

# **Employee Attributions and Psychological Contract Breach in China**

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# **Abstract**

## **Employee Attributions and Psychological Contract Breach in China**

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Breaches of the psychological contract (i.e., subjective experiences that are based on an individual's perception that another party has failed to realise the obligations that had been promised) can have negative consequences for employees, such as reducing employees' performance, job satisfaction and organisational commitment. The main aim of this study is to examine how employee attributions about the causes of psychological contract breach shape the relationship between psychological contract breach and employee outcomes. Based on existing literatures, two models concerning of the role of employee attributions are compared. A moderation model proposes that employee attributions moderate the relationship between psychological contract breach and employees outcomes. A mediation model asserts that employee attributions play a mediating role in the mechanism of psychological contract breach affecting employee outcomes. In addition, a relatively unexplored aspect why employees make different attributions in response to psychological contract breach was identified. The aim of this study is to examine whether individual differences (i.e., individualism/collectivism and employee proactivity) shape the employee attributions of psychological contract breach. Two survey-based studies were conducted in China. The first study ( $N = 261$ ) developed new measures of psychological contract breach and employee attributions. The second study ( $N = 634$ ) further refined the new measures and tested the study hypotheses using Structural Equation Modelling. The results show that psychological contract breach was significantly related to internal and external employee attributions as well as employee outcomes (i.e., employee well-being, leadership perceptions and supervisor ratings of performance). But a central message that emerges from this research is that employee attributions are more likely to play a moderating role than a mediating role in the relationship between psychological contract breach and employee outcomes. This study mainly has four theoretical contributions, which are developing and testing a model of psychological contract breach and employee attributions, extending the understanding of the relationship between psychological contract breach and employee attributions, extending the criterion space of psychological contract breach and employee attributions, and developing a more specific understanding of how employee attributions shape the employee outcomes of psychological contract breach.

## Declaration

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# **Chapter 1 Introduction**

## **1.1 Background**

The psychological contract is regarded as a helpful framework for understanding employment relations (Coyle-Shapiro & Kessler, 2000; Shore & Coyle-Shapiro, 2003; Turnley, Bolino, Lester & Bloodgood, 2003; Vos, Buyens & Schalk, 2005). According to Rousseau (1989, p.123), a psychological contract refers to “an individual’s beliefs regarding the terms and conditions of the reciprocal exchange agreement between that focal person and another party.” Because a psychological contract represents an individual’s beliefs, it is usually unspoken, unwritten, and thus implicit and subjective. Its implicit nature makes the psychological contract play an important role in understanding employment relations, as employment relations are implicit and explicit contractual arrangements between an employee and a supervisor (Kalleberg & Reve, 1992). Moreover, employment relations involve an employee’s expectations about his or her work, such as how the work is organised and rewarded (Kalleberg & Reve, 1992). In an organisational context, a psychological contract can convey the employee’s beliefs about the terms and conditions of work hours, workplaces, and other factors of the work environment to the supervisor. Thus, exploring the employee’s psychological contract has a positive effect on understanding the content of employment relations. Employment relations are reciprocal. Key issues in the psychological contract include the individual’s belief that a contribution has been offered in exchange for another party’s promise, binding the individual and another party into reciprocal obligations (Rousseau, 1989). Exploring the psychological contract can help to obtain a better understanding of the reciprocal characteristic of employment relations.

The psychological contract is important not only because of its role in understanding employment relations but also because of its effects on employee outcomes. Research

has shown that the fulfilment of a psychological contract is positively related to the employee's in-role performance, organisational citizenship behaviour, and organisational commitment (Turnley, et al., 2003; Castaing & Toulouse, 2006, etc.). However, the breach of a psychological contract can lead to a negative effect on employee outcomes, such as in-role and extra-role performance, the employee's job satisfaction and the employee's trust in the organisation (e.g., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000).

Psychological contract breach is a central construct of the psychological contract literature. Robinson (1996) has indicated that psychological contract breach is a subjective experience that is based on an individual's perception that another party has failed to realise the obligations that had been promised. In the organisation, from both the supervisor's and the employee's perspectives, certain promises are made and accepted by both parties (Rousseau, 1989). However, because the psychological contract is implicit and subjective, a supervisor and an employee may not share the same understanding of every promise. However even if there is no misunderstanding between the supervisor and the employee, the employee's expectations about work and employment conditions still may not be fulfilled due to various factors; for example, the employee may not have required skills, the supervisor may not put enough effort in fulfilling the employee's expectations, and the economic environment may prevent the organisation from realising the employee's expectations. Therefore, the breach of a psychological contract between the two parties may occur. For instance, from an employee's perspective, there may be a psychological contract of an attractive salary between the employee and his or her supervisor. However, the supervisor may intend to improve profits by reducing costs and therefore not fulfil this psychological contract deliberately, or the supervisor may fail to recognise the employee's psychological contract. When the employee identifies that the supervisor has not met a promise, the employee may perceive psychological contract breach (Rousseau, 1995).

Psychological contract breach is worth studying because it can lead to negative effects on employees. Because a psychological contract is based on the assumptions of good faith and fair dealing (MacNeil, 1985), the breach of a psychological contract may affect the employee's beliefs about the supervisor, the organisation, and the employment relationship, which may further make the employee feel disappointed and

dissatisfied (Rousseau, 1989). As a result, the employee's attitudes, such as organisational commitment, trust and job satisfaction, may decrease (e.g., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000). The breach of a psychological contract may also lead to a negative impact on the employee's behaviour; for example, the employee may perform less when he or she has experienced the breach of a psychological contract (Zhao, Wayne, Glibkowski & Bravo, 2007). Studying psychological contract breach can help to better understand its consequences and may provide an opportunity to reduce the occurrence and negative effects of the psychological contract breach.

## **1.2 Explaining effects of psychological contract breach using social exchange theory**

Because a psychological contract is rooted in social exchange theory (Rousseau, 1995), which is regarded as one of the most influential conceptual paradigms for explaining workplace behaviours (Cropanzano & Mitchell, 2005), social exchange theory can help to explain why psychological contract breach affects employee outcomes. Social exchange theory describes the social relations between two parties, such as the social relations between the employee and the supervisor (Cook & Whitmeyer, 1992). Social exchange theory is a framework rather than a theory (Emerson, 1976). In this framework, many theories can converge to explore the nature and the process of human relationships (Emerson, 1976). The essence of social exchange theory is that "social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships" (Cropanzano & Mitchell, 2005). Thus, the social exchange relationship between the two parties is mutual. Social exchange theory is applicable when one party expects something in return after providing a favour to another party (Blau, 1964).

In an organisation, an employee may expect a fair and balanced exchange relationship between him or her and the organisation. More specifically, after offering his or her contributions to the supervisor, the employee often expects something in return, such as

rewards, recognition, training and development, which constitute the fulfilment of the psychological contract. Moreover, people will act according to the rewards they received (Cropanzano & Mitchell, 2005). Thus, the employee acts according to whether the psychological contract has been fulfilled. When the employee's expectations have not been realised, psychological contract breach may occur (Robinson & Morrison, 1995). As a result, the employee may identify an outcome of an unbalanced exchange relationship between him or her and the supervisor. In order to restore the balance in the exchange relationship, the employee may refuse to fulfil some of his or her obligations (Zhao, et al., 2007); for instance, he or she may decrease employee performance.

Research has shown that the effects of psychological contract breach on employee outcomes vary across individuals (Robinson & Rousseau, 1994; Bal, De Lange, Jansen & Van Der Velde, 2008). This suggests that employees react differently to the perceptions of psychological contract breach. There is a need for a better understanding of processes by which psychological contract breach affects employee outcomes.

### **1.3 Role of Attributions in Shaping Outcomes to Psychological Contract Breach**

Attribution theory is proposed as a means of helping to understand individual differences in reactions to psychological contract breach. However, little research has examined the role of employee attributions in the process of psychological contract breach affecting employee outcomes.

According to Campbell and Swift (2006), attribution theory proposes that people make causal explanations for events that they have experienced and that their future behaviours and attitudes can be influenced by these explanations. Therefore, attribution theory involves how people answer causal questions and make causal explanations for the events they have experienced. Hastie (1984) proposed that unexpected events generate more attributional activities than expected events. In addition, compared with

positive events, negative events tend to generate more attributional activities (Peeters & Czapinski, 1990). In an organisational context, the employee expects the fulfilment of his or her psychological contract; thus, psychological contract breach may be a highly salient unexpected event. Moreover, from the employee's perspective, psychological contract breach is regarded as a negative event rather than a positive one. Therefore, as both an unexpected and negative event for the employee, psychological contract breach may then stimulate more employee attributions.

One of the primary questions that individuals address in causal explanations is whether the event results from internal factors or external factors. Internal attributions refer to the factors within the person, such as ability and intention; by contrast, external attributions are related to the factors that lie outside of the person, such as the task itself, regulations, and luck (Heider, 1958). When an employee devises an attributional explanation for a psychological contract breach, he or she may attribute the breach to internal factors within himself or herself, such as skills, ability, and efforts. Meanwhile, an employee may believe that his or her psychological contract has not been fulfilled because of factors outside of him or her, which refer to external attributions, such as the supervisors' leadership skills and efforts, the organisation's facilities, and circumstances outside of the organisation's control.

The employee's internal and external attributions may play a moderating role in the relationship between psychological contract breach and employee outcomes. The relationship between psychological contract breach and employee outcomes may become stronger or weaker when the employee makes a causal explanation of the breach. Alternatively, the employee's internal and external attributions may play a mediating role in the relationship between psychological contract breach and employee outcomes. Psychological contract breach stimulates the employee to make an attribution of the breach, which may further lead to a negative effect on the employee outcomes.

The employee's internal and external attributions may play a moderating role in the relationship between psychological contract breach and employee outcomes. People who blame external causes might perceive social exchange relationship differently from those blaming internal causes. For instance, an employee who attributes a



psychological contract breach to external factors, such as the supervisor's leadership skills and efforts, may believe the supervisor owes certain work and employment conditions to him or her and perceive an unbalanced exchange relationship between the supervisor and him or her. As a result, the employee may refuse to fulfil some of his or her obligations (e.g., employee performance) in order to restore the balance in the exchange relationship. Thus, the employee's external attributions may strengthen the relationship between psychological contract breach and employee outcomes. If the employee attributes psychological contract breach to internal factors, such as his or her own skills and ability, the employee may perceive that the social exchange relationship between the supervisor and him or her is more balanced and may decrease performance to a lesser extent. Therefore, the employee's internal attributions may weaken the relationship between psychological contract breach and its effects on the employee.

In terms of the mediating role of employee attributions in the relationship between psychological contract breach and its effects on the employee, psychological contract breach may cause the employee's attributions, then the employee's attributions lead to employee outcomes. For both unexpected and negative events, people tend to engage in attributional activities when psychological contract breach occurs (Hastie, 1984; Peeters & Czapinski, 1990). Therefore, psychological contract breach can cause the employee's attributions. The employee's attributions of psychological contract breach may further affect employee outcomes, such as the employee's performance. Expectancy theory can help to explain the employee attribution's effect on employee performance. Expectancy theory refers to the explanations of people's behaviour in choice situations (Kukla, 1972; Tolman, 1932; Lewin, 1935; Rotter, 1954). Expectancy theory indicates that the reason why people decide to behave in a certain way is that they are motivated by the expected outcome of this certain behaviour when choosing this certain behaviour from a set of behaviours (Oliver, 1974). In terms of psychological contract breach, if the employee attributes the breach to his or her internal attributions (e.g., his or her own skills and efforts), the employee may choose to improve his or her performance to expect the fulfilment of the psychological contract in the future. However, if the employee attributes psychological contract breach to the factors outside of himself or herself, such as the supervisor's leadership skills and the organisation's facilities, the employee may perceive that his or her inputs and outcomes in the organisation are not balanced. As a result, the employee may choose to reduce

his or her performance to expect the restored balance between his or her inputs and outcomes.

Research has shown that the effects of psychological contract breach on employee outcomes vary across individuals (Robinson & Rousseau, 1994; Bal, et al., 2008). Attribution theory may be a means of helping to understand individual differences in reactions to psychological contract breach. However, little research has examined the role of an employee's attributions in the process of psychological contract breach affecting employee outcomes. Therefore, the first aim of this research is to explore the role of employee attributions in the relationship between psychological contract breach and employee outcomes. In addition, as most research has explored psychological contract breach in Western contexts (e.g., Turnley, et al., 2003; Zhao, et al., 2007; Coyle-Shapiro & Kessler, 2000), this study will explore psychological contract breach in a Chinese context for examining the generalisation of psychological contract breach.

## **1.4 Why Do People Make Different Causal Attributions in Response to Psychological Contract Breach**

People make different causal attributions in response to psychological contract breach. The reason why people attribute psychological contract breach differently needs better understanding. Empirical evidence has shown that there is an influence of individualism/collectivism on people's attributions (Oyserman, Coon & Kemmelmeier, 2002). Individualism means the person regards himself or herself as autonomous and independent from others; in contrast, collectivism indicates that the person treats himself or herself as interdependent within a team, an organisation and a society (Al-Zahrani & Kaplowttz, 1993). Individualism/collectivism are chosen because the current research will be conducted in China and research on individualism/collectivism has indicated that these concepts are a fundamental way to distinguish between cultures (Moorman & Blakely, 1995). According to Hofstede (1980), China is regarded as a collectivistic culture, in which citizens are primarily collectivistic. Thus, collectivism can be found in the Chinese context and the participants of the current research may

exhibit different levels of collectivism. Individualism/collectivism may help to indicate why people have different causal responses to psychological contract breach, especially in the Chinese context in which this study will be conducted. However, the role of individualism/collectivism in the relationship between psychological contract breach and employee attributions is unknown. Thus, the current research will explore the role of individualism/collectivism in the relationship between psychological contract breach and employee attributions.

In addition to individualism/collectivism, employee proactivity may also help to explain why employees make different attributions towards psychological contract breach. Proactivity refers to anticipatory actions taken by employees in order to influence themselves and/or their situations (Grant & Ashford, 2008). The individual difference of proactivity is chosen because research has suggested that proactive people are likely to take anticipatory actions to change and improve their situations (Bateman & Crant, 1993; Unsworth & Parker, 2003; Grant & Ashford, 2008). Compared to less-proactive employees, proactive employees are likely to take more actions and put forward more effort in realising their obligations in exchange for the fulfilment of their psychological contracts. As a result, proactive people may attribute psychological contract breach to their internal factors less. Proactivity may help to explain why employees have different responses to psychological contract breach. However, the role of the employee proactivity in the relationship between psychological contract breach and employee attributions is unknown. Thus, this current research will explore the role of employee proactivity in the relationship between psychological contract breach and employee attributions.

In general, the reasons why people make different causal attributions in response to psychological contract breach need better understanding. An employee's individualism/collectivism and proactivity may help to explain these reasons, but little research has examined the roles of an employee's individualism/collectivism and proactivity in the relationship between psychological contract breach and employee attributions. Therefore, this research is aimed to identify whether and how an employee's individualism/collectivism and proactivity influence the process of psychological contract breach affecting employee attributions in a non-Western context.

## **1.5 Effects of Psychological Contract Breach on Employees**

Most research on psychological contract breach examined its effects on employee performance. Employee performance refers to the quality and quantity of the work contributions made by an individual or a group and involves in-role behaviours and extra-role behaviours (Schermerhorn, Cattaneo & Smith, 1988). In-role performance is also known as core task performance (Katz & Kahn, 1978), which is related to the performance that is specified in the employee's job description and recognised by the company's formal reward system. Unlike in-role performance, extra-role performance is related to the employee's behaviour that benefits the organisation and is not specified in the employee's job description or the company's formal reward system (Organ, 1988). Empirical research has shown that psychological contract breach is negatively related to the employee's performance (e.g., Turnley, et al., 2003; Zhao, et al., 2007; Restubog, Bordia & Tang, 2007; Suazo, 2009; Bal, Chiaburu & Jansen, 2010). However, little research has tested this relationship in a non-Western context. Thus, the current research is aimed to explore the relationship between psychological contract breach and employee performance in China.

Although research has shown that psychological contract breach can negatively affect the employee's performance and other work-related outcomes, such as the employee's organisational commitment, trust, job satisfaction, and organisational citizenship behaviours (e.g., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000; Lo & Aryee, 2003), little research has examined the effect of psychological contract breach on an employee's well-being. As one component of people's mental health (Warr, 1990), well-being refers to an individual's overall experience in daily life, particularly his or her self-described happiness (Diener, 1984). Employee well-being usually brings positive consequences (Isen & Baron, 1991), such as the employee's high level of job satisfaction (Connolly & Viswesvaran, 2000) and less turnover (Shaw, 1999). Therefore, employee well-being is generally desired in an organisational context. Because of the importance of employee well-being, this research is aimed to identify the effect of psychological contract breach on employee

well-being.

In addition, little research has explored the effects of psychological contract breach on an employee's perceptions of leadership. Leadership is the process whereby an individual influences others towards the achievement of team or organisational goals (Yukl, 2002). Cockerill (1993) has indicated that effective leadership plays an important role in an organisational context. The employee's leadership perceptions are consistent or modified by circumstances (Collins, 2010); thus, the circumstance of experiencing psychological contract breach may have an effect on leadership perceptions. Moreover, leadership can help the supervisor to achieve the goal of improving the employee's performance (Vecchio, Justin, & Pearce, 2010). Because of the importance of leadership, this research is aimed to identify the effects of psychological contract breach on leadership perceptions.

In summary, a psychological contract plays a significant role in understanding the employment relationship. An important issue in the field of psychological contract is psychological contract breach. The processes of a psychological contract breach affecting an employee's outcomes need better understanding, and attribution theory is regarded as a means of helping to understand these processes. However, little research has examined an employee's attributions in the relationship between psychological contract breach and employee outcomes. The reasons why people attribute psychological contract breach differently need better understanding as well. An employee's individualism/collectivism and proactivity may help to explain these reasons. However, the roles of individualism/collectivism and proactivity in the relationship between psychological contract breach and the employee's attributions remain unknown. In addition, most research focuses on the effects of psychological contract breach on an employee's performance; however, little research has explored the influence of psychological contract breach on employee well-being and employee evaluations of leadership. The overall model that the research is designed to test is shown in Figure 1.1.

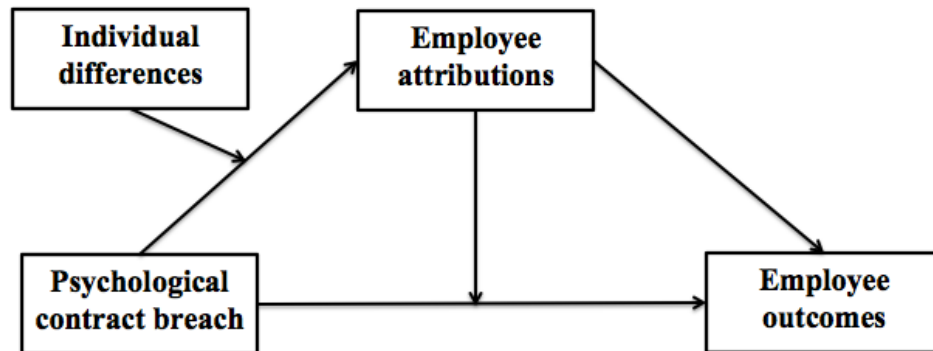


Figure 1.1 Overall Model

## 1.6 How to Measure Psychological Contract Breach

A core issue in research on the psychological contract is how to measure psychological contract breach. There are various established measures on testing psychological contract breach (e.g., Chen, Tsui & Zhong, 2008, Lester, Turnley, Bloodgood & Bolino, 2002, Orvis, Dudley & Cortina, 2008), and they share similar items, such as pay, training and development. For instance, Chen, et al. (2008) applied the following nine items to measure psychological contract breach, which are opportunity for promotion, a job in which employees can make decisions by themselves, a job with responsibilities, wage increases based on performance, regular benefits and extras, respect for employees' personal situations, the opportunity to decide when to take vacation, fair treatment and training. In Jafri's (2011) study, nine items were applied to measure psychological contract breach: training and development, compensation, promotion, the nature of the job, job security, feedback, management of change, amount of personal responsibility, and the expertise and qualities of co-workers.

However, the nature of a job is multi-faceted and the psychological contract has a wide range of variables (Kotter, 1973); thus, the items in these established measures do not cover all key dimensions of a job and list only certain content items of psychological contract breach. To obtain a more comprehensive understanding of psychological contract breach, this research is aimed to construct a new measure to test the breach. Holman and McClelland's (2011) five-dimension classification of job quality will be

adopted to construct a measure on psychological contract breach, as it is both parsimonious in terms of the number of dimensions and comprehensive in terms of its coverage. The five key dimensions are work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation.

According to Holman and McClelland (2011), work organisation dimension is related to work quality and includes job design and team design. Wages and payment system dimension refers to wage level, performance-based pay, and benefits. Security and flexibility dimension is related to contractual status, flexible working arrangements and working hours. Skills and development dimension is related to indicate empowerment quality and contains skill requirements, training, and development opportunities. The last dimension is engagement and representation, which refers to employee engagement and communication practices. This current research is aimed to construct a psychological contract breach measure based on Holman and McClelland's (2011) five-dimension classification of job quality.

## **1.7 How to Measure Employee Attributions**

Little research has explored the employee attributions of psychological contract breach. Rousseau (1995) and Morrison and Robinson (1997) indicated three primary attributions of psychological contract breach: reneging, disruption, and incongruence. Reneging is related to the situations in which the organisation is unable to realise an obligation or unwilling to fulfil it (Morrison & Robinson, 1997). According to Lester, et al. (2002), disruption is related to the situation in which the organisation intends to fulfil the promise, but due to some unexpected environmental factors, the organisation is unable to realise its obligations to the employee. Incongruence appears when the supervisor and the employee have different understandings of the same promise due to miscommunication, ambiguity surrounding obligations, and divergent schemata (Morrison & Robinson, 1997). In addition to reneging, incongruence, and disruption, employees may also attribute psychological contract breach to their own skills or efforts, their supervisors' leadership and efforts, incorrect implementation of the organisation's policies and so forth. The three specific attributions proposed by

Rousseau (1995) and Morrison and Robinson (1997) do not cover all key dimensions of employee attributions. There is a need to classify employee attributions, identify the key dimensions of employee attributions, and investigate employee attributions according to those key dimensions.

Heider's (1958) internal and external attribution theory can help to identify and classify the causal explanations of unexpected events. In an organisational context, employees may attribute psychological contract breach to the factors within themselves or to the factors that lie outside of them. Based on Heider's (1958) attribution theory, four dimensions of the employee attributions of psychological contract breach can be identified. The first dimension refers to employee internal attributions. When employees devise attributional explanations for psychological contract breach, they may attribute the breach to internal factors within themselves, such as skills, ability, efforts and initiatives. Meanwhile, employees may believe that their psychological contracts are fulfilled due to factors outside of them, which refer to external attributions. Employees' external attributions can include another three dimensions of employee attributions, which are attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation. The dimension of attributions about the supervisor supposes that employees attribute psychological contract breach to factors outside of themselves but within their supervisors. The third dimension is attributions about the organisation, which supposes that employees attribute psychological contract breach to causes outside of themselves but within the organisation's control. The fourth dimension is attributions outside of the supervisor and the organisation and indicates that employees attribute psychological contract breach to factors outside of the supervisor's and the organisation's control. The current research is aimed to construct a measure of employee attributions based on the four above dimensions.

## **1.8 Contributions**

The research makes five important contributions to the literature on psychological contract breach. First, the research will create, develop and test a model of



psychological contract breach and employee attributions. The model will provide the first test of the role of employee attributions in the relationship between psychological contract breach, which can respond to a question regarding why employees react to psychological contract breach differently. Integrating attribution theory into psychological contract breach theory in a way that has been rarely attempted can help to extend existing knowledge on psychological contracts and expand the boundary conditions of psychological contract theory, and further contribute to the development of both the psychological contract literature and the attribution literature.

Second, the study will develop a more specific understanding of how employee attributions shape the effects of psychological contract breach by testing two competing models (i.e., moderation model and mediation model). The study will provide the first test of the moderating and mediating roles of employee internal attributions and external attributions in the relationship between psychological contract breach and employee outcomes, which can help to extend the prior research on psychological contract breach. The research can contribute to the development of both psychological contract breach theory and attribution theory.

Third, the research will provide the first test of the moderating role of individual differences (i.e. individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions, in order to respond to the question regarding why employees make different attributions in response to psychological contract breach. The research may contribute to the development of the psychological contract breach literature.

Fourth, the study will extend prior research on the employee attributions of psychological contract breach by examining employee internal and external attributions of psychological contract breach. The content and types of employee attributions of psychological contract breach can be understood better by conducting this study. The study can help to obtain a better understanding of the relationship between psychological contract breach and employee attributions.

Fifth, by examining the relationships between psychological contract breach and employee well-being and leadership perceptions, the research can help to get a more

comprehensive understanding of the effects of psychological contract breach and to extend criterion space of psychological contract breach. Examining the relationship between psychological contract breach and employee performance in a Chinese context can contribute to the generalisation of the effect of psychological contract breach on employee performance. In addition, the research will examine the relationship between employee attributions and employee outcomes, which can help to extend the criterion space of employee attributions. The study can extend prior research on employee attributions and contributes to the development of attribution theory.

In terms of methodological contributions, constructing a new measure that covers all key dimensions of psychological contract breach will contribute to the methodology of psychological contract breach. In addition, the constructed new measure can help to obtain a more comprehensive understanding on the wide range of the variables of psychological contract breach. Since the items in the psychological contract breach measure will be constructed based on the content of the psychological contract, the research will contribute to enriching existing knowledge on the content of the psychological contract. In addition, constructing a new measure on employee attributions in response to psychological contract breach will contribute to better understanding on how individuals attribute psychological contract breach differently, and will further contribute to the methodology of employee attributions.

Practically, the quantitative research and the collected data will provide evidence from organisational practices. Thus, the contributions of this research will include describing, explaining and confirming theories. The research will also contribute to explaining and confirming psychological contract breach theories in a non-Western context and will further contribute to the generalisation of psychological contract breach. In addition, the practical implications of this research can make a contribution to the reduction of the occurrence of psychological contract breach and its negative effects.

In summary, this research makes contributions from theoretical, methodological, and practical aspects. As the topic of psychological contract breach is one of scholars' contemporary interests in the field of employment relationship, this research will advance current discussions and stimulate further research on the topic.

## 1.9 Organisation of the Thesis

There are nine chapters in this thesis. *Chapter 1 Introduction.* In which the background to the problem, problem statement, research questions, research aims, the contributions of the study and the organisation of the thesis will be explained.

*Chapter 2 Psychological contract and Psychological Contract Breach.* In this chapter, the mainstream literature on psychological contracts will be introduced to describe the definition, content, characteristics, and types of psychological contracts. Meanwhile, the definitions, content, antecedents, the sense making process, and the effects of psychological contract breach will be reviewed.

*Chapter 3 Relationship between Psychological Contract Breach and Employee Outcomes: Moderating role of employee attributions.* Attribution theory will be introduced in this chapter. The direct relationships between psychological contract breach and employee well-being, leadership perceptions and performance will be discussed. Based on this, the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes will be discussed.

*Chapter 4 Relationship between Psychological Contract Breach and Employee Outcomes: Mediating role of employee attributions.* This chapter will describe the relationship between psychological contract breach and employee attributions and the relationship between employee attributions and employee outcomes. The mediating role of employee attributions in the mechanism of psychological contract breach affecting employee outcomes will be discussed in this chapter as well.

*Chapter 5 Role of Individual Differences in the Relationship between Psychological Contract Breach and Employee Attributions.* In this chapter, the employee individualism/collectivism and the employee proactivity will be reviewed. After that, the moderating role of individualism/collectivism and proactivity in the relationship between psychological contract breach and employee attributions will be discussed.

*Chapter 6 Methodology.* This chapter will describe the philosophical assumptions of the current research first, which will be followed by introducing the approach used to address the hypotheses of the research. In addition, the procedures of data collecting and the analysis strategies of the two studies will be discussed.

*Chapter 7 Study 1.* Study 1 is a pilot study that is designed to test the constructed measures of psychological contract breach and employee attributions. This chapter will describe the sample and measures of study 1. The factor analysis results on the psychological contract breach and employee attributions measures will be reported. In addition, the ways of improving the psychological contract breach and employee attributions measures will be proposed in this chapter.

*Chapter 8 Study 2 - Factor Analysis Results.* Study 2 tests the overall model of the current research. This chapter will describe the overview, sample and measures of study 2. In addition, the factor analysis strategy and factor analyses results of study 2 will be reported in this chapter.

*Chapter 9 Study 2 - Structural Equation Modelling Results.* In this chapter, structural equation modelling results of study 2 will be reported. The results of the moderating and mediating roles of employee attributions in the relationship between psychological contract breach and employee outcomes will be reported. In addition, the moderating role of individual differences in the relationship between psychological contract breach and employee attributions will be described as well.

*Chapter 10 Discussion.* This chapter will discuss the theoretical, methodological, and practical contributions of the research. In addition, the limitations of the research and recommendations for further studies will be described in this chapter.

## **1.10 Chapter Summary**

This chapter has described the background of the research. The problems in

psychological contract breach literature have been identified, and the research aims of the research have been stated. In addition, the contributions of the research and the organisation of the thesis have been explained. The next chapter will make a review on the concepts of psychological contract and psychological contract breach.

## **Chapter 2 The Psychological Contract and**

### **Psychological Contract Breach**

#### **2.1 Introduction**

Chapter 2 will introduce the definitions of the psychological contract first, which will include the early definitions and the new modern definition of the psychological contract. Besides the definitions, the content of the psychological contract will be described. In addition, this chapter will discuss the definitions of psychological contract breach, which will be followed by a review of different psychological contract breach models.

#### **2.2. Psychological Contract**

Scholars have defined the term psychological contract in different ways, as the understanding of the term psychological contract has changed over the past 50 years. However, broadly, the psychological contract is concerned with the employee's understandings of the employment relationship and in particular with the mutual set of obligations between both the employee and the supervisor.

##### **2.2.1 Early Definitions of the Psychological Contract**

The origin of the term psychological contract dates back to the 1960s since it has been introduced firstly by Argyris (1960). Subsequently, Levinson, Price, Munden, Mandl

and Solley (1962), Schein (1965) and Kotter (1973) have also defined the term psychological contract. Table 2.1 presents the early scholars' definitions on the psychological contract.

Table 2.1 Early Definitions of the Psychological Contract

Scholars	Definitions
Argyris (1960)	The psychological contract is an implicit understanding between a line manager and his or her team members.
Levinson, Price, Munden, Mandl and Solley (1962, p.21)	The psychological contract is "a series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but which nonetheless govern their relationship to each other."
Kotter (1973)	The psychological contract is an implicit contract between the employee and the organisation on what to give and to receive.
Schein (1980, p.22)	The psychological contract is "a set of unwritten reciprocal expectations between an individual employee and the organisation."

The early definitions of the term psychological contract indicate that the psychological contract is unspoken, unwritten and thus implicit. Argyis (1960) suggested that the psychological contract is based on a group level and a group of employees share similar expectations. On the contrary, Levinson et al. (1962), Kotter (1973) and Schein (1980) indicated that the psychological contract is based on an individual level and each individual employee has his or her own expectations. In addition, Levinson, et al. (1962) proposed that the expectations in psychological contract are mutual. On one hand, the employee may expect a competitive and fair salary from the supervisor; on the other hand, the supervisor may expect in-role performance and extra-role performance from the employee.

### 2.2.2 Contemporary Definition of the Psychological Contract

More recently, Rousseau's (1989) definition of a psychological contract has been regarded as a new approach to the psychological contract, which signals that research on the psychological contract has transferred from classical work to contemporary work (Coyle-Shapiro & Parzefall, 2008). According to Rousseau (1989, p.123), the psychological contract refers to "an individual's beliefs regarding the terms and conditions of the reciprocal exchange agreement between that focal person and another party. Key issues here include the belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations".

Rousseau (1989) indicated that a psychological contract is inherently subjective because the fulfilment or the breach of the psychological contract is perceived and decided by the employee (Rousseau, 1989; Robinson, Kraatz & Rousseau, 1994). To be more specific, there are implicit beliefs and explicit promises. Implicit beliefs refer to an employee's expectations about what he or she should be offered and what promises should a supervisor make. Explicit promises refer to the actual promises made by a supervisor. However, the implicit beliefs and the explicit promises sometimes do not match with each other. As a result, the breach of the psychological contract may occur. The employee may compare their implicit beliefs and the supervisor's explicit promises and decide whether his or her psychological contract has been fulfilled or breached.

A psychological contract contains not only the employee's expectations on items given by the supervisor but also the employee's beliefs about items that should be provided to the supervisor, because from the employee's perspective, the supervisor will offer items to him or her in exchange for his or her contributions (Rousseau, 1989). Therefore, the psychological contract involves perceived obligations, which spur the employee to fulfil his or her obligations because of the belief that the supervisor will reciprocate him or her in the near future.

In 2004, Rousseau proposed six key characteristics of a psychological contract. Voluntary choice is the first one, which means that entering into a certain psychological contract is a voluntary choice made by the employee (Rousseau, 2004). The second characteristic is belief in mutual agreement, which means that from the employee's perspective, the psychological contract is mutual and the supervisor will reciprocate the



employee in exchange for his or her contributions (Rousseau, 2004). The third one is incompleteness, which means that a psychological contract is not unchangeable. On the contrary, there always are certain items that are added in or taken out; thus, a psychological contract is incomplete (Rousseau, 2004). The fourth characteristic is multiple contract makers (Rousseau, 2004). Different agents of the organisation, such as the team leader, top management, and direct supervisor, can make the psychological contract with the employee; thus the psychological contract has multiple contract makers. Managing losses when psychological contracts fail is the fifth characteristic (Rousseau, 2004). In order to motivate the employee, the losses of the breach of a psychological contract have to be managed. Regarding a psychological contract as a model of the employment relationship is the final one, which means that a psychological contract can create a mental model to present the employment relationship and guide both the employee's and the supervisor's behaviours (Rousseau, 2004).

There are similarities between Rousseau's (1989) modern definition of the psychological contract and the earlier definitions. For example, like Levinson et al. (1962) and Kotter (1973) identified that a psychological contract is an individual-level phenomena, Rousseau (1989) also explained that each employee has his or her own views on a psychological contract because the psychological contract is subjective. In addition to the similarities, Rousseau's (1989) definition differs from the early classical definitions in mainly two aspects. First, the earlier definitions emphasised expectations; however, Rousseau (1989) applied the term obligation to describe a psychological contract. From Rousseau's perspective, while expectations refer to the employee's general assumptions on what will be provided by the supervisor in the future, obligations mean that the supervisor has the duty to reciprocate the employee's contributions (Robinson & Rousseau, 1994). Second, unlike the earlier definitions, Rousseau (1989) shifted a psychological contract from the perspectives of both the employee and the supervisor to the employee's perceptions alone (Anderson & Schalk, 1998). In other words, the psychological contract is regarded as the employee's perceptions regarding what he or she should offer to the supervisor and what the supervisor should reciprocate to him or her.

### **2.2.3 Content of the Psychological Contract**

According to Rousseau (1990, p.393), the content of the psychological contract refers to an employee's beliefs about what he or she should offer and what he or she should be provided in turn. The psychological contract has a wide range of content and covers different aspects of work and employment conditions (Kotter, 1973).

Table 2.2 Content of the Psychological Contract

	<b>Herriot, Manning, and Kidd (1997)</b>	<b>Hutton and Cummins (1997)</b>	<b>Csoka (1995)</b>	<b>Rousseau (1990)</b>	<b>Robinson and Rousseau (1994)</b>
Training	X		X	X	
Fairness	X	X			
Needs	X				
Consult	X				
Discretion	X				
Humanity	X				
Recognition	X				
Environment	X				
Justice	X				
Pay	X		X	X	
Benefits	X				
Security	X			X	
Support		X		X	
Employability			X		
Flexibility			X		
Greater participation and involvement			X		
Interesting and challenging work			X		
Advancement				X	
Work responsibilities					X
The specific nature of the job					X
Feedback from management					X
Characteristics of co-workers					X
Management of change					X

Table 2.2 presents different scholars' views on the content of the psychological contract, and they share similar items, such as pay, training and security. The models were chosen because they reflect the main models used in psychological contract research (e.g., Herriot, et al., 1997; Rousseau, 1990; Robinson and Rousseau, 1994) or because they identified specific items that were rarely covered by other studies (e.g., Hutton & Cummins, 1997; Csoka, 1995). The nature of a job is multi-faceted and the psychological contract has a wide range of content (Kotter, 1973); thus a classification of the content of the psychological contract can be proposed in order to obtain a more comprehensive understanding of the psychological contract. Holman and McClelland's (2011) five-dimension classification of job quality is adopted to classify the content of the psychological contract, as it is both parsimonious in terms of the number of dimensions and comprehensive in terms of its coverage. The five key dimensions are work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation (Holman & McClelland, 2011).

Work organisation is related to work quality and includes job design and team design (Holman & McClelland, 2011). This dimension includes items like work responsibilities and interesting and challenging work. Wages and payment system can indicate employment quality in the organisation and refers to wage level, performance-based pay, and benefits (Holman & McClelland, 2011). Items like pay and benefits are contained in this dimension. Security and flexibility includes contractual status, flexible working arrangements and working hours (Holman & McClelland, 2011). This dimension includes items such as security, flexibility, and management of change. Skills and development can indicate empowerment quality and contains skill requirements, training, and development opportunities (Holman & McClelland, 2011). This dimension includes the content of training, direction, and feedback from management. The last dimension is engagement and representation, which refers to employee engagement and communication practices (Holman & McClelland, 2011). The items like consult, recognition, and greater participation and involvement are included in this dimension. In summary, the psychological contract has a wide range of content and includes various items.

## **2.3 Psychological Contract Breach**

Psychological contract breach is a central construct of the psychological contract literature. In the organisation, from both the supervisor's and the employee's perspectives, certain promises are made and accepted by both parties (Rousseau, 1989). However, because the psychological contract is implicit and subjective, a supervisor and an employee may not share the same understanding of every promise. However even if there is no misunderstanding between the supervisor and the employee, the employee's expectations about work and employment conditions still may not be fulfilled due to various factors; for example, the employee may not have required skills, the supervisor may not put enough effort in fulfilling the employee's expectations, and the economic environment may prevent the organisation from realising the employee's expectations. Therefore, the breach of a psychological contract between the two parties may occur. This section will review the definitions of psychological contract breach and different psychological contract models.

### **2.3.1 Definitions of Psychological Contract Breach**

In the field of psychological contract breach, most research defined the term psychological contract breach from the employee's perspective and regarded psychological contract breach as the employee's belief (Morrison & Robinson, 1997; Robinson, 1996; Rousseau, 1989). According to Morrison and Robinson (1997), psychological contract breach includes two aspects; one is the actual breach made by the supervisor, and another is the perceived breach from the employee's view. Actual breach means that the supervisor has not fulfilled his or her obligations or met the employee's expectations. On the other hand, the perceived breach is related to the perception held by the employee that a salient promise made by the supervisor has not been realised (Morrison & Robinson, 1997).

In the psychological contract breach literature, almost all the research concentrated on the latter aspect, which means that research usually identifies psychological contract breach from the employee's perspective rather than measuring psychological contract breach directly (Conway & Briner, 2005). Like Morrison and Robinson (1997),

Robinson (1996) also indicated that the breach of a psychological contract is a subjective experience, which is based on the individual's perception that another party failed to realise the obligations that had been promised, which in turn has an effect on his or her attitudes or behaviour. According to Rousseau (1989, p.128), the breach of a psychological contract is defined as a "failure of organisations or other parties to respond to an employee's contribution in ways the individual believes they are obligated to do". In general, scholars hold the point of view that psychological contract breach refers to an employee's belief that a breach has occurred, no matter whether the perception is valid.

In general, psychological contract breach is the employee's subjective experience. When psychological contract breach occurs, the employee perceives that there are unfulfilled supervisor obligations. As a negative event to the employee, psychological contract breach often generates negative effects on the employee's work-related attitudes or behaviours.

However, as discussed above in the content of the psychological contract section, a classification of the content of the psychological contract is needed in order to obtain a more comprehensive understanding of the psychological contract. Holman and McClelland's (2011) five-dimension classification of job quality is adopted to classify the content of the psychological contract. The five key dimensions are work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation (Holman & McClelland, 2011). Based on the five dimensions, this current research constructs a new measure on psychological contract breach and proposes that:

*Hypothesis 1. Psychological contract breach is measured by a five-factor model. The five factors are work organisation, wages and payment system, security and flexibility, skills and development, and engagement representation.*

It is also important to point out here that some scholars have treated the term psychological contract breach and the term psychological contract violation as interchangeable. However, Morrison and Robinson (1997) have distinguished the two terms. According to Morrison and Robinson (1997), psychological contract breach

refers to the belief held by the employee that some expectations have not been realised, while the term psychological contract violation is related to the employee's emotional experience, such as feelings of betrayal, distress and anger, which derived from the perception that a breach has occurred. Therefore, psychological contract breach, reflecting whether the employee identified the unmet expectations, is regarded as a prerequisite for the psychological contract violation (Morrison & Robinson, 1997; Zhao, et al., 2007; Dulac, Coyle-Shapiro, Henderson & Wayne, 2008). The focus in this research is on psychological contract breach.

### **2.3.2 Different Models of Psychological Contract Breach**

There are a large number of studies on the effects of psychological contract breach and they propose different models of the relationships between psychological contract breach and its outcomes (e.g., Bal, et al., 2008; Zhao, et al., 2007; Chen, et al., 2008; Chiu & Peng, 2008; Lo & Aryee, 2003). The different models, including direct effect models, moderation models and mediation models, will be introduced in this section. In general, research shown that the effects of psychological contract breach on employee outcomes vary across individuals (Robinson & Rousseau, 1994; Bal, et al., 2008). This suggests that employees react differently to the perceptions of psychological contract breach. Exploring why people have different reactions can help to obtain a better understanding of processes by which psychological contract breach affects employee outcomes. Attribution theory is proposed as a means of helping to understand individual differences in reactions to psychological contract breach. But little research has examined the employee's attributions in the process of psychological contract breach affecting the employee outcomes. Thus, the role of employees' attributions in the relationship between psychological contract breach and the employee outcomes is remaining unclear.

## Direct Effect Models

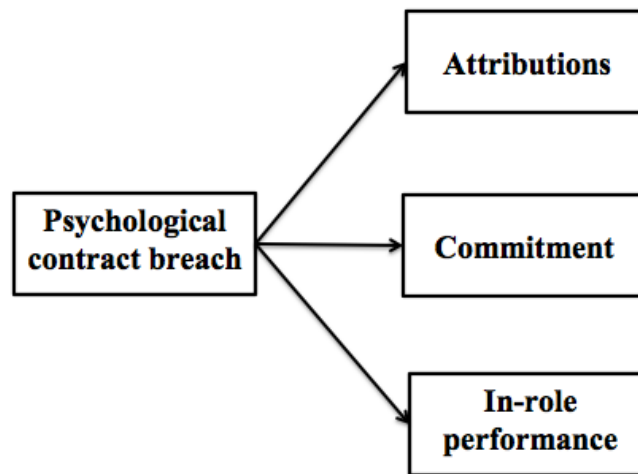


Figure 2.1 Psychological Contract Breach Direct Model (Lester, et al., 2002)

Lester, et al. (2002) took an initial empirical look at the employee attributions of psychological contract breach and proposed that there is a direct relationship between psychological contract breach and employee attributions. Based on the work of Rousseau (1995) and Morrison and Robinson (1997), Lester, et al. (2002) hypothesised that when psychological contract breach is perceived, employees are likely to make three types of attributions about the cause of the breach: reneging, disruption, and incongruence. Lester, et al. (2002) also hypothesised that psychological contract breach has direct effects on the employee's organisational commitment and in-role performance. Figure 2.1 shows the model proposed by Lester, et al. (2002).

Reneging is related to a situation in which the organisation is unable to realise an obligation or unwilling to fulfil it (Morrison & Robinson, 1997). Therefore, in the case of reneging, the organisation may have made a promise to the employee, but the organisation could not fulfil it or had no intention to realise it (Morrison & Robinson, 1997). However, according to Lester, et al. (2002), reneging refers only to the situation in which the organisation is unwilling to fulfil the promise, and the term disruption can be used to describe the situation in which the organisation is unable to realise the promise even though it intends to do so. The supervisor, as the representative of the organisation, will trade off between the benefits of reneging the promise and the costs of failing to realise the promise.



According to Lester, et al. (2002), disruption is related to the situation in which the organisation intends to fulfil the promise, but due to unexpected environmental factors, the organisation is unable to realise its obligations to the employee. For example, the organisation may have made a promise to not lay off employees in the short term, but because of an unexpected economic crisis, the organisation may have to do so even though it did not intend to.

Incongruence appears when the supervisor and the employee have different understandings on the same promise due to divergent schemata, ambiguity surrounding obligations, and miscommunication (Morrison & Robinson, 1997). Schemata guide an individual to interpret and recollect the promise (Taylor & Crocker, 1981). Therefore, when the supervisor and the employee have divergent schemata, the incongruence may occur because of the different interpretations of the same promise made by the two parties (Morrison & Robinson, 1997). Ambiguous obligations may result in different understandings of the same agreement, as the mental representations of the same agreement of the two parties may change (Morrison & Robinson, 1997). The miscommunication between the supervisor and the employee is also likely to cause incongruence because the two parties may assume that they share the same understanding of the promise, while in reality, they do not (Ross, Greene & House, 1977).

Based on social exchange theory, Lester, et al. (2002) hypothesised that psychological contract breach is negatively related to employee commitment and in-role performance. Organisational commitment refers to the strength of the employee's identification with and attachment to the organisation (Meyer & Allen, 1984). In-role performance is defined as being part of the employee's job description and is assessed by the organization's reward systems (Katz & Kahn, 1978). Social exchange theory indicates that there is a motivation for the employee to seek a balanced exchange relationship with the supervisor (Homans, 1961). When psychological contract breach occurs, the employee may perceive that there is an unbalanced exchange relationship. In order to restore the balance, the employee may reduce his or her own organisational commitment and in-role performance because the commitment and in-role performance are regarded as part of the employee's exchange agreement with the supervisor

(Rousseau, 1995).

By doing a survey, the hypotheses proposed by Lester, et al. (2002) were supported. When psychological contract breach occurs, employees are likely to attribute the breach more to renegeing and incongruence if compared with their supervisors. In addition, psychological contract breach is negatively related to employee commitment and in-role performance.

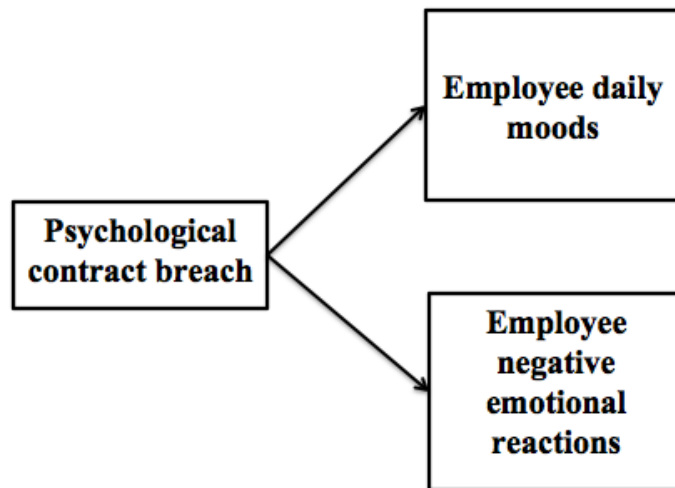


Figure 2.2 Psychological Contract Breach Direct Model (Conway & Briner, 2002)

Empirical research indicated that psychological contract breach is not only negatively related to the employee's attitudes, such as organisational commitment, trust and job satisfaction; but also negatively related to the employee's behaviours, like job performance and organisational citizenship behaviours (Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000; Rousseau & Anton, 1988). Little research has examined the effects of psychological contract breach on employee well-being. Conway and Briner (2002) took an initial look at employees' short-term affective reactions to psychological contract breach. Figure 2.2 shows the model of Conway and Briner's (2002) study. They hypothesised that broken promises are negatively related to employees' daily moods and are positively associated with employees' negative emotional reactions (Conway & Briner, 2002). By applying a daily diary study, Conway and Briner's (2002) hypotheses on the relationships between psychological contract breach and employees' daily moods and negative emotional reactions were supported. In terms of limitations, because of the daily diary study conducted by

Conway and Briner (2002), the participants made records at the end of each working day. This may lead to perceptual distortions.

In summary, people tend to make attributional explanations when psychological contract breach occurs. Besides, psychological contract breach has negative impact on the employee's behaviour (e.g., in-role performance), attributed (e.g., organisational commitment), and affect (e.g., daily moods). There is a direct relationship between psychological contract breach and employee work-related outcomes.

### **Moderation Models**

In addition to the above direct relationship models, there are models testing an indirect relationship between psychological contract breach and employee work-related outcomes. Research has shown that the employee's external attributional style, hostile attributional style, traditional value and age can mediate the relationship between psychological contract breach and work-related outcomes.

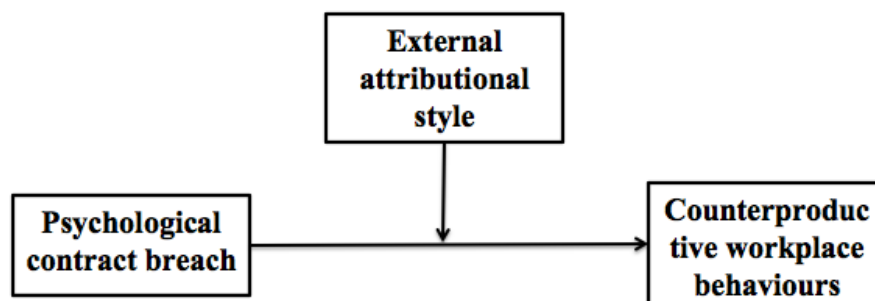


Figure 2.3 Psychological Contract Breach Moderation Model (Chao, Cheung & Wu, 2011)

Chao, Cheung and Wu (2011) explored the role of employee attributional styles in the relationship between psychological contract breach and counterproductive workplace behaviours, which can be regarded as a development of the study of Lester, et al. (2002). Figure 2.3 shows the model proposed by Chao, et al. (2011). Similar to the study of Lester, et al. (2002), Chao, et al. (2011) also developed their hypotheses based on Morrison and Robinson's (1997) three employee attributions of psychological contract breach, which are reneging, disruption, and incongruence. Chao, et al. (2011)

hypothesised that (a) when experiencing psychological contract breach, employees with higher incongruence attributions performing fewer counterproductive workplace behaviours if compared with employees with lower incongruence attributions; (b) when experiencing psychological contract breach, employees with higher reneging attributions performing more counterproductive workplace behaviours if compared with employees with lower reneging attributions; (c) when experiencing psychological contract breach, employees with higher disruption attributions performing fewer counterproductive workplace behaviours if compared with employees with lower disruption attributions. In addition, Chao, et al. (2011) hypothesised that psychological contract breach is positively related to counterproductive workplace behaviours. Counterproductive workplace behaviours mean that employees intentionally behave deviant work behaviours to break the rules of the organisation and harm the well-being of other employees (Sackett & Devore, 2001).

By conducting a survey with a sample size of 131, Chao, et al. (2011) indicated that psychological contract breach is positively associated with counterproductive workplace behaviours. Among the three hypotheses about the role of employee attributions in the relationship between psychological contract breach and counterproductive workplace behaviours, only one hypothesis was supported by the collected data, which is (c) when experiencing psychological contract breach, employees with higher disruption attributions performing fewer counterproductive workplace behaviours if compared with employees with lower disruption attributions. Disruption means that employees attribute psychological contract breach to unexpected environmental factors outside of the organisation (Morrison & Robinson 1997). Chao, et al. (2011) concluded that external attribution style moderates the relationship between psychological contract breach and counterproductive workplace behaviours.

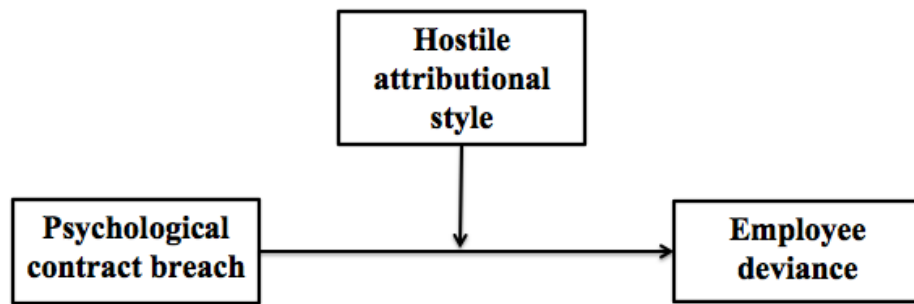


Figure 2.4 Psychological Contract Breach Moderation Model (Chiu & Peng, 2008)

Chiu and Peng (2008) examined the moderating role of the employee's hostile attributional style in the relationship between psychological contract breach and employee deviance. Figure 2.4 shows Chiu and Peng's (2008) model. Hostile attributional style refers to the employee's tendency of attributing negative events to external, intentional, stable and controllable factors (Douglas & Martinko, 2001). When psychological contract breach occurs, the employee with a high level of hostile attributional style tends to attribute the breach to the organisation's intentional and controllable factors. In order to seek self-protection, experiencing psychological contract breach may lead to negative behaviour, like employee deviance. Employee deviance is related to the employee's aggressive behaviour and retaliatory behaviour. Furthermore, the employee with a higher level of hostile attributional style is more likely to have employee deviance when experiencing psychological contract breach (Weiner, 1985). Thus, Chiu and Peng (2008) hypothesised that the employee's hostile attributional style moderates the relationship between psychological contract breach and employee deviance. By doing a survey among 233 employees in an electronics industry, Chiu and Peng's (2008) found that their hypothesis was supported. The higher level of the employee's hostile attributional style, the stronger the positive relationship between psychological contract breach and employee deviance is.

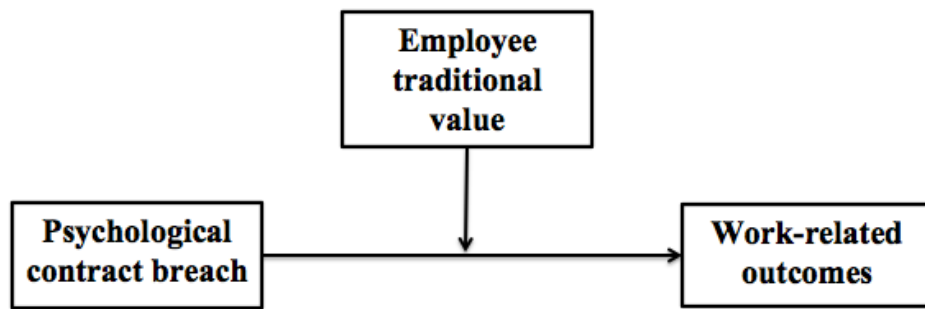


Figure 2.5 Psychological Contract Breach Moderation Model (Chen, et al., 2008)

Chen, Tsui and Zhong (2008) examined the moderating role of the employee's traditional value in the relationship between psychological contract breach and employee work-related outcomes. Figure 2.5 shows Chen, et al.'s (2008) model. Tradition value refers to the employee's behaviour of obedience and respect for authority (Yang, Yu & Yeh, 1989). Chen, et al. (2008) proposed that psychological contract breach is negatively related to the employee's organisational commitment, organisational citizenship behaviour, and work performance. Moreover, the employee's tradition value is hypothesised to moderate the relationship between psychological contract breach and those outcomes. By doing a survey in China, Chen et al.'s (2008) hypotheses were supported. The more tradition value the employee has, the weaker the negative relationship between psychological contract breach and employee work-related outcomes is.

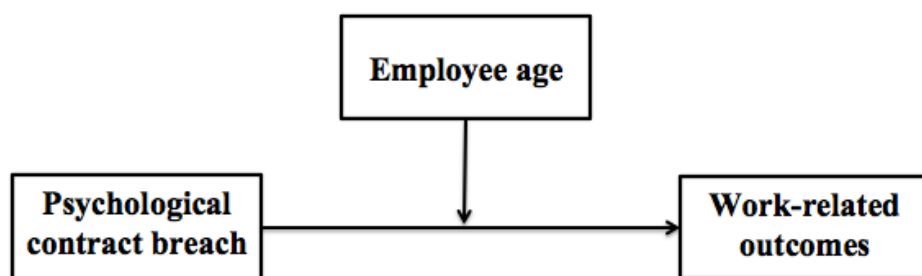


Figure 2.6 Psychological Contract Breach Moderation Model (Bal, et al., 2008)

Bal, et al. (2008) explored the role of the employee's age in the relationship between psychological contract breach and the employee's outcomes. Bal, et al. (2008) hypothesised that psychological contract breach is negatively related to the employee's

trust, organisational commitment, and job satisfaction. In addition, age was proposed to moderate the relationship between psychological contract breach and those outcomes (Bal, et al., 2008). Figure 2.6 shows Bal et al.'s (2008) model. By doing a meta-analysis, Bal et al.'s (2008) hypotheses were supported. The younger the employee, the stronger the negative relationships between psychological contract breach and trust and organisational commitment are. The older the employee, the stronger the negative relationship between psychological contract breach and the employee's job satisfaction is.

In summary, there are moderators that play a role in the relationship between psychological contract breach and the employee's work-related outcomes. Research has shown that the relationship between psychological contract breach and the employee outcomes can be moderated by the employee's external attributional style, hostile attributional style, traditional value and age.

### **Mediation Models**

Besides the moderators, there are mediators that play a role in the relationship between psychological contract breach and the employee's work-related outcomes. Research has shown that the employee's affective reactions, trust in the organisation, and organisational cynicism can mediate the relationship between psychological contract breach and work-related outcomes.

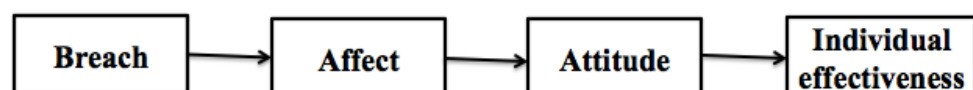


Figure 2.7 Psychological Contract Breach Mediation Model (Zhao, et al., 2007)

Zhao, et al. (2007) applied a meta-analysis to identify the effects of psychological contract breach on employee work-related consequences. Figure 2.7 shows the model proposed by Zhao, et al. (2007). They regarded psychological contract violation and mistrust as employees' affective reactions to psychological contract breach and hypothesised that psychological contract breach is positively associated with violation

and mistrust (Zhao, et al., 2007). Psychological contract violation refers to employees' strong emotional reactions to psychological contract breach, including the feeling of injustice, betrayal and so forth (Robinson & Rousseau, 1994). Mistrust is related to interpersonal hostility and is treated as part of distress (Webb, 1996).

In addition, Zhao, et al. (2007) proposed that there is a relationship between psychological contract breach and employees' work attitudes. Specifically, they hypothesised that psychological contract breach is negatively associated with employees' job satisfaction and organisational commitment, and is positively associated with employees' turnover intentions. Job satisfaction perceives the relationship between what the employee wants from his or her job and what he or she offers (Locke, 1969). Turnover intention refers to the probability that the employee will quit the organisation within a certain period of time (Lum, Kervin, Clark, Reid & Sirola, 1998). In addition, Zhao, et al. (2007) hypothesised that psychological contract breach is related to employees' work behaviours as well. They proposed that psychological contract breach is positively associated with employees' actual turnover, and is negatively associated with employees' organisational citizenship behaviour and in-role performance. Organisational citizenship behaviour is the employee's discretionary behaviour that can promote the effectiveness of the organisation, which is not examined explicitly by the organisation's reward systems (Organ, 1990).

By doing a meta-analysis, Zhao, et al. (2007) found that most of their hypotheses on employees' affective reactions, work attitudes and work behaviours were supported except the hypothesis on the relationship between psychological contract breach and employees' actual turnover. Thus, in the study of Zhao, et al. (2007), psychological contract breach is significantly related to employees' psychological contract violation, mistrust, job satisfaction, organisational commitment, turnover intentions, organisational citizenship behaviours and in-role performance. In addition, Zhao, et al. (2007) used individual effectiveness to represent the employee's work behaviours and identified that the employee's affective reactions mediate the relationship between psychological contract breach and the employee's work attitudes and individual effectiveness.



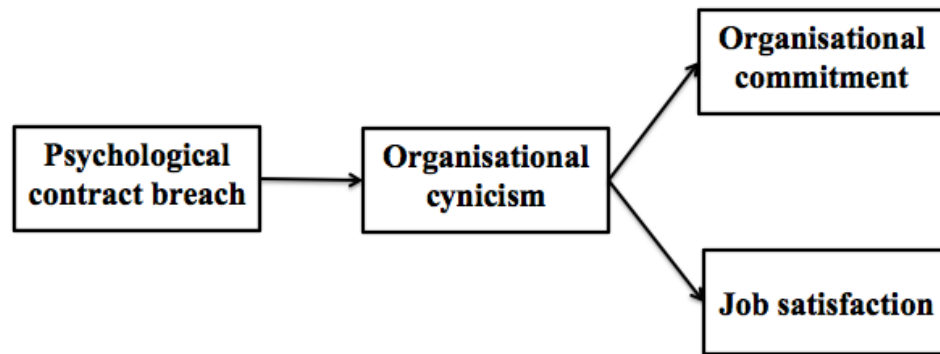


Figure 2.8 Psychological Contract Breach Mediation Model (Johnson & O’leary-kelly, 2003)

Johnson and O’leary-kelly (2003) examined the mediating role of organisational cynicism in the relationship between psychological contract breach and employee work-related outcomes. Organisational cynicism refers to the employee’s belief that the organisation lacks integrity (Dean, Brandes & Dharwadkar, 1998). Psychological contract breach was regarded as an antecedent of organisational cynicism, and Johnson and O’leary-kelly (2003) hypothesised that there is a positive relationship between psychological contract breach and organisational cynicism. In addition, the employee generates negative attitudes regarding the organisation when the employee believes that the organisation lacks integrity, thus, Johnson and O’leary-kelly (2003) further hypothesised that organisational cynicism mediates the effects of psychological contract breach on the employee’s job satisfaction and organisational commitment. Figure 2.8 shows Johnson and O’leary-kelly’s (2003) model. By doing a survey in a community bank in United States, Johnson and O’leary-kelly (2003) found that their hypotheses were supported. Organisational cynicism plays a mediating role in the relationships between psychological contract breach and the employee’s organisational commitment and between psychological contract breach and the employee’s job satisfaction.

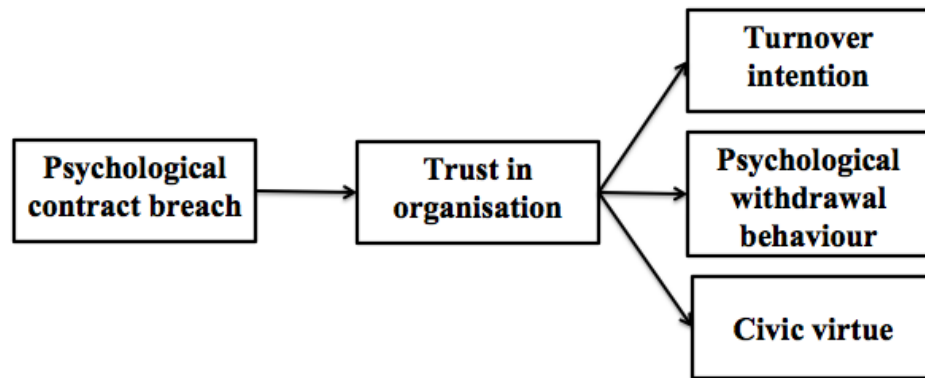


Figure 2.9 Psychological Contract Breach Mediation Model (Lo & Aryee, 2003)

Lo and Aryee (2003) examined the mediating role of trust in the relationship between psychological contract breach and employee work-related outcomes. Trust is defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor irrespective of the ability to monitor or control that other party” (Mayer, Davis & Schoorman, 1995, p.712). Thus, an employee who trusts in the organisation has the expectation that the organisation will behave benignly in a risk situation or an unforeseen situation. Relational trust is not static, which can become negative beliefs regarding the intentions and actions of another party (Rousseau, Sitkin, Burt & Camerer, 1998). Thus, Lo and Aryee (2003) hypothesised that psychological contract breach is negatively related to the employee’s trust in the organisation. When the reduction of trust occurs, the employee may become less loyal or engaging in performing, therefore, Lo and Aryee (2003) further hypothesised that the employee’s trust in the organisation mediates the relationships between psychological contract breach and the employee’s turnover intentions, psychological withdrawal behaviour, and civic virtue. Figure 2.9 shows Lo and Aryee’s (2003) model. Psychological withdrawal behaviour refers to the employee’s behaviour of not dependably performing tasks in a job description (Katz, 1964). Civic virtue means that the employee performs extra behaviour more than tasks described in a job description to benefit the organisation (Katz, 1964). By doing a survey, Lo and Aryee (2003) found that their hypotheses were supported. Thus, the employee’s trust in the organisation mediates the relationships between psychological contract breach and the employee work-related outcomes of turnover intentions, psychological withdrawal behaviour and civic virtue.

In summary, there is an indirect relationship between psychological contract breach and employee work-related outcomes. Research has shown that the employee's affective reactions, trust in the organisation, and organisational cynicism can mediate the relationship between psychological contract breach and work-related outcomes. But little research has examined the employee attributions' role in the mechanism of psychological contract breach affecting employee outcomes. Therefore, this current research will explore the indirect relationship between psychological contract breach and employee outcomes and examine the mediating role of employee attributions in this relationship.

In general, research has explored the employee work-related consequences of psychological contract breach and proposed direct, moderation and mediation models. However, little research has examined the attributions of psychological contract breach or the role of employee attributions in the relationship between the breach and employee work-related outcomes. Although scholars tried to explore the employee attributions of psychological contract breach, they only tested three specific attributions of psychological contract breach (Lester, et al., 2002; Chao, et al., 2011); while, employee attributions contain a wide range of factors. Besides reneging, incongruence, and disruption, employees may also attribute psychological contract breach to their own skills or efforts, their supervisors' leadership and efforts, incorrect implementation of the organisation's policies and so forth. The three specific attributions examined by Lester, et al. (2002) and Chao, et al. (2011) do not cover all key dimensions of employee attributions. Thus, this current research will construct a new measure to test employee attributions in response to psychological contract breach.

In addition, attribution theory supposes that people make causal explanations for events that they have experienced, and their future behaviours and attitudes can be influenced by these explanations (Campbell & Swift, 2006). Thus, the employee attributions of psychological contract breach may have an influence on the employees' work-related outcomes. But it remains unclear whether employee attributions moderate or mediate the relationship between psychological contract breach and employee work-related outcomes. This research will examine the role of employee attributions in the relationship between psychological contract breach and employee outcomes.

## **2.4 Chapter Summary**

This chapter has discussed the early definitions and contemporary definition of the term psychological contract. Then the content of the psychological contract has been described. After that, the definitions of psychological contract breach have been discussed. By reviewing the direct, moderation and mediation models of psychological contract breach, this chapter has identified that little research has examined the employee attributions of psychological contract breach. The following chapters will describe the employee attributions of psychological contract breach and will discuss the role of employee attributions in the relationship between the breach and employee work-related outcomes through proposing moderation and mediation models.

# **Chapter 3 Psychological Contract Breach and**

## **Employee Outcomes: The *moderating* role of employee**

### **attributions**

### **3.1 Introduction**

Attribution theory will be first introduced and reviewed in this chapter. The different psychological contract breach models discussed in Chapter 2 have shown that psychological contract breach leads to negative effects on employees (e.g., Bal, et al., 2008; Zhao, et al., 2007; Chen, et al., 2008; Chiu & Peng, 2008; Lo & Aryee, 2003). This chapter will outline attribution theory, and then explain why employee attributions may moderate the relationship between psychological contract breach and key employee outcomes, i.e., employee well-being, leadership perceptions and performance.

### **3.2 Attribution Theory**

The term attribution refers to the inferences or perceptions of causes (Gronhaug & Falkenberg, 1994). According to Campbell and Swift (2006, p.393), “Attribution theory asserts that people continuously attempt to develop causal explanations for events experienced by themselves (Kelley, 1967) and others (Kelley & Michela, 1980), and that the resulting perception of causality influences future behaviour (Abramson et al, 1978; Campbell & Martinko, 1998; Sabini et al 2001)”. Therefore, the attribution theory is about how people answer causal questions and make causal explanations for

the events they have experienced, and how people's causal explanations influence their future behaviours.

### **3.2.1 Heider's "Naïve Psychology" Theory**

Heider is regarded as the father of attribution theory; his "naïve psychology", which was provided in his book *The Psychology of Interpersonal Relationships*, is treated as the origin of attribution theory (Fatemi & Asghari, 2012). Heider's "naïve psychology" refers to the process of how an untrained actor makes sense of events (Heider, 1958). According to Heider (1958), people are naive psychologists and have innate interests in seeking the causal explanations of successes and failures in their lives. Heider (1958) distinguished between internal attributions and external attributions and indicated that one of the primary questions that individuals address in causal explanations is whether an event results from internal factors or external factors. Internal attributions refer to the factors within the person, such as ability and intention; by contrast, external attributions are related to the factors that lie outside of the person, such as the task itself, regulations, and other people's factors. Both the internal and external factors have an influence on people's processes of making causal explanations for events they have experienced (Heider, 1958). In addition, Heider (1958) proposed that there is a hydraulic relation between internal attributions and external attributions, which means that people who attribute more on one factor may attribute less on the other factor. For instance, if people make more causal explanations of internal attributions, they may make less causal explanations of external attributions.

### **3.2.2 Development of Heider's "Naïve Psychology" Theory**

Heider's contributions on the attribution theory opened the door for subsequent scholars, such as Kelley (1971), Weiner (1985a) and Martinko and Thomson (1998). Martinko, et al. (2006) indicated that those scholars' research formed the core literature in attribution theory.

### **Kelley's "Covariation and Configuration" Theory**

From Kelley's (1971) perspective, people depend on three types of information when they make causal explanations. The three types of information are consistency, distinctiveness, and consensus (Kelley, 1971). Consistency is related to the generality of the person's actions across different times. If the person's behaviours were similar to the actions he or she took in the past, then they would be consistent actions (Kelley, 1971). Distinctiveness refers to whether the actor's behaviour is concentrated on only one certain target or aimed at all potential targets (Kelley, 1971). In other words, if the actor's behaviours in situation A were not likely to happen in other situations, the actor's behaviours would be regarded as distinctiveness. Consensus refers to whether the same action will be taken by other individuals in the same situation (Kelley, 1971). If other individuals behaved in the same way in the same situation, then the consensus would be high; on the contrary, if the action taken by the person were almost unique, then the consensus would be low. Based on Heider's (1958) internal and external attribution theory, Kelley (1971) developed his own model to identify causal explanations. However, his model has not indicated how various information leads to specific attributions.

### **Weiner's Attribution Theory**

Weiner's (1985a) attribution theory indicated three causal dimensions that people apply to interpret events and predict the future. The three causal dimensions are the locus of causality, stability, and controllability (Weiner, 1985a). A locus of causality is applied to identify whether attributions are generated from the internal factors or external factors (Weiner, 1985a). In terms of achievement, attributions such as effort and aptitude can be regarded as an internal locus of causality, while causes such as task difficulty and luck can be treated as an external locus of causality. Stability is the second causal dimension, which is used to identify whether the cause will remain constant or change across different time periods (Weiner, 1985a). For example, although both ability and effort are regarded as internal attributions, ability tends to be a stable cause, while effort tends to be an unstable attribution. The third causal dimension is controllability, which is related to the degree of volitional control the

person has over his or her behaviour (Weiner, 1985a). For instance, skill and ability can be controlled, while mood and luck are regarded as uncontrollable. Weiner's (1985a) attribution theory has been widely used in psychology, education, law, and many other areas. However, sometimes, the locus of causality is not straightforward and may shift between two actors (Fincham, 1985).

### **The combination of Kelley's and Weiner's attribution theories**

Martinko and Thomson (1998) proposed an integration of Kelley's (1971) and Weiner's (1985a) models. They linked Kelley's (1971) consensus, consistency, and distinctiveness with Weiner's (1985a) locus of causality, stability, and Abramson, Seligman and Teasdale (1978)'s globality. The globality dimension is related to whether the cause is generalisable across different situations (Abramson, et al., 1978). Figure 3.1 shows Martinko and Thomson's (1998) model.

According to Martinko and Thomson (1998), Kelley's (1971) consensus, which is related to whether the same action will be taken by other individuals in the same situation (Kelley, 1971), can be linked to Weiner's (1985a) locus of causality, which is used to identify whether an attribution is raised from the internal factors or external factors (Weiner, 1985a). Therefore, the events that have high consensus can be attributed to external factors, such as the nature of task, while the events with low consensus may be attributed to internal factors, such as ability (Martinko & Thomson, 1998).

Moreover, Martinko and Thomson (1998) combined Kelley's (1971) consistency, which is related to the generality of the person's actions across different times, with Weiner's (1985a) stability, which is applied to identify whether the cause will remain constant. The high consistent cause is regarded as a stable cause, such as physical laws, while the low consistent attribution is related to an unstable attribution, such as chance (Martinko & Thomson, 1998).



Consistency					Consensus
<hr/>					
High		Low			
Distinctiveness		Distinctiveness			
<hr/>		<hr/>			
High		Low	High	Low	
High	External Stable Specific	External Stable Global	External Unstable Specific	External Unstable Global	
Low	Internal Stable Specific	Internal Stable Global	Internal Unstable Specific	Internal Unstable Global	

Figure 3.1 A Synthesis of the Dimensions of the Weiner and Kelley Attributional Models (Martinko & Thomson, 1998)

Finally, Martinko and Thomson (1998) linked Kelley's (1971) distinctiveness with globality. Distinctiveness refers to whether the actor's behaviour is focused on only one certain target or aimed at all potential targets (Kelley, 1971). Therefore, low distinctiveness is related to high globality, such as general ability and physical laws, whereas high distinctiveness is linked to low globality, such as specific ability and effort (Martinko & Thomson, 1998).

In summary, Heider's "naïve psychology" theory is regarded as the origin of attribution theory (Fatemi & Asghari, 2012). Then Kelley (1971) and Weiner (1985a) developed Heider's "naïve psychology" theory and proposed their own attribution theories. Lacter, Martinko and Thomson (1998) proposed an integration of Kelley's (1971) and Weiner's (1985a) models. All of these scholars' theories formed the core literature in attribution theory (Martinko, et al., 2006).

### **3.3 Employee Attributions of Psychological Contract Breach**

Rousseau (1995) and Morrison and Robinson (1997) indicated three primary attributions of psychological contract breach, which are reneging, disruption, and incongruence. Reneging is related to the situations in which the organisation is unable to realise an obligation or unwilling to fulfil it (Morrison & Robinson, 1997). Therefore, in the case of reneging, the organisation may have made a promise to the employee, but the organisation could not fulfil it or had no intention to realise it (Morrison & Robinson, 1997). According to Lester, et al. (2002), disruption is related to the situation in which the organisation intends to fulfil the promise, but due to unexpected environmental factors, the organisation is unable to realise its obligations to the employee. Incongruence appears when the supervisor and the employee have different understandings on the same promise due to divergent schemata, ambiguity surrounding obligations, and miscommunication (Morrison & Robinson, 1997). Schemata guide an individual to interpret and recollect the promise (Taylor & Crocker, 1981). Ambiguous obligations may result in different understandings of the same agreement, as the mental representations of the same agreement of the two parties may change (Morrison & Robinson, 1997). The miscommunication between the supervisor and the employee is also likely to cause incongruence because the two parties may assume that they share the same understanding of the promise, while in reality, they do not (Ross, et al., 1977).

Employee attributions contain a wide range of factors. In addition to reneging, incongruence, and disruption, employees may also attribute psychological contract breach to their own skills or efforts, their supervisors' leadership and efforts, incorrect implementation of the organisation's policies and so forth. The three specific attributions proposed by Rousseau (1995) and Morrison and Robinson (1997) do not cover all key dimensions of employee attributions. Meanwhile, little research has developed the measurement on the employee attributions of psychological contract breach. In order to obtain a more comprehensive understanding and construct a new measure on employee attributions, there is a need to classify employee attributions, identify the key dimensions of employee attributions, and investigate employee attributions according to those key dimensions.

Heider's (1958) attribution theory can help to identify and classify the causal explanations of unexpected events. Moreover, one of the primary questions that individuals address in causal explanations is whether the event resulted from internal factors or external factors (Heider, 1958). In an organisational context, employees may attribute psychological contract breach to the factors within themselves or to the factors that lie outside of them. Based on Heider's (1958) attribution theory, four dimensions of the employee attributions of psychological contract breach can be identified. Table 3.1 shows the four dimensions of employee attributions.

Table 3.1 Employee Attributions of Psychological Contract Breach

<b>Dimension</b>		<b>Examples</b>
Employee internal attribution		Employee skills, ability, efforts and initiatives
Employee external attribution	Attribution about supervisor	Supervisor intention, leadership skills and efforts
	Attribution about organisation	Organisation intention, facilities and efforts
	Attribution outside of supervisor and organisation	Unforeseen events and economic environment

The first dimension is employee internal attributions. When employees devise attributional explanations for psychological contract breach, they may attribute the breach to internal factors within themselves, such as skills, ability, and efforts. Meanwhile, employees may believe that their psychological contracts are fulfilled due to factors outside of them, which refer to external attributions. Employee external attributions can include another three dimensions of employee attributions, which are attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation. The dimension of attributions about the supervisor supposes that employees attribute psychological contract breach to factors outside of themselves but within their supervisors. This dimension is related to the supervisors' intention, leadership skills and efforts. The third dimension is attributions

about the organisation, which means that employees attribute psychological contract breach to causes outside of themselves but within the organisation's control. This dimension includes the organisation's intention, facilities and efforts. The fourth dimension is the attributions outside of the supervisor and the organisation and supposes that employees attribute psychological contract breach to factors outside of the supervisor's and the organisation's control, such as unforeseen events, economic environment and other circumstances beyond the supervisor's control and the organisation's control. Based on the four dimensions of employee attributions discussed above, the study proposed that:

*Hypothesis 2. Employee attributions in response to psychological contract breach are measured by a four-factor model. The four factors are employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation.*

In the following sections, the direct relationships between psychological contract breach and employee well-being, leadership perceptions and performance will be discussed. Based on this, the moderating role of the four dimensions of employee attributions in the relationship between psychological contract breach and employee outcomes will be described.

### **3.4 Employee well-being**

Empirical research has indicated that psychological contract breach is not only negatively related to employees' attitudes, such as organisational commitment, trust and job satisfaction; but also negatively related to the employees' behaviours, like job performance and organisational citizenship behaviours (Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000; Rousseau & Anton, 1988). However, little research has examined the effect of psychological contract breach on employee well-being. As one important component of people's mental health (Warr, 1990), well-being usually brings positive consequences (Isen & Baron, 1991), such as the employee's high level of job satisfaction (Connolly & Viswesvaran, 2000) and less turnover (Shaw, 1999).

Therefore, employee well-being is generally desired in an organisational context. Cognitive dissonance theory supports that psychological contract breach has impact on employees' well-being, which will be discussed in this section in detail. Thus, the research chooses and explores the employee well-being outcome of psychological contract breach.

### 3.4.1 Defining Well-being

As one component of people's mental health (Warr, 1990), well-being refers to an individual's overall experience in daily life, particularly his or her self-described happiness (Diener, 1984). Based on two axes, Warr (1990) constructed a measure to test well-being, helping to indicate the dimensions of well-being. The two axes consist of pleasure and arousal, in which pleasure is the horizontal dimension and arousal is the vertical dimension (Warr, 1990). In addition to the horizontal indicator -- unpleasant-pleasant, Warr (1990) proposed another two key indicators of well-being. The two indicators are anxiety-contentment, and depression-enthusiasm. The anxiety-contentment indicator is related to the individual's tendency of feeling tense, uneasy, worried, calm, contented and relaxed. The depression-enthusiasm indicator tests the individual's tendency of feeling depressed, gloomy, miserable, cheerful, enthusiastic, and optimistic. Figure 3.2 shows Warr's (1990) measurement model of well-being. An employee's well-being can be located anywhere along the axes.

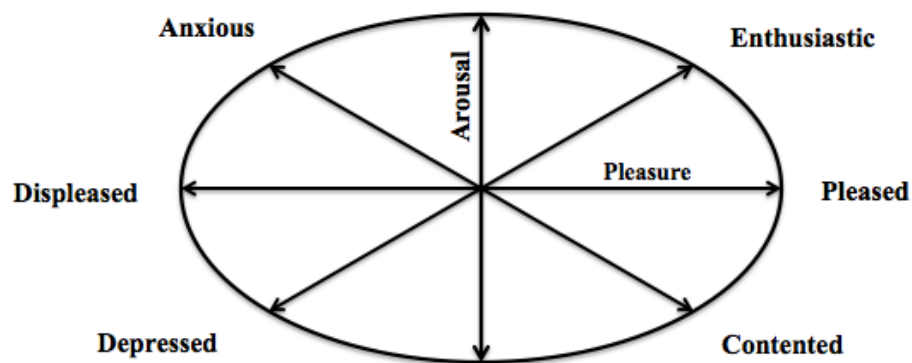


Figure 3.2 Warr's (1990) Well-being Measurement Model

Empirical evidence has supported Warr's (1990) measurement on well-being and the two indicators (Warr, 1990; Holman, Chisick & Totterdell, 2002; Dierendonck, Haynes, Borrill & Stride, 2004; Daniels & Guppy, 1994). For instance, Daniels and Guppy (1994) applied Warr's (1990) well-being measurement to conduct a survey among 244 accountants and found that occupational stress is negatively related to employee well-being.

### **3.4.2 Direct Relationship Between Psychological Contract Breach and Employee Well-being**

Employee well-being may be influenced by psychological contract breach directly. Cognitive dissonance theory can help to explain the direct relationship between psychological contract breach and employee well-being. Cognitive dissonance theory argues that people experience a psychological state of discomfort and tension when people have two or more contradictory beliefs in their minds or when one belief follows from the obverse of another belief and conflicts with it (Festinger, 1957; Shultz & Lepper, 1996). The experience of cognitive dissonance leads to an increase in people's negative feelings (Elliot & Devine, 1994; Harmon-Jones, 2000; Zanna & Cooper, 1974). This is because people often expect cognitive consistency, and cognitive dissonance is an unexpected and a negative event from people's perspectives, as the inconsistent cognitions interfere with people's effective actions. Thus, when cognitive dissonance occurs, people may feel less happy. As the absence of negative feelings is one component of well-being, cognitive dissonance further leads to reduced well-being (Burroughs & Rindfleisch, 2002). In empirical research, by conducting two induced-compliance experiments, Elliot and Devine (1994) found that conflict dissonance is positively related to psychological discomfort. Harmon-Jones (2000) conducted two experiments and demonstrated that cognitive dissonance is positively associated with the experience of negative feelings.

In an organisational context, employees have the belief that their psychological contracts should be fulfilled. According to Morrison and Robinson (1997), employees engage in a cognitive sense-making process when they have experienced psychological

contract breach in order to identify the meaning of the negative event. When psychological contract breach occurs, the employees identify that their psychological contracts have not been realised. As a result, there are two contradictory beliefs in the employees' minds. The experience of cognitive dissonance can reduce people's well-being (Burroughs & Rindfleisch, 2002). Thus, the psychological contract breach may have negative impact on the employee well-being.

Empirically, Conway and Briner (2002) took an initial look at employees' short-term affective reactions to psychological contract breach. They hypothesised that broken promises are negatively related to employees' daily moods and are positively associated with employees' negative emotional reactions (Conway & Briner, 2002). By applying a daily diary study, Conway and Briner's (2002) hypotheses were supported. However, the effect of psychological contract breach on employee well-being is remaining unclear. Thus, this current research proposes that

*Hypothesis 3. Psychological contract breach is negatively related to employee well-being.*

### **3.4.3 Moderating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Well-being**

As proposed in the above section, there may be a direct relationship between psychological contract breach and employee well-being. Cognitive dissonance theory can help to explain this direct relationship. In this section, employee attributions are proposed to moderate the direct relationship between psychological contract breach and employee well-being through influencing the employee's cognitive dissonance. To be more specific, when psychological contract breach occurs, if employees attribute the breach to the supervisor's or the organisation's factors, the employees may blame the supervisors or the organisation more and then generate more cognitive dissonance. Thus, compared to the situation in which employees do not attribute psychological contract breach to the supervisor's or the organisation's fault, the negative relationship between psychological contract breach and employee well-being may be stronger if

employees make attributions about the supervisor or attributions about the organisation.

On the contrary, when employees attribute psychological contract breach to their internal factors or factors beyond the supervisor's or the organisation's control, employees may perceive less cognitive dissonance because the employees may be less likely to blame the supervisor or the organisation. Therefore, compared to employees who do not attribute psychological contract breach to their internal factors or to factors outside of the supervisor and the organisation, employees who make employee internal attributions or attributions outside of the supervisor and the organisation may experience a weaker negative relationship between the breach and employee well-being. Thus, this current research proposes that

*Hypothesis 4. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation moderate the relationship between psychological contract breach and employee well-being.*

### **3.5 Leadership Perceptions**

Although research has shown that psychological contract breach can negatively affect a wide range of employee outcomes (e.g., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000; Lo & Aryee, 2003), little research has explored the effects of psychological contract breach on an employee's perceptions of leadership. Cockerill (1993) has indicated that effective leadership plays an important role in an organisational context. The employee's leadership perceptions are consistent or modified by circumstances (Collins, 2010); thus, the circumstance of experiencing psychological contract breach may have an effect on leadership perceptions. Moreover, leadership can help the supervisor to achieve the goal of improving the employee's performance (Vecchio, et al., 2010). Cognitive dissonance theory supports that psychological contract breach has impact on employees' leadership perceptions, which will be discussed in this section in detail. Thus, the research chooses and explores the leadership perceptions outcome of psychological contract breach.



### **3.5.1 Defining Leadership**

Leadership is similar to “good art” (Pardey, 2006), which means it is difficult to define but can be understood when people see it or experience it. There are almost as many definitions of leadership as there are scholars who have attempted to define it. According to Northouse (2004, p3), the concept of leadership refers to “a process whereby an individual influences a group of individuals to achieve a common goal”. Northouse (2004) emphasised that leadership is a process that involves the individual’s influence in a group context and goal achievement. Later, scholars developed Northouse’s (2004) definition and indicated that the process involves the member behaving in the leader’s desired way (Hughes, Ginnett & Curphy, 2009). Leadership is also related to an interpersonal relationship, in which the member complies with the leader because the member wants to rather than has to (Hughes, Ginnett & Curphy, 2009). Leadership is different from management, as managers seek stability and structure, while leaders look for change (Barker, 2001). In a word, although leadership is a complex concept that is difficult to define, when boiled down, contemporary leadership is about uniting and empowering individuals to achieve common goals (Sherman, 1995).

There are different leadership styles. Situational leadership indicated that there is no one single way of leading suitable for all situations (Fiedler, 1964), and leadership should be developed based on situational factors or even adapt to situations (Hersey & Blanchard, 1969). Transformational leadership is another leadership style, which proposed that leadership is a process that involves transforming and changing people, organisations and contexts rather than just taking actions to achieve goals (Northouse, 2004; Bass & Avolio, 1994). Charismatic leadership is related to rebuild morale and provide a positive vision of the future to members (House, 1976). Servant leadership involves the morale dimension of leadership as well, but this leadership style emphasises leaders’ serving desires more than leading desires (Greenleaf, 1970). According to servant leadership theory, leaders should ask questions rather than giving answers directly, should develop others’ leading skills, and should offer opportunities

for others to let others lead themselves (Katzenbach & Smith, 1993). Empowering leadership refers to a process that the supervisor shares his or her power with the employees (Conger & Kanungo, 1988). Empowering leadership is based on dialogues and cooperation with employees (Bolin, 1989). In short, there are different leadership styles vary with the different definitions of leadership. The current research will adopt empowering leadership. This is because in order to adapt to the changes of economic environment and organisational structures after globalisation, many employers in China have applied empowering leadership to replace traditional hierarchical management (Wang, Wu, Zhang and Chen, 2008).

### **3.5.2 Direct Relationship Between Psychological Contract Breach and Leadership Perceptions**

Employees' leadership perceptions may be influenced by psychological contract breach directly. Cognitive dissonance theory can help to explain the direct relationship between psychological contract breach and leadership perceptions. When people have two contradictory beliefs in their minds, cognitive dissonance theory indicates that people engage in reducing this dissonance and search for consistency (Festinger, 1957; Shultz & Lepper, 1996). One way to reduce cognitive dissonance is to deny the former belief that conflicts with the existing belief (Festinger, 1957). Empirically, experiments found that people reduce cognitive dissonance through changing their former beliefs to seek for consistency with the recent ones (Harmon-Jones, 2004).

In an organisational context, employees have the belief that their supervisors can fulfil their psychological contracts. Employees have favourable perceptions of their supervisors' leadership in terms of psychological contract fulfilment. When experiencing psychological contract breach, employees perceive that their psychological contracts have not been realised and have beliefs that conflict with the former beliefs. In order to reduce cognitive dissonance, the employees may deny the former favourable perceptions of their supervisors' leadership. Thus, the psychological contract breach may reduce the employees' favourable leadership perceptions. In addition, according to Bernardin and Ekatty (1984), upward feedback refers to

employees' ratings and perceptions of their supervisors' behaviours. Atwater, Roush and Fischthal (1995) indicated that employees are the direct targets of supervisors' behaviours; thus, employees evaluate and perceive their supervisors' leadership and give feedback to their supervisors based on their experience. Empirical studies supported that employees apply their experience to evaluate their supervisors' leadership (Sosik, 2005; Lord & Brown, 2001). However, the effect of psychological contract breach on employee leadership is remaining unclear. Thus, this current research proposes that

*Hypothesis 5. Psychological contract breach is negatively related to employees' favourable leadership perceptions.*

### **3.5.3 Moderating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Leadership Perceptions**

As proposed in the above section, there may be a direct relationship between psychological contract breach and leadership perceptions. Cognitive dissonance theory can help to explain this direct relationship. In this section, employee attributions are proposed to moderate the direct relationship between psychological contract breach and leadership perceptions through influencing the employee's cognitive dissonance. To be more specific, when employees attribute psychological contract breach to the supervisor's and the organisation's factors, they may blame more on the supervisors and experience more cognitive dissonance towards the employment relationship, as a result, denying more favourable leadership perceptions. In this situation, the employee who makes attributions about the supervisor and attributions about the organisation may strengthen the negative relationship between psychological contract breach and favourable leadership perceptions when compared to the employee who does not blame the supervisor or the organisation.

On the contrary, if the employee attributes psychological contract breach to his or her own fault or to the factors outside of the supervisor's and the organisation's control, the employee may be less likely to reduce favourable leadership perceptions because the

employee does not suppose that the supervisor's leadership has caused the breach. One consequence is less cognitive dissonance, which may make the employee less likely to deny his or her formerly favourable perceptions of leadership. Thus, compared to the employee who does not make employee internal attributions or attributions outside of the supervisor and the organisation, the employee who make these attributions may weaken the negative relationship between psychological contract breach and favourable leadership perceptions. Thus, this current study proposes that

*Hypothesis 6. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation moderate the relationship between psychological contract breach and employees' favourable leadership perceptions.*

### **3.6 Performance**

Employee performance is regarded as the 'bottom line' for employees at work (Schermerhorn, Cattaneo & Smith, 1988) and is one of factors that determine the organisation's effectiveness. Thus, the research on the effects of psychological contract breach on employee performance can benefit both individuals and organisations. Empirical research has shown that psychological contract breach is negatively related to the employee's performance (e.g., Turnley, et al., 2003; Zhao, et al., 2007; Restubog, et al., 2007; Suazo, 2009; Bal, et al., 2010). However, little research has tested this relationship in a non-Western context. Thus, the research chooses and explores the relationship between psychological contract breach and employee performance in China to contribute to the generalisation of the effects of psychological contract breach.

#### **3.6.1 Defining Performance**

Employee performance refers to the quality and quantity of the work contributions made by an individual or a group (Schermerhorn, et al., 1988). Churchill, Ford and

Walker (1992) indicated that employee performance is behaviour measured in terms of its contributions to the organisation's objectives and goals. According to Jamal (2007), employee performance is a function that the employee can perform well by applying available resources under some constraints. As it is supposed that the employee might reduce his or her performance contributions when psychological contract breach occurs in order to keep a balanced exchange relationship with the organisation, this thesis will adopt Schermerhorn et al.'s (1988) definition and treat the employee performance as the quality and quantity of an employee's contributions.

### **3.6.2 Dimensions of Employee Performance**

Employee performance is complex and multidimensional. Scholars applied a variety of approaches to explore the dimensions of employee performance, which are shown in Table 3.2. Moreover, it is believed that the research on the dimensions of employee performance has changed from a focus only on the employee's tasks and jobs to a much broader focus that contains dynamic organisational contexts (Ilgen & Hollenbeck, 1991). Although different scholars have indicated different dimensions of employee performance, most of the dimensions can be classified into two main aspects: in-role performance and extra-role performance. Therefore, this thesis will focus on these two aspects of employee performance.

Table 3.2 Dimensions of Employee Performance

<b>Authors</b>	<b>Dimensions</b>
Schermerhorn, et al. (1988)	Performance effectiveness Performance efficiency
Orr, Mercer & Sackett (1989)	In-role performance Extra-role performance
Campbell (1990)	Job specific proficiency Non-job-specific task proficiency Written and oral communication Demonstrating effort Maintaining personal discipline Maintaining peer and team performance Supervision / leadership Management / administration
Borman & Motowidlo (1993, 1997)	Task performance Contextual performance
Welbourne, Johnson & Erez (1998)	Job role behaviour Organisation role behaviour Career role behaviour Team role behaviour Innovator role behaviour
Podsakoff, MacKenzie, Paine & Bachrach (2000)	Helping behaviour Sportsmanship Organisational loyalty Organisational compliance Individual initiative Civic virtue Self development
Griffin, Neal & Paoker (2007)	Individual task proficiency Team member proficiency Organisation member proficiency Individual task adaptivity Team member adaptivity Organisation member adaptivity Individual task proactivity Team member proactivity Organisation member proactivity

The two aspects of employee performance, in-role performance and extra-role performance, were proposed by Orr, et al. (1989). In-role performance is also known as core task performance (Katz & Kahn, 1978), which is related to the performance that is specified in the employee's job description and recognised by the company's formal reward system. For example, the in-role performance may include working a full eight-hour day each weekday, completing assigned tasks before the deadline, and avoiding absence (Williams & Anderson, 1991). Unlike in-role performance, extra-role performance is related to the employee's behaviour that benefits the organisation and is not specified in the employee's job description or the company's formal reward system (Organ, 1988). For instance, extra-role performance may include the employee's creativity and innovative behaviour (Katz, 1964), the employee's pro-social behaviour (George & Bettenhausen, 1990), and the employee's organisational citizenship behaviour like civic virtue (Organ, 1988).

To be more specific, the term in-role performance is also known as task performance and job role behaviour, these three terms are sometimes interchangeable. According to Welbourne, et al. (1998), job role behaviour refers to the traditional views on the employee's job performance, which is related to task performance. Williams and Anderson (1991) suggested that task performance "measures the extent to which an employee fulfils the formal requirements of the job and performs all essential job duties" (p.606). However, from Borman and Motowidlo's (1993) perspectives, task performance is not only concerned with the job requirements fulfillment, but also regarded as the "effectiveness with which job incumbents perform activities that contribute to the organisation's technical core" (p.99).

Extra-role performance includes various factors, such as contextual performance (Borman & Motowidlo, 1993), demonstrating effort (Campbell, 1990), non-job-specific task proficiency (Compbell, 1990), individual task proactivity (Griffin, et al., 2007), and individual task adaptivity (Griffin, et al., 2007). Extra-role performance is close to contextual performance; thus, the two terms are sometimes interchangeable. In terms of contextual performance, Borman and Motowidlo (1993) suggested that it is a broader definition of job performance and is related to the employee's behaviours that do not "directly support the technical core, but rather support the organizational, social and psychological environment in which the ethical core must function" (p.73). Therefore,

unlike task performance, contextual performance includes employee behaviours that may not be specified in job descriptions but still have an important effect on organisational effectiveness (Borman & Motowidlo, 1993, 1997).

In general, traditionally, the dimensions of employee performance focused on the employee's effectiveness and his or her core tasks and job duties, which are related to in-role performance. Therefore, the employee performance only referred to the behaviours that are specified to the employee in the traditional time (Campbell, McCloy, Oppler & Sager, 1993). However, the traditional views of the dimensions of employee performance does not contain the full range of employee behaviours that contribute to the organisation's effectiveness (Campbell et al., 1993; Murphy & Jackson, 1999). Thus, the traditional views have been changed by the changing nature of work and organisations (Ilgen & Pulakos, 1999). New views on the dimensions of employee performance have been introduced, like extra-role performance, which is related to dynamic organisational contexts (Borman & Motowidlo, 1993). In one word, the research on the dimensions of employee performance has changed from a focus only on the employee's tasks and jobs to a much broader focus that concerns dynamic organisational contexts (Ilgen & Hollenbeck, 1991).

### **3.6.3 Direct Relationship Between Psychological Contract Breach and Employee Performance**

Employee performance may be influenced by psychological contract breach directly. Because a psychological contract is rooted in social exchange theory (Rousseau, 1995), which is regarded as one of the most influential conceptual paradigms for explaining workplace behaviours (Cropanzano & Mitchell, 2005), the direct relationship between psychological contract breach and employee performance can be explained by social exchange theory.

Social exchange theory describes the social relations between two parties, such as the social relations between the employee and the supervisor (Cook & Whitmeyer, 1992). The basic assumption of social exchange theory is that the relations between two



parties are maintained by expectations that one party will be rewarded by another party after doing a favour to another party (Homans, 1958; Blau, 1968). There is a motivation for the individual to seek a balanced exchange relationship with another party (Homans, 1961). Thus, social exchange theory indicated that one party expects something in return after doing a favour to another party (Blau, 1964). The essence of social exchange theory is that “social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships” (Cropanzano & Mitchell, 2005, p.890). Thus, the social exchange relationship between the two parties is mutual. After doing a favour to another party, people expect rewards from that party, and will act according to the rewards in the future.

Social exchange theory is based on certain reciprocity rules. Gouldner (1960) proposed three different types of reciprocity: reciprocity as interdependent exchanges, reciprocity as a folk belief, and reciprocity as a moral norm. Reciprocal interdependence focuses on contingent interpersonal transactions and believes that one party's behaviour is contingent on another party's actions (Cropanzano & Mitchell, 2005). Reciprocity as a folk belief refers to cultural expectations, such as the notion that people will get what they deserve (Gouldner, 1960) or that everything will work out in the end (Cropanzano & Mitchell, 2005). Reciprocity as a norm and individual orientation means treating the reciprocity as a cultural mandate, which is a universal principle (Gouldner, 1960), and those who do not comply with it will be punished.

The social relations in the social exchange theory involve the exchange of resources between two parties (Cook & Whitmeyer, 1992). Foa and Foa (1974, 1980) indicated six types of exchange resources in the social exchange theory, which are love, status, information, money, goods, and services. In the organisational context, there are two forms of resources in exchange: economic resources and socioemotional resources. Economic resources are related to financial needs, while socioemotional resources emphasise the employee's social and esteem needs (Cropanzano & Mitchell, 2005). In terms of the employee's psychological contract, the resources that the employee receives from the organisation can include both economic resources (e.g., pay and rewards) and socioemotional resources (e.g., respect for the employee's personal and family circumstances). Meanwhile, the resources that the employee contributes to the

organisation contain both economic resources (e.g., in-role performance) and sociemotional resources (e.g., extra-role performance, such as organisational citizenship behaviours).

In an organisation context, the employee expects a fair and balanced exchange relationship between him or her and the organisation. To be more specific, the employee often expects something in return after making a contribution to the organisation (Blau, 1964), such as attractive pay, training and opportunities for promotion. Therefore, the employee may expect the fulfilment of the psychological contract as rewards when he or she completes core tasks. Moreover, people will act according to the rewards they received (Cropanzano & Mitchell, 2005). Thus, the employee acts according to whether the psychological contract has been fulfilled. The employee may perform well when the psychological contract between him or her and the organisation has been fulfilled. However, when psychological contract breach occurs, the employee may perceive that the organisation has failed to realise some of its obligations (Robinson & Morrison, 1995), such as adequate health care benefits, a relatively secure job, and opportunities to grow and develop. As a result, the employee may identify that there has been an unbalanced and unfair exchange relationship between him or her and the organisation. In order to restore the balance in the relationship, the employee may refuse to fulfil his or her obligations (Zhao, et al., 2007) and make fewer contributions to the organisation. As the employee's obligations and the resources of exchange with the organisation, the employee's in-role performance and extra-role performance may be decreased when the employee has perceived the psychological contract breach. Thus, psychological contract breach may have a direct negative impact on the employee's in-role performance and extra-role performance.

Research has shown that psychological contract breach has a negative effect on employee performance (e.g., Bal, et al., 2010, Coyle-Shapiro, et al., 2000, Lester, et al., 2002, Suazo, et al., 2005, Chen, et al., 2008, Lo & Aryee, 2003). Bal, et al. (2010) tested the relationship between employee performance and psychological contract breach in a service company in USA. By collecting and analysing data from 266 employees, they have demonstrated that the psychological contract breach made to the employee is negatively related to the employee's in-role performance and organisational citizenship behaviour. Coyle-Shapiro, et al. (2000) conducted a study in

a local authority in the UK, and indicated that there is a negative relationship between the breach of psychological contract and the employee's organisational citizenship behaviour. Lester, et al. (2002) tested the relationship between psychological contract breach and employee performance in USA, and identified that the greater the degree of psychological contract breach, the less job performance behaved by the employee. In addition, Suazo, et al. (2005) collected data from 234 full-time American employees and demonstrated that psychological contract breach is negatively related to the employee's in-role performance and extra-role performance.

Most research has explored the relationship between psychological contract breach and employee performance in Western contexts (e.g., Bal, et al., 2010, Coyle-Shapiro, et al., 2000, Lester, et al., 2002, Suazo, et al., 2005, Chen, et al., 2008, Lo & Aryee, 2003), little research has tested this negative relationship in a non-Western context. Chen, et al. (2008) tested the relationship with a sample of 273 supervisor-subordinate dyads from a shoe manufacturing enterprise that located in Eastern China. The results have shown that psychological contract breach is negatively associated with the employee's organisational citizenship behaviour and work performance (Chen, et al., 2008). However, Chen, et al. (2008) used the average of the employee's most recent three months' salaries to measure work performance. As the amount of the employee's salary is paid by month and is usually steady in a short-term, like within three months, this measurement might not be able to reflect the employee's actual performance. In addition, Lo and Aryee (2003) conducted the study in Hong Kong with 152 respondents, who were employees enrolled in a part-time Master of Business Administration programme. Their research have shown that psychological contract breach is negatively related to the employee's civic virtue, which refers to the employee's extra-role performance. However, Lo and Aryee's (2003) sample size was small (152 respondents), and the composition of the sample was employees enrolled in a MBA programme, which might not able to represent the working population in Hong Kong. Moreover, the relationship between psychological contract breach and other employee job performance besides civic virtue has not been measured in Lo and Aryee's (2003) study. In general, although there is research on the relationship between psychological contract breach and the employee's performance, the relationship in a Chinese context still needs further study. Thus, this current research proposes that

*Hypothesis 7. Psychological contract breach is negatively related to employees' in-role performance and extra-role performance.*

### **3.6.4 Moderating Role of Employee Attributions in the relationship between Psychological Contract Breach and Employee Performance**

As proposed in the above section, there may be a direct relationship between psychological contract breach and performance. Social exchange theory can help to explain this direct relationship. In this section, employee attributions are proposed to moderate the direct relationship between psychological contract breach and performance through influencing the employee's exchange relationship with the supervisor. More specifically, if the employee believes that he or she has caused psychological contract breach, the employee may perceive that he or she has failed to realise his or her obligations, such as making sufficient effort. This perception may further allow the employee to recognise that the social exchange between him or her and the supervisor is more balanced. In this case, the employee may try to maintain his or her performance when psychological contract breach occurs. Thus, compared to the situation in which the employee does not attribute psychological contract breach to his or her internal factors, the negative relationship between psychological contract breach and employee performance may be weaker when the employee attributes the breach to his or her internal factors.

If the employee attributes psychological contract breach to factors outside of the supervisor's and the organisation's control, the employee may perceive fewer unfulfilled supervisor obligations. As a result, the employee may perceive a more balanced exchange relationship between him or her and the supervisor. In this case, the employee may try to maintain his or her performance as well when experiencing psychological contract breach. Therefore, compared to the situation in which the employee does not attribute psychological contract breach to the factors outside of the supervisor or the organisation, the negative relationship between the breach and employee performance may be weaker when the employee attributes the breach to factors beyond the supervisor's and the organisation's control.

On the contrary, when the employee blames psychological contract breach to the supervisor or to the party represented by the supervisor (i.e., the organisation), the employee may perceive an unbalanced exchange relationship with the supervisor. This is because in this situation, the employee believes that he or she fulfilled employee obligations, while the supervisor has not realised supervisor obligations, such as making sufficient effort. Therefore, employees may perceive their relationship with the supervisor to be more unbalanced when the psychological contract breach is considered to be the supervisor's or the organisation's fault. In this case, the employee may reduce his or her performance more when psychological contract breach occurs in order to restore the balance in the exchange relationship with the supervisor. Thus, compared to the situation in which the employee does not attribute psychological contract breach to the supervisor's or the organisation's factors, the negative relationship between the breach and employee performance may be stronger when the employee attributes the breach to the supervisor's or the organisation's fault. Thus,

*Hypothesis 8. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation moderate the relationships between psychological contract breach and employee in-role performance and extra-role performance.*

### **3.7 Chapter Summary**

This chapter has described attribution theory and employee attributions of psychological contract breach at first. Then the chapter has investigated three outcomes of psychological contract breach, which are employee well-being, leadership perceptions and performance. The direct relationships between psychological contract breach and employee well-being, leadership perceptions and performance have been proposed. Based on the proposed direct relationships, the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes has been discussed in this chapter. The next chapter will examine the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes.

# **Chapter 4 Psychological Contract Breach and**

## **Employee Outcomes: The *mediating* role of employee**

### **attributions**

#### **4.1 Introduction**

This chapter will describe the antecedents and consequences of attributions at first. Then the relationship between psychological contract breach and employee attributions and the relationship between employee attributions and employee outcomes will be discussed. Based on this, the mediating role of employee attributions in the mechanism of psychological contract breach affecting employee outcomes will be explained in this chapter.

#### **4.2 Antecedents of Attributions**

Research indicated various antecedents of attributions, such as the information, belief, and motivation the person has. The information the person obtains about another party's intention behind an event can lead to the person's attribution of that event (Gibson & Schroeder, 2003). For example, if the person receives information that another party has good intention behind another party's failure, the person tends to attribute failure to external and uncontrollable factors outside of another party. However, if the person receives the information that another party has bad intentions behind another party's failure, the person may attribute failure to another party's internal and controllable factors. Empirical studies demonstrated that there are two

extremes: using a large amount of information and making a choice among a broad set of causal explanations (Gibson & Schroeder, 2003) and depending on previous information and selecting the first adequate causal explanations (Gronhaug & Falkenberg, 1994).

An event can also be interpreted by existing beliefs the person has about that event (Kelley & Michela, 1980). When the person believes in another party, he or she attributes failure to external and uncontrollable factors outside of another party, while the person may attribute failure to another party's internal and controllable factors if he or she does not believe in another party. Ajzen (1977) found that whether the prediction of the person's attribution is correct depends on whether the prediction is consistent with the person's beliefs. Golding and Rorer (1972) showed that the person's beliefs can lead him or her to emphasize nonexistent attributions and to ignore true attributions.

The person's motivation can lead to his or her attribution of an event as well (Kelley & Michela, 1980). The person may attribute success to his or her internal and controllable factors because the person has the motivation to enhance self-esteem, while the person tends to attribute failure to the factors beyond his or her control because the person has a motivation of self-protection. Empirical studies demonstrated motivational effects on the person's attributions (Miller, 1976; Sicolý & Ross, 1977).

In addition, Hastie (1984) proposed that unexpected events generate more attributional activities than expected events. People tend to seek explanation-relevant information when experiencing unexpected events (Pyszczynski & Greenberg, 1981; Wong & Weiner, 1981). Moreover, people's tendency of seeking explanation-relevant information is stronger when events are unexpected. Compared with positive events, negative events tend to generate more attributional activities (Peeters & Czapinski, 1990). This is because the negative stimuli of negative events weight more than the positive stimuli of positive events (Peeters & Czapinski, 1990). In terms of the psychological contract, the employee expects the fulfilment of psychological contracts, thus, psychological contract breach is an unexpected and negative event for the employee. As a result, the employee may engage in making attributions.

## **4.3 Consequences of Attributions**

According to attribution theory, people's attributional explanations can influence their future behaviours, emotions and attitudes (Campbell & Swift, 2006). In an organisational context, the consequences of employee attributions include affective consequences, perceptive consequences and behavioural consequences.

### **4.3.1 Affective Consequences**

Weiner (1985c) explored the affective consequences of people's causal explanations and proposed an attribution-emotion-behaviour process model. Figure 4.1 shows the attribution-emotion-behaviour process model. This model demonstrates that people have initial emotional responses to an event they experience (Weiner, 1985c). Positive emotions can be generated by success, while negative emotions can result from failure. When the event is unexpected, negative or important, people seek causal explanations for the outcome of the event (Weiner, 1985c). Based on the attributions people have made, refined emotional reactions are generated (Weiner, 1985c). Different attributions generate different emotions. According to (Weiner, 1985c), pride can be generated by attributing success to the person's internal factors. Anger can result from attributing failure to other people's controllable factors, while pity is generated by attributing failure to other people's uncontrollable factors (Weiner, 1985c). The person may generate guilt if he or she has the feeling of personal responsibility and regards failure as his or her own fault (Weiner, 1985c). People may generate hopelessness when they attribute a negative event to stable causes (Weiner, 1985c). Weiner's (1985c) model further indicates that people's emotions can influence people's behavioural responses to an event at the end.



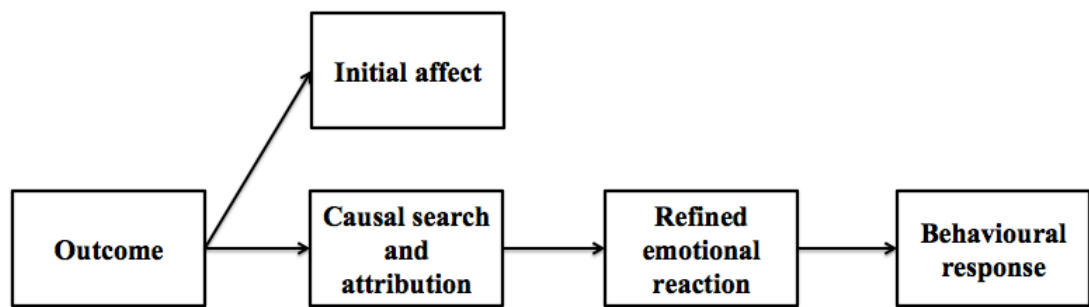


Figure 4.1 Attribution-emotion-behaviour Process Model (Weiner, 1985c)

Empirical studies support that attributions have an impact on people's emotions (e.g., Weiner, 1985a; Weiner, 1985b; McFarland and Ross, 1982, Graham and Chandler, 1982, Pastore, 1952). McFarland and Ross (1982) demonstrated that the attributions of success result in greater positive emotions and less negative emotions than the attributions of failure. Moreover, success may produce higher self-esteem than failure when the person attributes part of the success to his or her own abilities (McFarland & Ross, 1982). Weiner Graham and Chandler (1982) found that college students feel guilty about lying to their parents and cheating on exams, because they believe that they chose those behaviours, which were controlled by them. Pastore (1952) demonstrated that people get angry when a negative event is caused by other people's arbitrary or intentional behaviours. Research has shown that attributions can have an impact on people's emotions. But the role of internal attributions and external attributions in the relationship between events and affective outcomes needs better understanding, especially in the relationship between psychological contract breach and employee emotional outcomes.

### 4.3.2 Behavioural Consequences

According to Weiner's (1985c) attribution-emotion-behaviour process model, people's causal explanations influence their emotions; then the emotions influence their behaviours. Empirical research has shown that if the attribution of an event makes the person feel helpless, he or she may reduce motivation and positive behaviours and

increase passivity, while, if the person generates a feeling of hopefulness from the causal explanation of an event, the person is more likely to put more effort and motivation into his or her work (Douglas & Martinko, 2001; Campbell & Martinko, 1998). In addition, Douglas and Martinko (2001) found that people may behave aggressively or violently if they generate a feeling of anger after making causal explanations for a negative event.

The attributions of negative events can generate negative emotions, which further lead to counterproductive behaviours. The counterproductive behaviours include other-directed counterproductive behaviours, like violence, stealing, and sabotage, and self-directed counterproductive behaviours, such as alcoholism, drug abuse, and absenteeism (Martinko, Douglas & Harvey, 2006).

In terms of the other-directed counterproductive behaviours, Martinko and Zellars (1998) proposed a five-step attributional model to describe why causal explanations lead to violence and aggression. Figure 4.2 shows the five-step attributional model (Martinko & Zellars, 1998). A negative event can lead to people's perception of disequilibria, which spurs people to make causal explanations for the negative event. The attributions can further influence people's emotions. This model indicates that people's emotional state can lead to aggression or violence. To be more specific, people may generate negative feelings, such as anger, when they attribute a negative event to others' controllable factors. In order to obtain gratifications, angry people have a very specific goal, which is inflicting injury on the others (Berkowitz, 1965). Thus, aggression or violence occurs. However, emotions differ according to different attributions people make. People experience pity when they attribute the negative event to others' uncontrollable factors. In this case, people behave less aggressively and violently. Martinko and Zellars (1998). In Martinko, et al., (2006) demonstrated that people who tends to attribute negative experiences to external, stable, controllable, and intentional causes are more likely to take violent and aggressive actions. Aquino, Douglas and Martinko (2004) found that the person who adopts a hostile attributional style is more likely to behave aggressively and violently than the person who does not hold this type of attributional style.

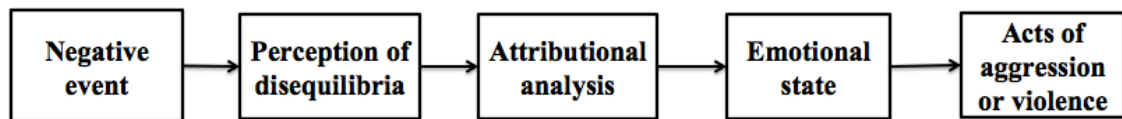


Figure 4.2 A five-step Attributional Model (Martinko & Zellars, 1998)

In terms of self-directed counterproductive behaviours, Martinko and Zellars's (1998) five-step model can be applied to explain why causal explanations lead to alcoholism, drug abuse, and absenteeism (Martinko, et al., 2006). The attributions made for negative events may result in the person's negative affect and expectations of future failure, which make the person tend to give up and become helpless (Martinko, et al., 2006). As a result, counterproductive behaviours, such as alcoholism, drug abuse, and absenteeism, may occur. Moore (2000) demonstrated that causal explanations made for negative events can influence people's work-based self-esteem, affective organisational commitment, depersonalisation, organisational cynicism, voluntary turnover, and effort to change both the company and themselves. The person's burnout is also associated with his or her attributions (Hablesleban & Buckley, 2004). Turnley, et al. (2003) indicated that the employee tends to reduce his or her in-role performance when the employee attributes the negative event to the supervisor's controllable and intentional factors. In general, research has shown that employee attributions may affect employee performance. In terms of psychological contract breach, the employee attributions of the breach may influence the employee's performance. But the role of employee attributions in the relationships between psychological contract breach and employee in-role and extra-role performance is unknown.

### 4.3.3 Perceptive Consequences

People's attributions can affect their perceptions of others. In an organisational context, after the supervisor makes attributional explanations for the employee's behaviour, the supervisor generates perceptions of the employee's behaviour as a result of the attribution. Green and Mitchell (1979) were the first to combine attribution theory and leadership theory. Figure 4.3 shows Green and Mitchell's (1979) model. In Green and

Mitchell's (1979) model, employees' behaviours lead to supervisors' attributions, which further influence the supervisors' actions. More specifically, supervisors' attributional explanations lead to their perceptions of employee behaviours before influencing supervisors' actions (Green & Mitchell, 1979). For example, if the supervisor attributes the employee's high performance to the employee's internal and controllable factors, the supervisor may increase favourable perceptions towards the employee. On the contrary, if the supervisor attributes the employee's poor performance to the employee's internal and controllable factors, the supervisor may generate less favourable perceptions towards the employee. Then the supervisor's perceptions of the employee's behaviours further determine whether the supervisor rewards or punishes the employee.

Empirical studies demonstrated that the supervisor's attributions on the employee's performance helps to form the supervisor's perceptions of the employee's behaviours, and subsequently the perceptions can lead to rewards or punishment (Mitchell, Green & Wood, 1981; Weiner & Kukla, 1970). Ashkanasy's (1989, 2002) studies supported that the supervisor's attributions have an impact on their perceptions of employees. Compared to the supervisor's attributions of the employee's unsuccessful performance, the supervisor's attributions of the employee's successful performance produce the supervisor's positive perceptions on the employee more (Ashkanasy, 1989, 2002).

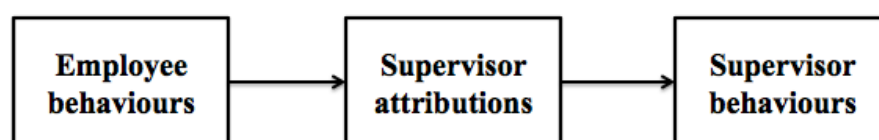


Figure 4.3 Attribution-leadership model (Green & Mitchell, 1979)

Green and Mitchell's (1979) three-step model played an important role in the attribution and leadership study; however, this model ignored that the employee's attributions of the supervisor's behaviour may also have an impact on the employee's behaviours (Martinko, et al., 2006). Later, Martinko and Gardner (1987) proposed a five-step model based on Green and Mitchell's (1979) model. Figure 4.4 shows Martinko and Gardner's (1987) model. This model indicates that the employee's attributions of the supervisor's behaviours may also have an impact on the employee's

perceptions towards the supervisor and subsequently influence the employee's behaviours. Ilgen and Knowlton (1980) demonstrated that if the employee attributes failure to the supervisor's lack of effort, the attribution leads to severe perceptions towards the supervisor. While, if the employee attributes success to the supervisor's abilities, the employee may generate positive perceptions towards the supervisor. Martinko, et al. (2011) showed that the employee's hostile attribution style is negatively related to the employee's perceptions of the supervisor. In general, research has shown that employee attributions may affect the employee's perceptions of the supervisor. But in terms of psychological contract breach, the role of employee attributions in the relationship between psychological contract breach and the employee leadership perceptions is unknown.

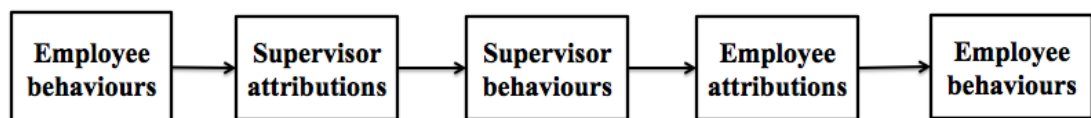


Figure 4.4 Attribution-leadership Model (Martinko & Gardner, 1987)

In summary, people's attributions have impact on the people's affect, behaviours and perceptions. The affective, behavioural, and perceptive consequences differ according to the different types of people's attributions.

## 4.4 Relationship between Psychological Contract Breach and Employee Attributions

The above sections have shown the antecedents and consequences of people's attributions. Based on the above sections, the following sections will discuss how psychological contract breach affect employee attributions and how employee attributions further lead to employee outcomes. Moreover, the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes will be discussed.

People attempt to make causal explanations for psychological contract breach. Hastie (1984) proposed that unexpected events generate more attributional activities than expected events. Empirical studies indicated that unexpected events instigate people's attributional activities. For instance, Pyszczynski and Greenberg (1981) and Wong and Weiner (1981) found that people tend to seek explanation-relevant information when they experienced unexpected events. Moreover, the tendency of seeking explanation-relevant information is stronger when events are unexpected. Compared with positive events, negative events tend to generate more attributional activities (Peeters & Czapinski, 1990). This is because the negative stimuli of negative events weight more than the positive stimuli of positive events (Peeters & Czapinski, 1990). With the heavier weight of stimuli, people tend to engage in more attributional activities when experiencing negative events. Furthermore, the negativity effects of negative events weight more than positive ones as well (Peeters & Czapinski, 1990). In an organisational context, employees expect the fulfilment of psychological contracts, thus psychological contract breach may be a high salient unexpected event. Moreover, from employees' perspective, a psychological contract breach is regarded as a negative event rather than a positive one. As both an unexpected and negative event to employees, psychological contract breach may then stimulate more employee attributions.

In addition, when people suffer a loss, they usually seek causal explanations for why the loss occurs (Frankl, 1969). Prior studies also suggested that when employees perceive that they have not received all the work and employment conditions to which they are entitled, they often try to identify why this occurs (Kahneman, Knetsch & Thaler, 1986; Shapiro, Buttner & Barry, 1994), which is related to employees' attributional activities. From the employee's perspective, a psychological contract breach is the situation in which the supervisor or the organisation has failed to realise the obligations of providing work and employment conditions that have been promised (Robinson, 1996). Thus, when psychological contract breach occurs, the employee may perceive that there is a loss and that he or she has not received all the conditions he or she entitled to, as a result, the employee may tend to engage in attributional activities.

Rousseau (1995) and Morrison and Robinson (1997) indicated three primary attributions of psychological contract breach, which are reneging, disruption, and

incongruence. Reneging is related to the situations that the organisation is unable to realise an obligation and also the organisation is unwilling to fulfil it (Morrison & Robinson, 1997). Therefore, in the case of reneging, the organisation may have made a promise to the employee, but the organisation could not fulfil it or had no intention to realise it (Morrison & Robinson, 1997). According to Lester et al. (2002), disruption means that the organisation wants to fulfil its obligations, but unexpected environmental factors prevent the organisation doing so. Incongruence appears when the supervisor and the employee have different understandings on the same promise due to miscommunication, ambiguity surrounding obligations, and divergent schemata (Morrison & Robinson, 1997). Schemata guide an individual to interpret and recollect the promise (Taylor & Crocker, 1981). Ambiguous obligations may result in different understandings of the same agreement, as the mental representations of the same agreement of the two parties may change (Morrison & Robinson, 1997). The miscommunication between the supervisor and the employee is also likely to cause incongruence because the two parties may assume that they share the same understanding of the promise, while actually, they do not (Ross, et al., 1977).

Employee attributions contain a wide range of factors. Besides reneging, incongruence, and disruption, employees may also attribute psychological contract breach to their own skills or effort, their supervisors' leadership and effort, incorrect implementation of the organisation's policies and so forth. The three specific attributions proposed by Rousseau (1995) and Morrison and Robinson (1997) do not cover all key dimensions of employee attributions. Meanwhile, little research has developed the measurement on employee attributions in response to psychological contract breach. In order to obtain a more comprehensive understanding and construct a new measure on employee attributions, there is a need to classify employee attributions, identify the key dimensions of employee attributions, and investigate employee attributions according to those key dimensions.

Heider's (1958) attribution theory can help to identify and classify the causal explanations of unexpected events. Moreover, one of the primary questions that individuals address in causal explanations is whether the event resulted from internal factors or external factors. In an organisational context, employees may attribute psychological contract breach to the factors within themselves or to the factors that lie

outside of them. Based on Heider's (1958) attribution theory, four dimensions of employee attributions of psychological contract breach can be identified. Table 4.1 shows the four dimensions. The first dimension refers to employee internal attributions. When employees devise attributional explanations for psychological contract breach, they may attribute the breach to internal factors within themselves, such as skills, ability, efforts and initiatives. Meanwhile, employees may believe that their psychological contracts are fulfilled due to factors external to them, which refer to external attributions. Employees' external attributions can include another three dimensions of employee attributions, which are attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation. The dimension of attributions about the supervisor supposes that employees attribute psychological contract breach to factors outside of themselves but within their supervisors. This dimension is related to the supervisors' intention, leadership skills and efforts. The third dimension is attributions about the organisation, which means that employees attribute psychological contract breach to causes outside of themselves but within the organisation's control. This dimension includes the organisation's intention, facilities and efforts. The fourth dimension is the attributions outside of the supervisor and the organisation and supposes that employees attribute psychological contract breach to factors outside of the supervisor's and the organisation's control, such as unforeseen events, unexpected changes and other circumstances beyond the supervisor's control and the organisation's control.



Table 4.1 Employee Attributions of Psychological Contract Breach

Dimension		Examples
Employee internal attribution		Employee skills, ability, efforts and initiatives
Employee external attribution	Attribution about supervisor	Supervisor intention, leadership skills and efforts
	Attribution about organisation	Organisation intention, facilities and efforts
	Attribution outside of supervisor and organisation	Unforeseen events, and unexpected changes

Empirically, the study made by Lester, et al. (2002) supported that employees make causal explanations on experienced psychological contract breach. Based on the work of Rousseau (1995) and Morrison and Robinson (1997), Lester, et al. (2002) hypothesised that when psychological contract breach is perceived, employees are more likely to attribute the breach to reneging or incongruence if compared with their supervisors. By doing a survey, this hypothesis was supported. However, Lester, et al. (2002) only tested three specific employee attributions of psychological contract breach, which were reneging, disruption, and incongruence; while, employee attributions contain a wide range of factors. The three specific attributions (i.e. reneging, disruption, and incongruence) examined by Lester, et al. (2002) do not cover the key dimensions of employee attributions (e.g., employee internal and external attributions). In order to obtain a more comprehensive understanding of employee attributions, this current study will apply the four dimensions of employee attributions that identified based on Heider's (1958) attribution theory to investigate employees' attributions of psychological contract breach. Thus, this current research proposes that

*Hypothesis 9. Psychological contract breach is positively related to employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation.*

As discussed above, psychological contract breach may lead to four types of employee

attributions. The reasons why people make different types of attributions will be explained in the next chapter. Besides, the consequences of attributions show that employee attributions have an impact on the employee's affect, behaviour and perception. The employee attributions may affect the employee's well-being, leadership perceptions and performance. However, little research has explored the role of employee attributions in the relationship between psychological contract breach and the employee outcomes. Thus, the following sections will examine the mediating role of employee attributions in the mechanism of psychological contract breach affecting employee work-related outcomes.

## **4.5 Mediating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Well-being**

There is a possibility that employees' internal and external attributions play a mediating role in the relationship between psychological contract breach and employee work-related outcomes. In other word, psychological contract breach causes employee attributions, and employee attributions then lead to employee work-related outcomes. The above section has explained the mechanism of psychological contract breach leading to employee attributions. The following sections will discuss the processes of employee attributions shaping employee outcomes.

Weiner's (1985c) attribution-emotion-behaviour process model (Figure 4.1) suggests that positive emotions can be generated from the attributions of success, while negative emotions can result from the attributions of failure. Moreover, the types of emotions differ according to people's attributions. When the employee attributes psychological contract breach to his or her internal factors, the employee may generate the emotion of guilt. The employee's emotion of anger may result from attributing psychological contract breach to the supervisor's or the organisation's factors. The employee may feel pity if he or she attributes psychological contract breach to factors outside of the supervisor and the organisation's control. Thus, as a negative event, no matter what

attributions employees make, the employees may generate negative emotions from the attributions of psychological contract breach. As one component of people's mental health (Warr, 1990), well-being refers to an individual's overall experience in daily life, particularly his or her self-described happiness (Diener, 1984). As the generation of positive feelings and the absence of negative feelings are the components of well-being, the employee attributions of psychological contract breach may influence employee well-being. Furthermore, employee attributions are proposed to play a mediating role in the relationship between psychological contract breach and employee well-being.

In terms of empirical evidence, Weiner (1985a) identified that the affective consequences result from causal explanations include shame, pride, guilt, anger, pity, hopelessness, gratitude, and self-esteem. McFarland and Ross (1982) demonstrated that the attributions of success results in greater positive feelings and less negative feelings than the attributions of failure (McFarland & Ross, 1982). Moreover, success may produce higher self-esteem than the failure when the person attributes part of the success to his or her own abilities (McFarland & Ross, 1982). Thus, this current research proposes that

*Hypothesis 10a. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation are negatively related to employee well-being.*

*Hypothesis 10b. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and employee well-being.*

## **4.6 Mediating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Leadership Perceptions**

Employee attributions of psychological contract breach may affect employees' leadership perceptions. Implicit leadership theory can help to explain the employee attributions' effects on leadership perceptions. Implicit leadership theory refers to a recognition-based approach to leadership (Lord, 1985). Implicit leadership theory indicates that the employee has implicit assumptions and expectations about the supervisor's traits, skills, characteristics, and qualities (Forsyth, 2009). The assumptions and expectations are generated from the image of an ideal leader in the employee's memory (Epitropaki & Martin, 2005). The employee then applies the assumptions and expectations to form a leadership perception (Epitropaki & Martin, 2005). When a discrepancy between the employee's assumption and the perceived actual leadership is identified, the employee changes his or her leadership perceptions (Epitropaki & Martin, 2005). Thus, this discrepancy affects the employee's leadership perceptions. Empirical studies have supported the implicit leadership theory (eg., Kenney, Schwartz, Kenney & Blascovich, 1996; Offermann, Kennedy & Wirtz, 1994; Epitropaki & Martin, 2005). For instance, by conducting a longitudinal study, Epitropaki and Martin (2005) found the importance of the implicit leadership theory for leader-member exchange relationships. The closer the employee's assumption and the perceived actual leadership, the better the quality of leader-member exchange relationship (Epitropaki & Martin, 2005).

Offermann et al.'s (1994) study identified eight distinct factors of the employee's assumptions and expectations in implicit leadership theory, which are sensitivity, dedication, tyranny, charisma, attractiveness, masculinity, intelligence and strength. Sensitivity refers to the supervisor's characteristics of sympathy, sensitivity and understanding (Offermann, 1994). Dedication means the supervisor should work hard and prepare his or her work well (Offermann, 1994). Tyranny indicates that the supervisor is assumed to be pushy and power-hungry (Offermann, 1994). Charisma refers to the supervisor's traits of being charismatic, inspiring, and involved (Offermann, 1994). Attractiveness is related to the characteristics of being attractive, classy and tall, for example (Offermann, 1994). The male gender is related to masculinity (Offermann, 1994). The supervisor is expected to be intelligent, knowledgeable, and wise, which are related to intelligence (Offermann, 1994). Strength refers to the characteristics of strength, forcefulness, and boldness (Offermann, 1994).

In terms of the psychological contract, the employee expects and assumes that the supervisor possesses effective leadership skills and that the supervisor will put enough efforts to fulfil the employee's psychological contract and help to improve the organisation's facilities because of the factors of intelligence and dedication in implicit leadership theory. Meanwhile, according to the factor of charisma described by implicit leadership theory, the supervisor is expected to develop the employee's skills and inspire the employee to make enough efforts to realise the psychological contract. The supervisor is also assumed to have the ability to cope with unforeseen events and external circumstances because of the strength and dedication factors of implicit leadership theory.

When psychological contract breach occurs, if the employee attributes the breach to his or her internal factors (e.g., skills and efforts), the supervisor's internal factors (e.g., leadership skills and efforts), the organisation's internal factors (e.g., facilities) and factors outside of the supervisor and the organisation (e.g., unforeseen events and external circumstances), the employee may find that the supervisor has not possessed effective leadership skills, put forward enough effort to fulfil the employee's psychological contract, helped to improve the organisation's facilities, developed the employee's skills, inspired the employee to make enough effort to realise the psychological contract, or had the ability to cope with unforeseen events and external circumstances. As a result, the employee identifies a discrepancy between the employee's expectations and the perceived actual leadership. According to the implicit leadership theory, when a discrepancy is identified, the employee changes his or her perceptions on the supervisor's leadership (Epitropaki & Martin, 2005). The employee then reduces his or her favourable leadership perceptions. Therefore, the employee attributions of psychological contract breach are proposed to be negatively related to the employee's favourable leadership perceptions. Furthermore, employee attributions are proposed to play a mediating role in the relationship between psychological contract breach and leadership perceptions.

In addition, According to Martinko and Gardner's (1987) five-step model (Figure 4.4), the employee's attributions of the supervisor's behaviours have an impact on leadership perceptions. Ilgen and Knowlton (1980) demonstrated that if the employee attributes failure to the supervisor's lack of efforts, this employee attribution leads to severe

perceptions towards the supervisor. While, if the employee attributes success to the supervisor's abilities, the employee tend to generate positive perceptions towards the supervisor (Ilgen & Knowlton, 1980). Thus, this current research further proposes that

*Hypothesis 11a. Employee internal attributions, attribution about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation are negatively related to favourable leadership perceptions.*

*Hypothesis 11b. Employee internal attributions, attribution about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and favourable leadership perceptions.*

## **4.7 Mediating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Performance**

Employee attributions of psychological contract breach may affect employee performance. Expectancy theory can help to explain employee attributions' effects on employee performance. Expectancy theory refers to the explanations of people's behaviour in choice situations (e.g., Kukla, 1972; Tolman, 1932; Lewin, 1935; Rotter, 1954). Expectancy theory indicates that the reason why people decide to behave in a certain way is because they are motivated by the expected outcome of this behaviour when choosing the behaviour from a set of behaviours (Oliver, 1974). The essence of the expectancy theory is that the expected outcome of the behaviour is one of the determinations of the motivation of the behaviour (Oliver, 1974). In an organisational context, the employee is faced with a set of alternative behaviours, and each one is predicated to lead to a possible outcome. The employee chooses one of the alternative behaviours, which has a possible outcome expected by him or her. Expectancy theory explains how much effort the employee puts in completing his or her tasks, how the employee chooses to enter or leave the organisation, and how satisfied the employee

with his or her job (Wanous, Keon & Latack, 1983). Empirical studies supported expectancy theory and showed that people's behaviours are motivated by the expected outcomes of those behaviours (e.g. Georgopoulos, Mahoney & Jones, 1957; Lavler, 1964; Graen, 1969, Goodman, Rose & Furcon, 1970, Schuster, Clark & Rogers, 1971). For instance, by conducting a survey among 575 employees, Schuster et al. (1971) demonstrated that the more the employees believe that their performance will influence their pay, the harder the employees work in order to improve their performance. Thus, in their study, the employees' performance behaviours were motivated by the expected outcome of increasing their payment.

When psychological contract breach occurs, the employee may attribute the breach to his or her own internal factors, such as he or she has not put enough effort in fulfilling the psychological contract. In this situation, the employee is confronted with a set of alternative behaviours, such as putting more effort to improve his or her performance, doing nothing and maintaining his or her performance, or putting even less effort to reduce his or her performance. Each of the above behaviours is predicted to lead to a possible outcome. For example, the behaviour of improving the employee's performance may result in the fulfilment of the psychological contract in the future, while the behaviour of reducing the employee's performance may lead to even more psychological contract breach in the future. According to the expectancy theory, the employee chooses a certain behaviour that is predicted having his or her expected outcome out of a set of behaviours (Oliver, 1974). In terms of the psychological contract, the employee expects the fulfilment of his or her psychological contract. Thus, when the employee attributes psychological contract breach to his or her own internal factors, the employee may choose to improve his or her performance to expect the fulfilment of the psychological contract in the future.

Alternatively, the employee may attribute the psychological contract breach to the factors outside of himself or herself, such as the supervisor's factors, the organisation's factors, or factors outside of the supervisor and the organisation. When the employee attributes the psychological contract breach to the factors outside of himself or herself, the employee may perceive that his or her inputs and outcomes are not balanced and that there is an unbalanced social exchange relationship between he or she and the supervisor. In this situation, the employee is still confronted with a set of alternative

behaviours in terms of performance, such as increasing his or her performance, maintaining his or her performance, or reducing his or her performance. Each of the above behaviours is predicated to lead to a possible outcome. For instance, the behaviour of improving the employee's performance may lead to more unbalance in the interpersonal relationship between the employee and the supervisor, while the behaviour of reducing the employee's performance may result in more balance in the interpersonal relationship between the employee and the supervisor. According to the expectancy theory, the employee chooses certain behaviour based on the behaviour's expected outcome (Oliver, 1974). The employees then expect to restore the balance in the exchange relationship between them and the supervisor. Thus, when the employee attributes psychological contract breach to the factors outside of himself or herself, the employee may choose to reduce his or her performance.

Empirically, Turnley, et al. (2003) indicated that the employee tends to reduce his or her in-role performance when the employee attributes the negative event to the supervisor's controllable and intentional factors. Moore's (2000) research showed that counterproductive behaviour is one of the consequences of causal explanations made on negative events. Mitchell and Wood (1980) indicated that internal attributions of failure are more likely to lead to people's disciplinary actions than external causes. But whether employee attributions play a mediating role in the mechanism of psychological contract breach affecting employee performance is remaining unknown. Thus, this current research proposes that

*Hypothesis 12a. Employee internal attributions are positively related to employee in-role performance and extra-role performance.*

*Hypothesis 12b. Attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation are negatively related to in-role performance and extra-role performance.*

*Hypothesis 12c. Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and employee performance.*



## **4.8 Chapter Summary**

This chapter has discussed the antecedents and consequences of attributions at first. Then the relationships between psychological contract breach and employee attributions and between employee attributions and employee outcomes have been explained. Based on this, the mediating role of employee attributions in the relationship between psychological and employee outcomes have been discussed. In addition, different employees are expected to make different types of attributions of psychological contract breach. The reasons of why attributions differ from one employee to another will be explored in the next chapter.

# **Chapter 5 Psychological Contract Breach and Employee Attributions: The moderating role of individual differences**

## **5.1 Introduction**

As discussed in Chapter 4, employees make different attributions for psychological contract breach, but the reason why people attribute psychological contract breach differently needs better understanding. Previous research has focused on individual differences such as attributional styles, gender, culture backgrounds, age, and self-evaluations. For example, according to Abramson, Seligman and Teasdale (1978), different attributional styles influence people's causal explanations of events. A person with an optimistic attributional style tends to attribute success more to internal stable factors, like ability and skills, and attribute failures more to external unstable factors, such as luck, chance, and the difficulty of the task. On the contrary, a person with a pessimistic attributional style tends to attribute success more to external unstable causes and attribute failures more to internal stable factors. However, the current research will not examine the role of the employee's attributional style in the relationship between psychological contract breach and employee attributions because the attributional style's role has already been fully explored. In terms of the gender differences, Feather (1969) and McElroy and Morrow (1983) indicated that females tend to attribute their performance more to external factors, while males tend to attribute their behaviour more to internal factors and are more self-serving. In terms of age differences, older employees may have more self-serving biases than younger employees when making causal explanations and tend to attribute a success more to their own factors (Mezulis, Abramson, Hyde & Hankin, 2004). According to Silver,

Mitchell and Gist (1995), an employee with high self-efficacy tends to attribute success more to internal stable factors and attribute failures more to external causes. Stake (1990) indicated that females with high self-esteem tend to attribute success more to internal stable factors, such as ability and skills.

In addition to the factors just mentioned, there are two individual differences variables that are particularly pertinent to this study. They are individualism/collectivism beliefs (i.e., the extent to which individuals value and emphasise personal autonomy versus responsibilities towards the group, Hofstede, 1980) and individual proactivity (i.e., anticipatory actions taken by employees in order to influence themselves and/or their situations, Grant & Ashford, 2008). These factors are relevant to this study because there are strong theoretical ground to expect that they will moderate the effects of psychological contract breach on attributions and also because they are important in helping to explain organisational behaviour in Chinese organisations. As such, focusing on individualism and proactivity may help to establish some of the boundary conditions of psychological contract theory, particularly because most of the research on psychological contract breach has been conducted in Western contexts. China is regarded as a collectivistic culture, while Western contexts are regarded as individualistic cultures, although there is variation within cultures (Hofstede, 1980). Furthermore, there is evidence to suggest that China is becoming more individualistic (Parker et al., 2009). As such, focusing on individualism/collectivism will not only help to indicate why people have different causal responses to psychological contract breach, but will also indicate whether such reactions are equally likely across different cultures and whether reactions to breach in China may change as society becomes more individualistic. These questions remain unanswered as the role of individualism in the relationship between psychological contract breach and employee attributions is unknown. Likewise, proactivity is chosen because the level of employee proactivity is expected to be different in China from Western countries. In a Chinese context, the organisational structure is regarded to be more hierarchical and less flat than the organisational structure in Western contexts (Wong & Slater, 2002). Employees in Chinese organisations tend to do what were told and obey their supervisors' decisions. Thus, employees in Chinese organisations may be less initiative or take fewer anticipatory actions to change their employment and working conditions when compared to employees in Western contexts. Furthermore, there is evidence to suggest

that employees in communist or ex-communist societies may be less proactive than those on capitalist societies (Frese, Kring, Soose, & Zempel, 1996). As such, focusing on proactivity will not only help to indicate why people have different causal responses to psychological contract breach, but will also indicate whether such reactions are equally likely across different cultures. But the role of employee proactivity in the relationship between psychological contract breach and employee attributions is unknown.

This chapter will discuss the definitions of individualism and collectivism at first. Then individualism/collectivism cross cultures and within cultures will be described. Based on these, the role of individualism/collectivism in the relationship between psychological contract breach and employee attributions will be discussed. Then the concept of proactivity will be introduced in this chapter. The definitions, characteristics and phases of proactivity will be described. In addition, this chapter will explore the role of proactivity in the relationship between psychological contract breach and employee attributions.

## **5.2 Individualism/collectivism**

This section will discuss the moderating role of individualism/collectivism in the relationship between psychological contract breach and employee attributions. The definitions of individualism/collectivism will be firstly introduced.

### **5.2.1 Definitions of Individualism/collectivism**

By administering questionnaires among 117,000 people that come from 53 countries, Hofstede's (1980) research is regarded as the largest comparative study in the field of individualism/collectivism (Kagitcibasi, 1997). According to Hofstede (1980), individualism indicates that the person has concerns about himself or herself, emphasises personal autonomy and personal accomplishment, and stresses personal

rights more than duties. From Waterman's (1984) perspective, individualism means that the person emphasises his or her own responsibilities and freedom to make choices and tries his or her best to develop his or her own potential in order to realise self-fulfilment. Both Hofstede (1980) and Waterman (1984) emphasised personal autonomy and personal fulfilment in the concept of individualism. However, unlike Hofstede's (1980) definition of individualism, which stressed personal rights more than personal duties, Waterman's (1984) definition of individualism emphasises both personal rights and personal duties. The core assumption of individualism is that individuals are independent from a team, an organisation and a society (Oyserman, Coon & Kemmelmeier, 2002).

According to Hofstede (1991), collectivism refers to a perception that from born until death, an individual is integrated into a cohesive team, organisation or society in which the individual offers loyalty in exchange for protection. From Triandis's (1995) perspective, collectivist people regard an individual as a component of a team, an organisation or a society, and share a common fate, values and goals with other individuals in that team, organisation or society. Both of these definitions emphasise the interdependence between individuals in the concept of collectivism. The core assumption of collectivism is that individuals are interdependent within a team, an organisation or a society (Al-Zahrani & Kaplowitz, 1993).

Before Hofstede (1980), Parsons and Shills (1951) indicated that individualism/collectivism distinguish between people who tend to pursue self-interest and self-fulfilment and people who tend to be more collective and emphasise more on social goals more than their personal goals. Later, research developed Hofstede's (1991) research and distinguished between vertical and horizontal individualism/collectivism (Triandis, 1995). To be more specific, horizontal individualism/collectivism refer to equality in a team, an organisation, or a society, whereas vertical individualism/collectivism refer to hierarchy in that team, organisation or society (Triandis, 1995). Thus, in addition to the differences between an individualistic team, organisation or society and a collectivistic team, organisation or society, there can be differences between two individualistic teams, organisations, or societies and between two collectivistic ones.

### **5.2.2 Individualism/collectivism Cross Cultures**

Research on individualism/collectivism has indicated that they are a fundamental way to distinguish between cultures (Moorman & Blakely, 1995). Individualistic culture suggests that citizens in this culture emphasise their own interests and personal accomplishment, while collectivistic culture suggests that citizens of this culture focus on social goals and social welfare. According to Hofstede (1980), United States, United Kingdom, Germany, Australia, Canada, and New Zealand are regarded as individualistic cultures, in which citizens are primarily individualistic, and China, Japan, Indonesia, Korea, and some South American and Middle Eastern countries are regarded as collectivistic culture, in which citizens are primarily collectivistic. Hofstede's (1980) research has been supported by other research (e.g., Earley, 1993; Al-Zahrani & Kaplowtztz, 1993; Triandis, 1995), which has shown that the individualism/collectivism can be applied to distinguish between different cultures.

### **5.2.3 Individualism/collectivism within Cultures**

In addition to cross-cultural studies on individualism/collectivism, research explores the distinction between individualism and collectivism within cultures, in which individualism/collectivism are regarded as individual differences. Hui and Triandis (1986) indicated that individualistic cultures or collectivistic cultures mean only that the majority of citizens in those cultures are individualistic or collectivistic, rather than all of the citizens in those cultures being individualistic or collectivistic. Furthermore, rather than measuring it according to different cultures, Earley's (1983) research measured individualism/collectivism directly and found that the distinction between individualism and collectivism exists within cultures.

Research has shown that individualism exists in cultures that have been classified as collectivist societies in Hofstede's (1980) research. For instance, the category of China is a collectivist society (Hofstede, 1980) was challenged by Ho and Chiu (1994). By analysing 458 Chinese sayings related to individualism/collectivism, Ho and Chiu

(1994) found that although those Chinese sayings emphasise collectivism more than individualism, more sayings affirm individualism than deny or ignore it. Based on this, a survey was conducted on 158 Chinese students (Ho and Chiu, 1994). The results showed that the Chinese culture is a synthesis of individualism and collectivism (Ho & Chiu, 1994); thus, both individualism and collectivism exist in China, which can be treated as individual differences. A similar situation exists in other cultures, such as India. India has been regarded as a collectivist society in Hofstede's (1980) research; however, Sinha and Tripathi (1994) conducted an exploratory study among 82 Indian students and found both individualist and collectivist students. Thus, they concluded that rather than being primarily individualist or primarily collectivist, Indian culture is a synthesis of both individualism and collectivism.

All of these studies have shown that the distinction between individualism and collectivism not only exists cross cultures, but also exists within cultures. The individualism/collectivism can be regarded as both cultural differences and individual differences. This current research will treat individualism/collectivism as individual differences in a Chinese context.

#### **5.2.4 Role of Individualism/collectivism in the Relationship between Psychological Contract Breach and Employee Attributions**

Individualism and collectivism are proposed to have an impact on employees' attributions. Miller (1984) indicated that individualistic cultures encourage people to make more internal attributions than external attributions. This is because individualistic cultures focus on people's personal autonomy and personal responsibility, which encourage people to search more for internal factors from contextual influences and distinguish their own factors from other people's factors (Miller, 1984) when making attributions on events. In contrast, collectivist cultures encourage people to seek more external attributions than internal attributions. This is because collectivist cultures stress more on situational variables and contextual cues and regard the social factors rather than individual factors as a fundamental issue (Selby, 1975). Thus, the collectivist cultures encourage people to emphasise contextual

factors more and focus less on their dispositions when making social inferences (Miller, 1984). The term attribution is defined as the inference or perception of causes (Gronhaug & Falkenberg, 1994); thus making social inferences include making attributions. Meanwhile, the situational variables and contextual cues can be regarded as external factors (Heider, 1958). Therefore, collectivist cultures encourage people to attribute events more to external factors. In empirical studies, by doing a survey among American graduate students and Chinese graduate students, Morris and Peng (1994) found that American graduate students tend to attribute events more to internal factors, while Chinese graduate students tend to make more situational attributions. Miller's (1984) interview study and Choi, Nisbett and Norenzayan's (1999) study found consistent results and support the theoretical supposition.

As discussed in above sections, research has shown that Western cultures (e.g., United States, United Kingdom and Australia) are individualistic, while non-Western cultures (e.g., Japan, Indonesia, Korea) are collectivistic (e.g., Hofstede, 1980, 1991; Al-Zahrani & Kaplowtztz, 1993; Triandis, 1995). Compared to non-Western culture, Western cultures encourage people to make more internal attributions (Miller, 1984). Meanwhile, non-Western cultures can encourage people to make more external attributions if compared to Western cultures (Miller, 1984). Thus, when exploring the effects of individualism/collectivism on people's attributions and treating individualism/collectivism as individual differences, it can be proposed that individualism spurs people to make more internal attributions of events experienced than collectivism, and collectivism spurs people to make more external attributions to events than individualism. Martinko and Douglas (1999) proposed that individualism/collectivism have different effects on people's attributional processes. Landrine and Klonoff (1992) made the same propositions. Landrine and Klonoff (1992) proposed that people with individualistic backgrounds and people with collectivistic backgrounds emphasise different attributional explanations of the same event. To be more specific, people who have high-individualism and low-collectivism cultural backgrounds emphasise personal goals and self-serving values and seek to make themselves feel independent and distinguished (Hui & Triandis, 1986; Triandis, 1989). Thus, individualist people tend to stress their internal factors (e.g., ability and skills) more and attribute events more to themselves. However, people who have high-collectivism and low-individualism cultural background hold a set of values and



identifications in common (Hofstede, 1980); for example, they emphasise harmony with other people and with society (Smith & Bond, 1993). Thus, collectivist people tend to more strongly emphasise cues from the contextual environment and attribute events more to external contextual factors.

In terms of employee attributions of psychological contract breach, as discussed in Chapter 4, people attempt to make causal explanations for psychological contract breach they experienced. Unexpected events generate more attributional activities than expected events (Hastie, 1984). Moreover, compared with positive events, negative events tend to generate more attributional activities (Peeters & Czapinski, 1990). As both an unexpected and negative event to employees, psychological contract breach may then stimulate more employee attributions. In addition, when people suffer a loss, they usually seek causal explanations for why the loss occurs (Frankl, 1969). When psychological contract breach occurs, the employee may perceive that there is a loss that he or she has not received all the employment and work conditions to which he or she is entitled, thus the employee may tend to engage in attributional activities. Based on Heider's (1958) internal and external attribution theory, four dimensions of the employee attributions of psychological contract breach have been identified, which are employee internal attribution, attribution about the supervisor, attribution about the organisation and attribution outside of supervisor and organisation.

Individualism/collectivism is proposed to play a moderating role in the relationship between psychological contract breach and employee attributions. To be more specific, when making attributions on psychological contract breach, employees who are individualistic emphasise their own personal autonomy and personal responsibility more, thus distinguishing themselves from other people's factors or contextual cues. Compared to employees who are collectivistic, individualistic employees are more likely to emphasise themselves when making attributions and then make more internal causal explanations (e.g., employees' own skills, efforts and initiatives) for psychological contract breach, which lead to a stronger relationship between psychological contract breach and employee internal attributions. Employees who are collectivistic focus more on situational variables and contextual cues and rely less on their own factors (e.g., skills and efforts) when making causal explanations for psychological contract breach. Thus, compared to employees who are individualistic,

collectivistic employees are more likely to attribute psychological contract breach to external factors, such as the supervisor's leadership skills, the organisation's facilities, and unexpected changes. The relationships between psychological contract breach and attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation are proposed to be stronger when employees are collectivistic. Thus,

*Hypothesis 13. When individualism is high, the relationship between psychological contract breach and employee internal attributions is stronger than when it is low. When collectivism is high, the relationships between psychological contract breach and attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation are stronger than when it is low.*

## **5.3 Proactivity**

This section will discuss the moderating role of employee proactivity in the relationship between psychological contract breach and employee attributions. The definitions of proactivity will be firstly introduced.

### **5.3.1 Definitions of Proactivity**

Proactivity broadly refers to the employees' actions to improve their employment and work conditions by taking initiative (Crant, 2000). Grant and Ashford (2008) further suggested that proactivity refers to anticipatory actions taken by employees in order to influence themselves and/or their situations. According to Unsworth and Parker (2003, p.177), "proactivity is a set of self-starting, action-orientated behaviours aimed at modifying the situation or oneself to achieve greater personal or organisational effectiveness". Thus, Unsworth and Parker's (2003) definition indicated that the ultimate aim of proactivity is to improve the effectiveness of the employees themselves or of their organisations.

The concept of proactivity has two distinctive characteristics when compared with other employee behaviours. The first one is acting in advance (Grant & Ashford, 2008). Proactive employees consider, deliberate, choose, plan and behave in advance of the occurrence of foresighted future events (Bandura, 2006; Karniol & Ross, 1996; Klein, 1989; etc.). Proactive employees aim at future outcomes and take anticipatory actions to realise those expected outcomes. Intended impact is regarded as the second characteristic of proactivity (Grant & Ashford, 2008). Proactive employees have expectations, and they intend to realise those expectations by making proactive choices and taking proactive actions. Thus, the proactivity employees take has an intended impact on the employees' expectations and goals.

According to Grant and Ashford (2008), proactivity has three main phases: anticipation, planning, and action directed towards future impact. Anticipation refers to employees' actions of thinking in advance to foresee future consequences (Weick & Roberts, 1993). In this phase, proactive employees try to imagine the possible future and the benefits and costs of realising their goals. Planning is the second phase, which is defined as the employees' actions to outline steps that will be implemented to realise their goals (Ajzen, 1991). The actions conducted by the proactive employees in this phase are advanced preparation for the occurrence of future events. Whereas the anticipation phase emphasises the imagination of a future event or an expected consequence, the planning phase focuses on transformation from an imagined vision into an implemented project (Gollwitzer, 1999). The third phase of proactivity is action directed towards future impact. This phase is related to the concrete implementation actions taken by proactive employees in fulfilling their goals. This phase emphasises the effectiveness of anticipation and planning in concrete implementation (Grant & Ashford, 2008). In this phase, proactive employees will try to seize opportunities to realise their aims and solve problems along the way (Frese & Fay, 2001).

In terms of individual differences, proactive people actively search for opportunities to improve their situations rather than passively waiting for opportunities offered to them (Crant, 2000). Unlike people who are not proactive in coping with situations, proactive people tend to control, change, or create contextual changes to benefit themselves (Bateman & Crant, 1993). In a word, proactive people are engaged in seeking and

seizing opportunities and in taking initiatives and actions to realise their goals.

Empirically, research showed that proactivity could improve employee's personal effectiveness and organisational effectiveness. By doing a survey among 619 employees, Van Veldhoven and Dorenbosch (2008) found that proactivity is positively related to employees' career opportunities. The more proactive the employees are, the more career opportunities they can get for development. Kim, Cable, Kim and Wang (2009) conducted a survey among 196 pairs of supervisor-employee, and showed that employees' proactivity of feedback seeking with their supervisors is positively related to the employees' task effectiveness. By doing a comparative meta-analysis, Thomas, Whitman and Viswesvaran (2010) indicated that the employees' proactivity is positively associated with the employees' overall job performance.

### **5.3.2 Role of Proactivity in the Relationship between Psychological Contract Breach and Employee Attributions**

Proactivity is proposed to have an impact on the relationship between psychological contract breach and employee attributions and may help to explain why employees make different attributions towards psychological contract breach. Proactive people tend to take anticipatory actions to change and improve their situations (Bateman & Crant, 1993; Unsworth & Parker, 2003; Grant & Ashford, 2008). The characteristics of proactivity emphasise that proactive people take actions in advance of the occurrence of events and make an intended impact on their expectations (Grant & Ashford, 2008). All three key phases of proactivity (i.e. anticipation, planning, and action directed toward future impact) are aimed at fulfilling proactive people's expectations and goals.

In an organisational context, employees have the expectation that the psychological contract will be fulfilled. To realise their expectations and to improve their situations, proactive employees will take advanced actions. The actions taken by the proactive employees are aimed to fulfil their psychological contracts and prevent the occurrence of psychological contract breach in advance. To be more specific, the proactive actions taken by proactive employees can help to improve employees' performance (van

Veldhoven & Dorenbosch, 2008; Dyer & Shafer, 1999; Paauwe, 2004), which can further help employees to fulfil their obligations and make contributions in exchange for the fulfilment of their psychological contracts. This is because the ultimate aim of proactivity is to improve the effectiveness of the employees themselves or of their organisations (Unsworth & Parker, 2003), and the situations chosen, created, or changed by proactive employees are aimed to enhance the possibility of high employee performance (Seibert, Grant & Kraimer, 1999). In addition, proactive actions facilitate the employees to obtain a better understanding of their supervisors' expectations and their organisations' needs (Kim, et al., 2009), which have a positive effect on improving their performance. Empirical studies found that proactivity improve employees' performance (Kim, et al., 2009; Thomas, et al., 2010). Employee performance is regarded as one of the employee's obligations and part of the employee's exchange agreement with the organisation (Rousseau, 1995).

Thus, when experiencing psychological contract breach, proactive employees may attribute the breach to their own factors (e.g., efforts and initiatives) less because they believe that their proactive actions can help them to realise their obligations in exchange for psychological contract fulfilment and help them to prevent the occurrence of the breach. Proactive employees may therefore be inclined to make less employee internal attributions on psychological contract breach than employees with low proactivity, leading to a weaker relationship between the breach and employee internal attributions. In addition, proactive employees may seek external attributions for psychological contract breach more often. This is because they are likely to suppose that they have realised their own obligations, but external factors, such as the supervisor's efforts, the organisation's facilities and circumstances outside of the supervisor's and the organisation's control caused psychological contract breach. As a result, there may be stronger relationships between the breach and attributions about the supervisor, attributions about the organisation and the attributions outside of the supervisor and the organisation. Thus,

*Hypothesis 14. When proactivity is high, the relationship between psychological contract breach and employee internal attributions is weaker than when it is low, and the relationships between psychological contract breach and attributions about the supervisor, attributions about the organisation and attributions outside of the*

*supervisor and the organisation are stronger than when it is low.*

## **5.4 Chapter Summary**

This chapter has focused on two individual differences and has discussed the definitions of individualism/collectivism and proactivity. In order to get a better understanding on the reasons why employees attribute psychological contract breach differently, the roles of individualism/collectivism and proactivity in the relationship between psychological contract breach and employee attributions have been explored. Individualism/collectivism and proactivity are proposed to moderate the relationship between psychological contract breach and employee attributions. The following chapters will describe two survey-based studies and will report the results that are related to established moderation and mediation hypotheses (i.e., the moderating and mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes; the moderating role of individual differences in the relationship between psychological contract breach and employee attributions).

## **Chapter 6 Methodology**

### **6.1 Introduction**

Two studies were conducted in Chinese organisations. Study 1 is a pilot study that is designed to test the constructed measures of psychological contract breach and employee attributions. As discussed in Chapter 2, established psychological contract breach measures do not cover all key dimensions of a job and only list certain content items of the breach, this study aimed to construct a new measure to test psychological contract breach. In addition, little research has examined the employee attributions of psychological contract breach and established measures only tested three specific employee attributions (i.e., reneging, incongruence, and disruption), thus this study also aimed to construct a new measure to test employee attributions. Study 2 tests the hypotheses of the current research and explores the role of employee attributions in the relationship between psychological contract breach and employee outcomes by testing two competing models (i.e., moderation model and mediation model). This chapter will describe the philosophical assumptions of the current research, the approach used to address the hypotheses of the research, the procedures of data collecting and the analysis strategies of the two studies.

### **6.2 Philosophical Assumptions**

The philosophical assumption of this study can be described from epistemological and ontological perspectives. Epistemology concerns the question of ‘how we know what we know’ (Crotty, 1998, p.8) and helps researchers to decide whether knowledge is acceptable and adequate. There are different epistemological assumptions. Positivism advocates applying the methods of natural sciences to study social reality (Bryman &

Bell, 2011). Positivists believe the existence of objective truths and argue that the truths can be discovered by testing the relationships between a set of variables (Hollis, 1994). From positivists' views, theories should be applied to generate hypotheses that can assess the explanations of objective truths (Bryman & Bell, 2011). Whether hypotheses should be accepted or rejected should be decided by observations, which can be collected in a way without theories' influences. After analysing the observations, theories can be developed and knowledge can be accumulated.

Similar to positivism, critical realism also advocates the existence of an external reality and the approaches adopted by natural sciences can be adopted by social sciences (Sayer, 1992). But unlike positivists who hold the point of view that the external reality can be reflected directly through doing research, critical realists believe what scientists do is only to know the reality rather than reflect it (Bryman & Bell, 2011). This is because critical realism distinguishes the external reality from what the scientists describe about it. In other words, research outcomes do not equal to the external reality but can provide understandings on the reality.

Interpretivism takes a contrasting position to positivism. From interpretivists' perspectives, there is a distinction between natural sciences and social sciences, thus natural scientists' approaches cannot be used to study social world (Bryman & Bell, 2011). Interpretivists hold the point of view that human beings use their common-sense thinking to understand and construct the world and regard what they have understood as the reality, which is different from the objective reality (Schutz, 1962). Human beings' actions are determined by their understandings of the world. Interpretivism indicates that the purpose of social sciences is to provide the interpretive understandings of human actions and causal explanations of human actions leading to outcomes (Weber, 1947). Thus, what social scientists do is to interpret social actions rather than reflect an external reality.

Epistemologically, this research adopted a positivist approach, which is decided by two reasons. First, positivism fits with my beliefs about knowledge. From my perspective, an objective social reality is existent and the knowledge generated from research can reflect the reality. I also believe natural sciences' methods can be used to study social issues and produce social knowledge. Second, what I intended to do is to develop and



test theories. Positivism argues that theories can be tested and developed by collecting and analysing observations (Bryman & Bell, 2011). More specifically, through analysing the observations, the hypotheses of the relationships between variables can be examined. Based on the results of whether hypotheses should be accepted, the theories can be confirmed or developed.

In terms of the ontological perspective, ontology is about ‘the study of being’ (Crotty, 1998) and concerns the question of whether the social reality is objective and external to human beings’ actions or is constructed by the human beings’ understandings and actions. Ontology has different assumptions as well. Objectivism advocates that social phenomena are independent and external facts that are beyond social actors’ influences (Bryman & Bell, 2011). In an organisational context, objectivism argues that the organisation is a tangible object and has its own rules and regulations, standardised producing procedures, hierarchical structure and clear job distribution. In other words, objectivists regard the organisation as a reality external to the employees.

Constructionism takes an alternative ontological position and argues that human beings construct the social reality. People can influence the social reality from different ways and have different understandings of it. Thus, the meaning of social reality is in a constant state of revision and continually being accomplished by human beings (Bryman & Bell, 2011). In an organisational context, constructionists argue that the rules, regulations, goals and job distribution of the organisation are changing in everyday interaction with the employees (Strauss, Schatzman, Ehrlich, Bucher & Sabshin, 1973). Constructionists hold the point of view that the social reality is not external to human beings, but is built up through interaction.

Ontologically, an objectivist approach was adopted in this research. This is because objectivism fits with my beliefs about an organisation. I tend to view the organisation as an external reality, in which employees need to comply with the organisation’s rules and regulations, follow the organisation’s standardised procedures and obey their supervisors to do what they are appointed. The organisation has its external reality that cannot be influenced by the employees.

The positivist assumptions and objectivist assumptions adopted by this research imply

taking a quantitative approach rather than a qualitative approach. This can be explained from three aspects. First, positivism advocates that theories should be tested by observations. Unlike qualitative approach that generates theories, quantitative approach can test theories by collecting and analysing data (Bryman & Bell, 2011). Second, positivism assumes that observations can reflect the objective truths, thus the amount of observations is important. A quantitative approach emphasises quantification in data collection, while, qualitative approaches emphasise words that can interpret the social world (Bryman & Bell, 2011). Third, objectivism advocates the existence of an external social reality beyond an individual's influence. Quantitative research can generate hypotheses to assess the external reality. Qualitative research is usually used to understand the changing state of the social reality rather than reflecting the reality that external to individuals.

Considering the role of theory in relation to quantitative research, deduction was adopted because previous research has explored the topic of psychological contract breach and offered theoretical understandings to deduce hypotheses. Deduction means identifying an unknown particular from a set of accepted facts (Rothchild, 2006). According to the process of deduction (Bryman & Bell, 2011), the hypotheses of the current research were deduced from the domain of psychological contract breach and employee attributions literature. Then data were collected to address the hypotheses. After that, the results of data analyses indicated whether the hypotheses should be confirmed or rejected.

## **6.3 Procedure**

Study 1 had three main steps. First, an introductory meeting was held in the organisations. Participants were informed that this survey formed part of a doctoral research project, examining their beliefs and attitudes about the organisation. They were informed that participation in this survey was voluntary, and the information that they provided on this questionnaire would be kept completely confidential. They were then informed about how to complete the questionnaire. All the employees were provided an email address to contact if they had any questions. Second, the employees in workplaces were asked whether they volunteer to do the survey. The paper copies of

questionnaires were distributed randomly to the employees who were not on a business trip and who volunteered to participate. Third, at the end of each working day, in the employees' workplaces, completed questionnaires were collected. Meanwhile, candies and cookies were distributed to the employees who completed questionnaires as rewards.

The research procedure of Study 2 involved seven steps. As one of employee outcomes, employee performance was evaluated and rated by supervisors. This was because research has shown that supervisor-rated performance was less lenient and more reliable than peer-rated performance or self-rated performance (Springer, 1953; Rothaus, Morton & Hanson, 1965; Zedeck, Imparato, Krausz & Oleno, 1974; Klieger & Mosel, 1953). Thus, there were two types of questionnaires in Study 2, the employee questionnaire and the supervisor questionnaire. First, as with Study 1, an introductory meeting was held in each organisation. Second, lists of all supervisors and employees in each company were obtained from human resources managers. Third, the paper copies of employee questionnaires were distributed to the employees in each company to fill in. When completing the employee questionnaires, the employees were asked to write down their employee ID numbers on the first pages of the employee questionnaires. Fourth, all completed employee questionnaires were collected. Fifth, according to the lists, the matched supervisors of the employees who had submitted questionnaires were identified through the employees' ID numbers. Sixth, the paper copies of supervisor questionnaires were handed out to the matched supervisors to fill in. The supervisors were asked to write down their employee ID numbers. At last, completed supervisor questionnaires were collected. The participants who completed questionnaires were given candies and cookies in return.

## **6.4 Analysis strategy**

In this section, analysis strategies for Study 1 and Study 2 will be described separately. Specifically, this section will discuss used analyses in the two studies, why use them and how to conduct them.

### **6.4.1 Analysis Strategy for Study 1**

Study 1 aimed to test the reliability and validity of the constructed measures of psychological contract breach and employee attributions. In order to realise this aim, exploratory factor analysis (EFA) on each constructed measure was conducted in Mplus first. EFA is commonly used to develop a scale and can help to identify the underlying relationships between items and factors (Norris & Lecavalier, 2009). Thus EFA was applied to classify items and identify the latent construct and factor structure of measured variables. Regarding extraction methods, the method of maximum likelihood allows researchers to identify the significance of factor loadings and to indicate correlations among factors (Cudeck & O'Dell, 1994). Moreover, the maximum likelihood method assumes that there are measurement errors. As both psychological contract breach measure and employee attribution measure are constructed measures, the variables may contain errors and are implausible to be perfectly measured. Thus, the maximum likelihood was used for extracting. In terms of factor rotation, this research used oblimin rotation because it allows correlations among factors. Three criteria were applied to examine EFA results, which were a) a factor must have at least three item loadings greater than .30; b) the individual item must have at least one factor loading greater than .30; c) any item loads on more than one factor should be placed only in the factor with highest loading (Stevens, 1992).

After deciding the factor structures of psychological contract breach measure and employee attributions measure according to EFA results, confirmatory factor analysis (CFA) was applied in Mplus because CFA helps to test whether empirical data is consistent with factor structures and constructed items. To evaluate model fit, four criteria were used, which were chi-square test, comparative fit index (CFI), root mean square error of approximation (RMSEA), and standard root mean square residual (SRMR). The value of chi-squared test that is closer to zero indicates a better fit (Gatignon, 2010). The value of CFI that is equal to or bigger than .95 indicates a good fit (Hu & Bentler, 1999). RMSEA value of .06 or less indicates a good model fit (Hu & Bentler, 1999). RMSEA value as high as .08 indicates a reasonable model fit (Browne and Cudeck, 1993). SRMR value of .08 or less indicates a good model fit (Hu & Bentler, 1999). All the above analyses were conducted in Mplus.

Both EFA and CFA were conducted on the same dataset, which means that the same dataset was applied to test a measure by EFA and subsequently to test the measure by CFA. There were three reasons for using the same dataset for EFA and CFA. First, EFA and CFA offer different pieces of information. EFA is regarded as a pretest of CFA and provides information on whether the proposed factor structure can be reflected in items' factor loadings (DeCoster, 1998). The information on whether empirical dataset is consistent with the proposed factor structure is offered by doing CFA. Conducting EFA and CFA on the same dataset can provide a rigorous and better understanding of the dataset and measures. Second, splitting the dataset into two samples and doing EFA on one sample and CFA on another cannot guarantee that the factor structure fits in both samples (Hurley, 1997). But conducting both EFA and CFA on the same dataset can reduce the uncertainty. Third, Van Prooijen and Van der Kloot (2001) indicated that if CFA cannot confirm the results of EFA on the same dataset, CFA couldn't be expected to confirm the results of EFA in a different sample. Thus, for a new measure, it is useful to conduct CFA on the same dataset from where the factor structure was derived.

In addition, the reliability of the measures was tested in SPSS to test the internal consistency of each measure. Cronbach's alpha value of .70 or higher is considered to be acceptable (Kline, 2000). The validity of constructed measures (i.e., psychological contract breach measure and employee attributions measure) was tested by content validity and convergent/discriminant validity.

Content validity tests the degree to which the items of a measure relate to and represent the measured construct (Haynes, Richard & Kubany, 1995). As the degree to which the items relate to and represent the constructs increases, the measures' content validity increases (Haynes, et al., 1995). Content validity was used to examine how well each item of the two constructed measures tested the construct of psychological contract breach and employee attributions and represented all key facets of the two constructs.

Convergent validity tests whether the proposed related measures are in fact related (Campbell & Fiske, 1959). Convergent validity was applied to examine psychological contract breach measure because the five dimensions of the breach measure were

proposed to relate with each other. Correlation coefficients were used to test the convergent validity of the constructed measures. If the proposed related measures correspond with each other, then the measures have high convergent validity. Discriminant validity tests whether the proposed unrelated measures are in fact unrelated (Campbell & Fiske, 1959). Low correlation coefficients between unrelated measures show discriminant validity. Discriminant validity was applied to test employee attributions measure because the measure was supposed to examine four distinct employee attributions.

In terms of item removal during the factor analysis, two main issues were considered, which were model fit and validity (i.e., content validity and convergent/discriminant validity). Model fit was considered for preparing the tests of hypotheses and psychological contract breach and employee attributions model in the following stages. Validity was considered to ensure the items could represent the constructs of the current research. The approach of item deletion includes removing items that have factor loadings less than .30 (Stevens, 1992) first. Then if the model fit was still poor, items with lower factor loadings in each factor were deleted to improve the model fit. The criterion for the amount of deleted items was to make sure each factor have at least three items (Stevens, 1992). Considering the face validity of the measures, if deleting the items with lower factor loadings did not improve the model fit, or the deleted items were thought to test what was supposed to test while the retained items were not, then the items with lower factor loadings would be retained and the items that have poor content validity would be removed. Considering the convergent/discriminant validity, items that were highly related to the other items in the same factor and were distinct from the items in other factors were retained.

#### **6.4.2 Analysis Strategy for Study 2**

In Study 2, the constructed measures (i.e., psychological contract breach measure and employee attributions measure) were developed further based on the factor analysis results of Study 1. Thus, the factor analysis of Study 1 was used on the constructed measures in Study 2. In terms of the factor analysis of established measures in Study 2,

CFA was applied in Mplus to test whether empirical data is consistent with established factor structures.

The employee questionnaire in Study 2 was applied to measure the variables of psychological contract breach, employee attributions, employees' evaluations of leadership, individualism/collectivism and employee proactivity; thus, these variables were measured with the same method. The same method may inflate the relationships between variables, which refers to common method bias (Spector, 2006). The common method bias of the variables was examined by the unmeasured latent method factor technique. This technique was chosen because the specific source of the common method bias is not clear in this study and the unmeasured latent method factor technique controls the measurement errors (Podsakoff, MacKenzie & Podsakoff, 2012). In order to test the common method bias, a first-order method factor that involves all the items of the variables was added to the factor analysis model to construct a new model, and the model fit results of the original model were compared with the results from the new model. If the new model has a better model fit, than there is common method bias.

Structural equation modelling (SEM) was applied to address the hypotheses of the current research. SEM is a statistical method of testing theoretical models (Hancock, 2003). Study 2 aimed to explore the role of employee attributions in the relationship between psychological contract breach and employee outcomes by testing four theoretical models, thus SEM was chosen and was conducted in Mplus. The four theoretical models are:

- *Direct effects model.* As shown in Figure 6.1, the direct effects model examined the direct relationship between psychological contract breach and employee outcomes, which tested *Hypothesis 3*, *Hypothesis 5* and *Hypothesis 7* that psychological contract breach is negatively related to employee well-being, favourable leadership perceptions and performance. The direct effects model also examined the direct relationship between psychological contract breach and employee attributions, which is related to *Hypothesis 9* that psychological contract breach is positively related to employee attributions. In addition, the direct effects model tested the direct relationship between employee attributions and employee

outcomes, which is related to *Hypothesis 10a*, *Hypothesis 11a*, *Hypothesis 12a* and *Hypothesis 12b* that employee attributions are significantly related to employee well-being, leadership perceptions and performance.

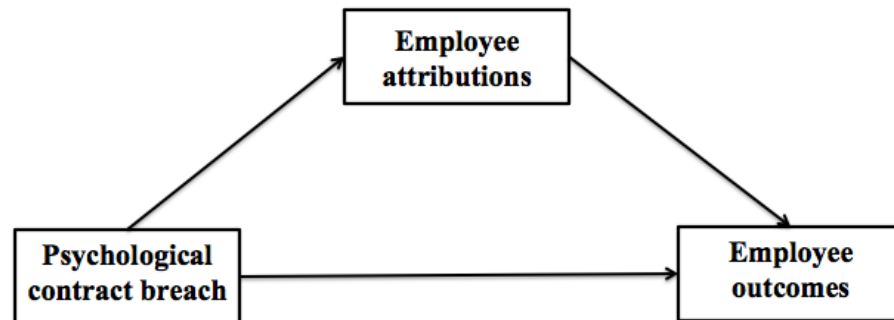


Figure 6.1 Direct Effects Model

- *Moderation model.* The moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes was examined. Figure 6.2 shows the moderation model. According to procedures set by Muthén (2012), all paths in the moderation model were tested simultaneously with using latent interaction terms in Mplus. One latent interaction term, which consists of psychological contract breach and one dimension of employee attributions, was tested each time. As there are four dimensions of employee attributions (i.e., employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation), the moderation model was tested four times with four different latent interaction terms. The moderation model examined *Hypothesis 4*, *Hypothesis 6* and *Hypothesis 8* that employee attributions moderate the relationships between psychological contract breach and employee well-being, leadership perceptions and performance.



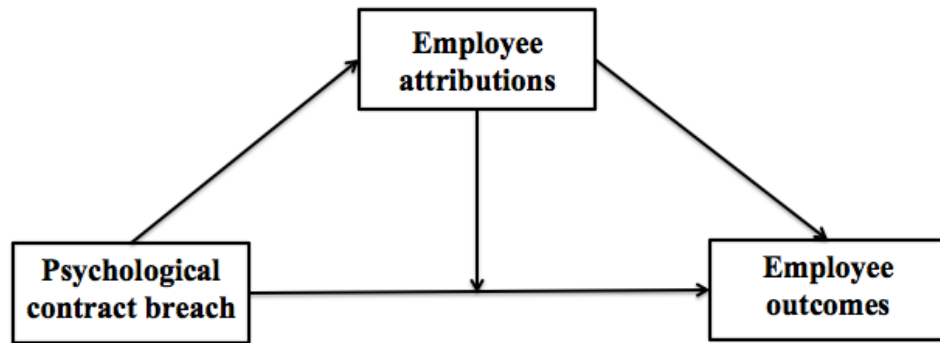


Figure 6.2 Moderation Model

- Mediation model.* Mediation model examined the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Figure 6.3 shows the mediation model. The approach for the significance testing of the mediation model is bootstrapping the indirect effect (MacKinnon, 2008). Bootstrapping is related to a common method that depends on random sampling with replacement to estimate confidence intervals (Varian, 2005). If the 95% confidence interval of an indirect effect did not cross zero, then the indirect effect is statistically significant (Preacher & Hayes, 2008). This approach was adopted because confidence intervals include estimated errors and provide a range of possible values rather than a single value for mediated effects (MacKinnon, 2008). In this study, a bootstrapping analysis (sample = 10,000) was applied to test the significance of indirect effects. All paths in the mediation model, including indirect effects, were tested simultaneously in Mplus. The mediation model tested *Hypothesis 10b*, *Hypothesis 11b* and *Hypothesis 12c* that employee attributions mediate the relationship between psychological contract breach and employee well-being, leadership perceptions and performance.

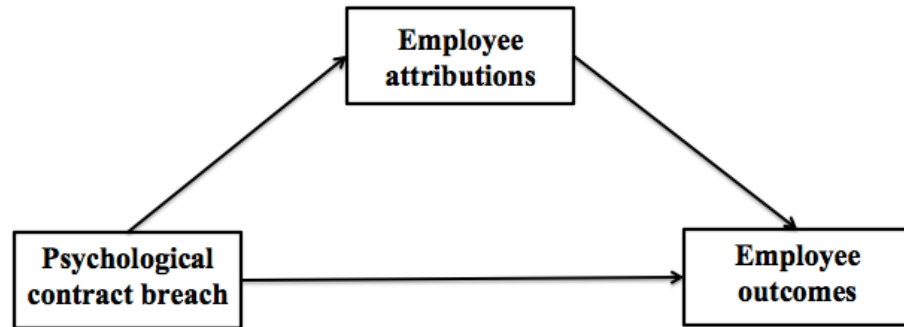


Figure 6.3 Mediation Model

- *Individual differences model.* This study examined the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions. Figure 6.4 shows the individual differences model. One latent interaction term, which consists of psychological contract breach and one individual difference, was tested each time. Thus, the individual differences model was tested two times with two individual differences. This model examined *Hypothesis 13* and *Hypothesis 14* that individualism/collectivism and employee proactivity moderate the relationship between psychological contract breach and employee attributions.

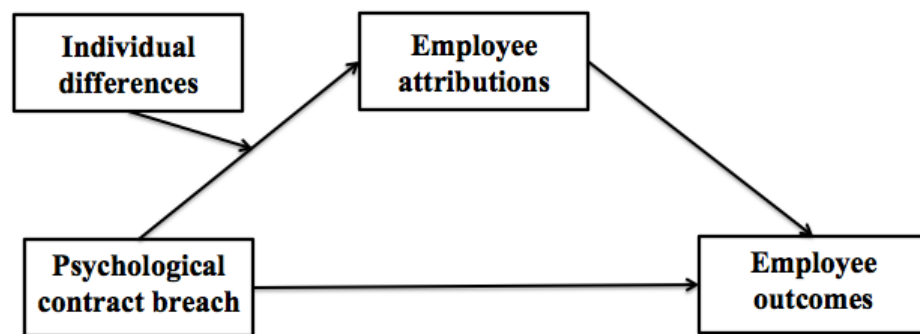


Figure 6.4 Individual Differences Model

In terms of the proposed moderation models, simple slope analysis was conducted on significant interaction terms. Simple slope analysis means decomposing the conditional effect of a significant moderator to better understand the moderating relationship

(Preacher, Curran & Bauer, 2006). Preacher, Curran and Bauer's (2010) website was applied to conduct the simple slope analysis. As all moderators of this study were continuous, this study used mean values of moderators plus and minus one standard deviation as the conditional values of moderators. This study used standard values, thus the mean values of moderators were zero, and standard deviations were one. Slope analysis was conducted at the low (-1 SD) and high (+1 SD) levels of each moderator. If the  $t$  value of a slope at one level of a moderator is greater than 1.96 or less than -1.96 and  $p$  value is less than .05, the slope is significant at this level of the moderator.

## **6.5 Chapter Summary**

This chapter has described the philosophical assumptions of the current research first, which has been followed by introducing the approach used to address the hypotheses of the research. In addition, the procedures of data collecting and the analysis strategies of the two studies have been discussed. The next chapter will report the sample, measures and factor analysis results of Study 1.

# **Chapter 7 Study 1**

## **7.1 Introduction**

Study 1 is a pilot study that is designed to test the constructed measures of psychological contract breach and employee attributions. As discussed in Chapter 2, established psychological contract breach measures share similar items, such as pay, training and security. However, the nature of a job is multi-faceted and the psychological contract has a wide range of variables (Kotter, 1973) and the items in the established psychological contract breach measures do not cover all key dimensions of a job and only list certain content items of the breach. To obtain a more comprehensive understanding of psychological contract breach, this research is aimed to construct a new measure to test psychological contract breach.

In addition, little research has examined the employee attributions of psychological contract breach. Scholars only tested three specific employee attributions in response to psychological contract breach (Lester, et al., 2002; Chao, et al., 2011); while besides reneging, incongruence, and disruption, employees may also attribute psychological contract breach to their own skills or effort, their supervisors' leadership and effort, incorrect implementation of the organisation's policies and so forth. The three specific attributions examined by Lester, et al. (2002) and Chao, et al. (2011) do not cover all key dimensions of employee attributions. Thus, this current research will construct a new measure to test employee attributions in response to psychological contract breach. This chapter will describe the sample and measures of Study 1. The factor analysis results of the constructed psychological contract breach and employee attributions measures will be reported. In addition, the ways of improving the measures will be proposed.

## 7.2 Sample

The pilot study was conducted in two Chinese manufacturing organisations, located in a coastal city in the Northern part of China. The data was collected in June 2013. There were 180 employees in the first organisation, and 314 employees in the second one. Questionnaires were distributed randomly to people who were not on a business trip and who volunteered to participate. In organisation one, 120 questionnaires were distributed, and 91 employee questionnaires were received, for a response rate of 86 per cent. In the second organisation, 230 questionnaires were distributed, and 196 questionnaires were received, for a response rate of 85 per cent. In total, 350 questionnaires were distributed. A total of 287 questionnaires were received, for an overall response rate of 90 per cent. After deleting problematic and incomplete questionnaires, the final sample consisted of 261 questionnaires.

Table 7.1 summarises the demographic information of the participants. For participants, 73.6 per cent ( $N = 192$ ) were male. Their ages ranged from 18 years old to 59 years old with a mean age of 30 years old. Job tenure ranged from 0.5 month to 33 years with a mean of 4.6 years. All participants were full-time employees. Their education level ranged from middle school to postgraduate with an average of secondary specialised school.

Table 7.1 Demographic Information on Participants

Demographic variables	Percentage of team member ( <i>N</i> = 261)
Gender	
Male	73.6 ( <i>N</i> = 192)
Age	
Below 20 years old	1.1
20-30 years old	60.5
31-40 years old	27.9
41-50 years old	8.5
51-60 years old	2.0
Job years	
Less than 1 year	11.1
1-10 years	77.4
11-20 years	8.8
21-30 years	2.4
31-40 years	0.4
Tenure years	
Less than 1 year	14.2
1-10 years	80.0
11-20 years	4.3
21-30 years	1.2
31-40 years	0.4
Full time/Part time	
Full time	100.0
Education level	
Middle school	23.0
High school	14.6
Secondary specialised school	21.1
Junior college	24.5
Undergraduate	16.5
Postgraduate	0.4
No formal qualifications	0.0

### 7.3 Measure Development

In this section, the basis and process of measure development will be described. In addition, factors and items in psychological contract breach measure and employee attributions measure will be discussed.

The survey instruments were in Chinese. After translating the items from English to Chinese, two Chinese students studying PhD degrees in the UK were responsible for

the back translation. Then the back-translated version was compared with the original version to identify improper words. To ensure the readability and validity of the meaning of each item, those improper words were retranslated and retested until they matched original ones.

### **7.3.1 Psychological Contract Breach**

The first step of creating a new measure of psychological contract breach was to identify the key facets of a job. To do this, Holman and McClelland's (2011) five-dimension classification of job quality was adopted. Table 7.2 shows Holman and McClelland's (2011) five-dimension classification. This model was used as it is both parsimonious in terms of the number of dimensions and comprehensive in terms of its coverage. The five key dimensions are work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation. Work organisation is related to work quality and includes job design and team design; wages and payment system indicates employment quality in the organisation and refers to wage level, performance-based pay, and benefits; security and flexibility includes contractual status, flexible working arrangements and working hours; skills and development indicates empowerment quality and contains skill requirements, training, and development opportunities; and engagement and representation refers to employee engagement and communication practices (Holman & McClelland, 2011).

Table 7.2 Summary classification of job quality (Holman & McClelland, 2011)

Area of job quality	Dimension		Example indicators
A. Work quality	1.	Work organisation	Job design, e.g., job discretion, job demands, ergonomics, physical conditions Team design, e.g., off and online teams, autonomous work groups
B. Employment quality	2.	Wages and payment system	Wage level, performance related pay, benefits
	3.	Security and flexibility	Contractual status, flexible working arrangements, working time
C. Empowerment quality	4.	Skills and development	Skill requirements, training, opportunity for development
	5.	Engagement and representation	Employee engagement and communication practices

Based on these five dimensions, twenty-five items, five items for each dimension, were constructed to identify psychological contract breach. The five dimensions and twenty-five items are shown in Table 7.3. Participants were asked to state, item by item, the extent to which they believed their expectations about the work and employment conditions had been met by this organisation. Each employee was asked “To what extent has your organisation provided you with the following...” A five-point Likert scale that ranged from “1 = Not provided” to “5 = Completely provided” was used.



Table 7.3 Psychological Contract Breach Measure

To what extent has your organisation provided you with the following:

	Not provi- ded	Provi- ded a little	Some what provi- ded	Provi- ded a lot	Comp- letely provi- ded
<b>Work organisation</b>					
1. Variety in my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A challenging job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. An interesting job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A safe working environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Resources to do the job well (e.g., software)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Wages and payment system</b>					
6. Rewards based on your performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A competitive and fair salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Adequate health care benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Adequate retirement benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Adequate housing benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Security and flexibility</b>					
11. Flexible working hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The opportunity to balance work and family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. An opportunity to decide when I take my vacation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Not working too many hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Protection against being dismissed without good reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Opportunities to develop my career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Training to do the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Constructive feedback on my performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Career guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Opportunities to voice my ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Information on important changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Involvement in decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Recognition of my ideas for improving work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specifically, the five dimensions and twenty-five items of psychological contract breach measure are:

- *Work organisation.* Work organisation is the first dimension, which is used to describe the work itself, such as work quality and job design (Holman & McClelland, 2011). Among the five items in this dimension, two items were adopted from Lester, et al.'s (2002) psychological contract breach measure, which are "A challenging job" and "An interesting job". Lester's et al. (2002) measure of psychological contract breach tests the work itself, and an employee may expect a challenging and interesting job, thus, the two items were adopted. The item of "Variety in my job" was proposed to test the work organisation dimension. The reason for adding this item is that an employee may expect multiple job contents rather than a single job content because the latter may make people feel bored. The item of "A safe working environment" was constructed because the work organisation dimension includes working environments and employees usually expect a safe working environment. The item of "Resources to do the job well (e.g. software)" was constructed because the work organisation dimension also includes offering sufficient resources for employees to complete their tasks.
- *Wages and payment system.* The second dimension, wages and payment system, concerns pay and reward system and includes performance-based pay and benefits (Holman & McClelland, 2011). Lester, et al.'s (2002) psychological contract breach measure uses the items of "a competitive salary" and "a fair salary" to examine the pay dimension of psychological contract breach, which are involved in the wages and payment system dimension, thus, the two items were integrated into one item in this study, which is "A competitive and fair salary". Four constructed items were added to this dimension. The item of "Rewards based on your performance" was constructed to test whether an employee's expectation on performance-based pay had been fulfilled. The dimension of wages and payment system also includes benefits that provided to an employee. In China, an organisation is usually required to provide the benefits of health care, retirement and houses to employees (Miao, 2009). Therefore, another three items were constructed to test the wages and payment dimension of psychological contract breach, which are "Adequate health care benefits", "Adequate retirement benefits", and "Adequate housing benefits".

- *Security and flexibility.* The third dimension, security and flexibility, concerns an employee's contractual status, flexible working arrangements and working hours (Holman & McClelland, 2011). The item of "An opportunity to decide when I take my vacation" was adopted from Chen's et al. (2008) psychological contract breach measure. The item was adopted because flexible working arrangements include an employee's flexible working arrangement on deciding when he/she can take a vacation. Four constructed items were added to this dimension. The items of "Flexible working hours" and "The opportunity to balance work and family life" were proposed because flexible working arrangements also include an employee's flexibility on working hours and on the balance between work and family life. The item of "Not working too many hours" was constructed because security and flexibility dimension contains an employee's expectation on working hours, besides flexible working hours, the employee may expect less overtime working. The item of "Protection against being dismissed without good reason" was constructed because an employee may expect security on maintaining his/her job.
- *Skills and development.* Skills and development is the fourth dimension. It concerns contains training and development opportunities provided to an employee (Holman & McClelland, 2011). Items were constructed based on the dimension. Regarding development opportunities in this dimension, an employee may expect the development of his/her skills, knowledge, and career, thus the items of "Opportunities to develop my skills and knowledge", "Opportunities to develop my career", and "Career guidance" were proposed to measure this dimension. As this dimension is related to training on an employee, thus, the item of "Training to do the job" was proposed to test psychological contract breach. In addition, receiving constructive feedback from a supervisor is a kind of training to an employee (Olivero, Bane & Kopelman, 1997); therefore, the item of "Constructive feedback on my performance" was constructed to test the skills and development dimension.
- *Engagement and representation.* The final dimension is engagement and representation, which is related to employee engagement and communication practices (Holman & McClelland, 2011). Items were constructed based on the dimension. The communication practices include the communication between an employee and his/her supervisor. For example, a supervisor consults and informs

an employee about work-related issues. Thus, the item of “Consultation about changes that may affect my job” and “Information on important changes” were proposed. In addition, the employee may want to express his/her ideas to the supervisor even the supervisor has not asked, thus, the item of “Opportunities to voice my ideas” was proposed. In order to improve employee engagement, an employee may expect to be involved in decision making and to be recognised about his/her ideas by the supervisor, therefore, the items of “Involvement in decision making” and “Recognition of my ideas for improving work” were constructed to test the engagement and representation measure.

In general, based on the five dimensions of psychological contract breach discussed above, the study has constructed a five-factor model that involves twenty-five items to measure psychological contract breach.

### **7.3.2 Employee Attributions**

Employee attributions measure was constructed based on Heider’s (1958) attribution theory in terms of internal and external attributions. The reason for choosing Heider’s (1958) attribution theory is that one of the primary questions that individuals address in causal explanations is whether the event resulted from internal or external factors (Heider, 1958). Heider (1958) indicated that both the internal and external factors have an influence on people’s processes of making causal explanations for the events they experienced. When psychological contract breach occurs, employee may attribute the breach to factors within themselves, such as skills and ability. Meanwhile, employees may attribute psychological contracts breach to factors outside of them, which refer to external attributions, such as the supervisor’s factors, the organisation’s factors, or the factors beyond the supervisor’s and the organisation’s control. Therefore, based on Heider’s (1958) theory, four dimensions of employee attributions were identified, which are employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation. In total, fourteen items were constructed to test employee attributions. Table 7.4 shows the employee attributions measure. Participants were asked to state the extent to which they believed the items were the reasons of why the organisation had not fulfilled its

obligations to provide appropriate work and employment conditions. The question followed the format of “To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because...” with responses rated on a five-point Likert scale anchored from “1 = Strongly disagree” to “5 = Strongly agree”.

Table 7.4 Employee Attributions Measure

To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because:

	Strongly disagree	Disagree a little	Neither agree nor disagree	Agree a little	Strongly agree
<b>Employee internal attributions</b>					
1. I needed to develop my skills and ability to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I needed to make more effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I was unlucky.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I should grasp the opportunity to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions about the supervisor</b>					
5. My supervisor <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My supervisor did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions about the organisation</b>					
8. My organisation <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Due to lack of facilities, my organisation could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My organisation did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions outside of the supervisor and the organisation</b>					
11. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My organisation tried but unforeseen events prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My organisation tried but the incorrect implementation of the organisation's policies prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specifically, the four dimension and fourteen items of employee attributions measure are:

- *Employee internal attributions.* The first dimension is employee internal attributions. When employees devise attributional explanations for psychological contract breach, they may attribute the breach to internal factors within themselves; the key internal factors are skills and ability, effort and initiative (Heider, 1958). Thus, the three items of “I needed to develop my skills and ability to fulfil them”, “I needed to make more effort to fulfil them” and “I should grasp the opportunity to fulfil them” were proposed. In addition, an employee may believe that luck plays a role in making casual explanations. Thus, the item of “I was unlucky” was added in this dimension.
- *Attributions about the supervisor.* The dimension of attributions about the supervisor supposes that employees attribute psychological contract breach to factors outside of the employee but within the supervisor. Skills and effort are key internal factors within the supervisor, thus, the items of “Due to lack of leadership skills, my supervisor could not fulfil them” and “My supervisor did not make the effort to fulfil them” were proposed. In addition, the supervisor’s intention may also play an important role in psychological contract breach, thus, the items of “My supervisor would not fulfil them” was constructed.
- *Attributions about the organisation.* The third dimension is attributions about the organisation, which means employees attribute psychological contract breach to causes outside of themselves but within the organisation’s control. Facilities and efforts may be two key internal factors within the organisation. Thus, the items of “Due to lack of facilities, my organisation could not fulfil them” and “My organisation did not make the effort to fulfil them” were proposed. In addition, the organisation’s intention may also play an important role in the breach of the psychological contract. Therefore, the item of “My organisation would not fulfil them” was constructed.
- *Attributions outside of the supervisor and the organisation.* The last dimension is attributions outside of the supervisor and the organisation, which means that employees attribute psychological contract breach to factors beyond the supervisor’s and the organisation’s control. Unforeseen events and circumstances are regarded as key external factors (Heider, 1958). Thus, the items of “My

supervisor tried but unforeseen events prevented it from fulfilling them”, “My organisation tried but unforeseen events prevented it from fulfilling them” and “My supervisor tried but circumstances beyond the organisation’s control prevented him/her from fulfilling them” were proposed. In addition, whether the organisation’s policies were implemented correctly may also have an impact on the breach of the psychological contract breach. Thus, the item of “My organisation tried but the incorrect implementation of the organisation’s policies prevented it from fulfilling them” was constructed.

In general, based on the four dimensions of employee attributions discussed above, the study has constructed a four-factor model that involves fourteen items to measure the employee attributions of psychological contract breach.

## **7.4 Factor Analysis Results**

This section will report the EFA and CFA results of psychological contract breach and employee attributions measures. In addition, the reliability and validity of these two constructed measures will be discussed.

### **7.4.1 Psychological Contract Breach**

At first, EFA on psychological contract breach measure was conducted in Mplus to identify the number of factors. The EFA examines the relative fit of the hypothesised five-factor model of psychological contract breach against other models. From one-factor solution to five-factor solution were tested with oblimin rotation on all the twenty-five items of psychological contract breach measure.

The results from the initial EFA are shown in Table 7.5. After comparing the one-factor solution to four-factor solution, a five-factor solution was regarded as a better solution (CFI = .87, RMSEA = .11, and SRMR = .04), and the Chi-Square change was significant ( $p < .05$ ) in comparison to a four-factor solution. Table 7.6 shows the factor



loadings of the five-factor model. Although the five-factor model was better than others, the values of CFI and RMSEA were still not acceptable and the factors were not consistent with the hypothesised measure.

Table 7.5 Results of EFA on Twenty-five Psychological Contract Breach Items ( $N = 261$ )

Model	CFI	RMSEA	SRMR	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$
One factors model	.65	.15	.10	1801.44	275		
Two factors model	.73	.13	.07	1431.87	251	257.59	24*
Three factors model	.79	.13	.06	1156.28	228	645.16	23*
Four factors model	.83	.12	.05	950.31	206	205.97	22*
Five factors model	.87	.11	.04	743.77	185	412.51	21*

*Notes:* CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change.  
\*  $p < .05$ .

Table 7.6 Factor Loadings from EFA for Psychological Contract Breach Twenty-five Items ( $N = 261$ )

Items	Work organisation	Wages and payment system	Security and flexibility	Skills and development	Engagement and representation
<b>Work organisation</b>					
1. Variety in my job	<b>.35</b>	.23	.10	-.01	-.01
2. A challenging job	<b>.54</b>	.11	-.10	-.01	.03
3. An interesting job	<b>.41</b>	.12	.13	.21	.01
4. A safe working environment	<b>.25</b>	.49	.11	-.09	.01
5. Resources to do the job well (e.g. software)	<b>.26</b>	.35	-.10	.17	.08
<b>Wages and payment system</b>					
6. Rewards based on your performance	-.01	<b>-.01</b>	-.01	-.01	2.29
7. A competitive and fair salary	.06	<b>.18</b>	.31	.14	.22
8. Adequate health care benefits	-.17	<b>.81</b>	.09	.09	.01
9. Adequate retirement benefits	-.01	<b>.80</b>	.04	.06	.01
10. Adequate housing benefits	.26	<b>.65</b>	-.10	-.09	.01
<b>Security and flexibility</b>					
11. Flexible working hours	-.17	.04	<b>.81</b>	.19	.01
12. The opportunity to balance work and family life	.01	.01	<b>.70</b>	.05	-.01
13. An opportunity to decide when I take my vacation	.11	.10	<b>.60</b>	-.02	.05
14. Not working too many hours	.04	.06	<b>.80</b>	-.19	.01
15. Protection against being dismissed without good reason	.01	.28	<b>.48</b>	.06	.01
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	.15	.06	-.04	<b>.71</b>	.04
17. Opportunities to develop my career	.15	.05	.09	<b>.65</b>	.04
18. Training to do the job	.12	.09	-.11	<b>.80</b>	-.02
19. Constructive feedback on my performance	-.05	.08	.13	<b>.76</b>	.01
20. Career guidance	-.17	.01	-.01	<b>.93</b>	.01
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	.33	-.09	.33	.44	<b>.05</b>
22. Opportunities to voice my ideas	.36	-.05	.33	.40	<b>.04</b>
23. Information on important changes	.39	.01	.15	.40	<b>.04</b>
24. Involvement in decision making	.26	-.06	.37	.36	<b>.01</b>
25. Recognition of my ideas for improving work	.41	.04	.30	.33	<b>.03</b>

In order to improve the model fit, items with factor loadings less than .3 (Stevens, 1992) were deleted. Thus, four items were deleted, which were “4. A safe working environment”, “5. Resources to do the job well (e.g. software)”, “6. Rewards based on your performance” and “7. A competitive and fair salary”. There were three items in work organisation dimension and three items in wage and payment system dimension.

In terms of security and flexibility dimension, the factor loadings of all the five items were greater than .3, in order to improve the model fit, items with lower factor loadings were deleted first (i.e., item “15. Protection against being dismissed without good reason” and item “13. An opportunity to decide when I take my vacation”). But deleting item 15 and item 13 did not improve the model fit. Moreover, considering the content validity of this factor, besides item “15. Protection against being dismissed without good reason”, no other items could represent the construct of security in this dimension. Thus, item 15 should be retained and removing other items should be considered. Among the five items, items “11. Flexible working hours” and “14. Not working too many hours” are highly related to each other but are less related to other items in this dimension. This is because the other three items (i.e., item 12, item 13 and item 15) concern about the employee’s contractual status and flexible working arrangements, while item 11 and item 14 concern about the employee’s working hours. Thus, item 11 and item 14 were deleted in consideration of the convergent validity of this factor. It is shown that deleting item 11 and item 14 could improve the model fit.

In terms of skills and development dimension, the factor loadings of all the five items were greater than .3. Deleting items with lower factor loadings (i.e., item “16. Opportunities to develop my skills and knowledge” and item “17. Opportunities to develop my career”) did not improve the model fit. Thus, item 16 and item 17 would be retained and items that have lower content validity should be removed. Compared with other items, item “18. Training to do the job” and item “20. Career guidance” were thought to represent this dimension less because the wordings of the two items are less specific than the others’. Considering the content validity of this factor, item 18 and item 20 were deleted. It is shown that deleting item 18 and item 20 could improve the model fit.

In terms of engagement and representation dimension, the five items that loaded in

other factor were influenced by item “24. Involvement in decision making” and item “25. Recognition of my ideas for improving work”. A plausible reason is that item 24 and item 25 are less related to other items in this dimension because for the shop-floor workers who were the main participants in this study, these two items may overweight their roles in organisational management and are not appropriate for them. Thus, item 24 and item 25 were deleted and results show that the rest three items loaded in this factor successfully.

After deleting the ten items, EFA was repeated on the remaining fifteen items. The EFA results are shown in Table 7.7. After comparing the one-factor solution to four-factor solution, a five-factor solution was regarded as a better solution and has a good model fit (CFI = .98, RMSEA = .06, and SRMR = .02), and the Chi-Square change was significant ( $p < .05$ ) in comparison to a four-factor solution. The factor loadings from EFA are shown in Table 7.8.

Table 7.7 Results of EFA on Fifteen Psychological Contract Breach Items ( $N = 261$ )

Model	CFI	RMSEA	SRMR	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$
One factors model	.74	.15	.10	648.54	90		
Two factors model	.87	.12	.06	347.98	76	300.56	14*
Three factors model	.92	.10	.04	223.25	63	425.29	13*
Four factors model	.95	.09	.03	150.51	51	72.74	12*
Five factors model	.98	.06	.02	73.85	40	76.66	11*

Notes: CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change.

\*  $p < .05$ .

Table 7.8 Factor loadings from EFA for psychological contract breach items ( $N = 261$ )

Items	Work organisati -on	Wages and payment system	Security and flexibility	Skills and develop -ment	Engage ment and represen -tation
<b>Work organisation</b>					
1. Variety in my job	<b>.55</b>	.07	.20	-.12	.14
2. A challenging job	<b>.81</b>	-.01	-.06	.04	-.05
3. An interesting job	<b>.48</b>	.04	.17	.18	.11
<b>Wages and payment system</b>					
8. Adequate health care benefits	-.07	<b>.77</b>	.17	.18	-.06
9. Adequate retirement benefits	-.01	<b>.90</b>	.02	-.02	.04
10. Adequate housing benefits	.14	<b>.68</b>	-.17	.04	.02
<b>Security and flexibility</b>					
12. The opportunity to balance work and family life	.00	-.01	<b>.70</b>	.06	.11
13. An opportunity to decide when I take my vacation	.07	-.01	<b>.73</b>	.04	-.04
15. Protection against being dismissed without good reason	-.05	.23	<b>.54</b>	.06	.01
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	.11	.01	.08	<b>.44</b>	.26
17. Opportunities to develop my career	.01	.01	.01	<b>.95</b>	-.01
19. Constructive feedback on my performance	-.07	.10	.08	<b>.44</b>	.32
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	.01	-.02	.03	-.06	<b>.96</b>
22. Opportunities to voice my ideas	-.01	.04	.01	.15	<b>.76</b>
23. Information on important changes	.11	.04	.07	.11	<b>.56</b>

The five factors are consistent with the five dimensions of the constructed psychological contract breach measure, and there are three items in each factor.

- *Work organisation.* Factor I was labelled Work organisation and is related to work quality and job design. This factor contain the items of “Variety in my job”, “A challenging job”, and “An interesting job”.
- *Wages and payment system.* Factor II is Wages and payment system, which refers to employees’ pay and benefits. This factor includes the items of “Adequate health care benefits”, “Adequate retirement benefits”, and “Adequate housing benefits”.
- *Security and flexibility.* Security and flexibility is Factor III and is related to employee’s contractual status and flexible working arrangements. This factor includes the items of “The opportunity to balance work and family life”, “An opportunity to decide when I take my vacation”, and “Protection against being dismissed without good reason”.
- *Skills and development.* Factor IV was labelled Skills and development, which represents skill requirements, training and development opportunities. This factor includes the items of “Opportunities to develop my skills and knowledge”, “Opportunities to develop my career”, and “Constructive feedback on my performance”.
- *Engagement and representation.* Factor V was labelled Engagement and representation and refers to employee engagement and communication practices. This factor contains the items of “Consultation about changes that may affect my job”, “Opportunities to voice my ideas”, and “Information on important changes”.

After doing the EFA on psychological contract breach measure, a CFA on the five-factor solution was conducted. The results from CFA were CFI = .96, RMSEA = .07, SRMR = .05,  $\chi^2 = 171.27$ , and  $df = 80$ . The factor loadings of these fifteen items from CFA are shown in Table 7.9. The results and factor loadings show that psychological contract breach is successfully measured by the five-factor model. Psychological contract breach was successfully measured by the five-factor model, but RMSEA in the CFA’s results shows a reasonable model fit. This suggests that this measure could be developed further.

Table 7.9 Factor Loadings from CFA for Psychological Contract Breach Items ( $N = 261$ )

Items	Work organisati -on	Wages and payment system	Security and flexibility	Skills and develop -ment	Engage ment and represen -tation
<b>Work organisation</b>					
1. Variety in my job	<b>.59</b>				
2. A challenging job	<b>.57</b>				
3. An interesting job	<b>.83</b>				
<b>Wages and payment system</b>					
8. Adequate health care benefits		<b>.78</b>			
9. Adequate retirement benefits		<b>.93</b>			
10. Adequate housing benefits		<b>.64</b>			
<b>Security and flexibility</b>					
12. The opportunity to balance work and family life			<b>.82</b>		
13. An opportunity to decide when I take my vacation			<b>.72</b>		
15. Protection against being dismissed without good reason			<b>.69</b>		
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge				<b>.79</b>	
17. Opportunities to develop my career				<b>.85</b>	
19. Constructive feedback on my performance				<b>.81</b>	
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job					<b>.90</b>
22. Opportunities to voice my ideas					<b>.90</b>
23. Information on important changes					<b>.76</b>

A second-order factor model of the psychological contract breach was also used to improve model parsimony and to reflect the fact that an employee's perceptions of psychological contract breach may be summative, i.e. a global assessment of breach across all aspects of the job (Pike, Hudson, Murphy & McCuan, 1998). The results from the second-order factor analysis were CFI = .95, RMSEA = .07, SRMR = .06,  $\chi^2 = 191.42$ , and  $df = 85$ . The factor loadings of these fifteen items are shown in Table 7.10. The results and factor loadings show that psychological contract breach can be measured by using a second-order factor. In addition, the correlations between the five factors ranged from .36 to .85. Only three correlations are less than .50, others are great than .50, which indicate strong relationship between the five psychological contract breach factors (Cohen, 1988). The high correlations also mean that a single composite measure of psychological contract breach can be used.



Table 7.10 Factor Loadings from Second-order Factor Analyses for Psychological Contract Breach Items ( $N = 261$ )

Items	Work organisati- on	Wages and payment system	Security and flexibility	Skills and develop- ment	Engagem- ent and represen- tation	Psychol- ogical contract breach
<b>Work organisation</b>						
1. Variety in my job	.59					
2. A challenging job	.57					
3. An interesting job	.84					
<b>Wages and payment system</b>						
8. Adequate health care benefits		.77				
9. Adequate retirement benefits		.93				
10. Adequate housing benefits		.64				
<b>Security and flexibility</b>						
12. The opportunity to balance work and family life			.83			
13. An opportunity to decide when I take my vacation			.72			
15. Protection against being dismissed without good reason			.67			
<b>Skills and development</b>						
16. Opportunities to develop my skills and knowledge				.79		
17. Opportunities to develop my career				.85		
19. Constructive feedback on my performance				.81		
<b>Engagement and representation</b>						
21. Consultation about changes that may affect my job					.90	
22. Opportunities to voice my ideas					.91	
23. Information on important changes					.76	
<b>Psychological contract breach</b>						
Work organisation						.69
Wage and payment system						.48
Security and flexibility						.82
Skills and development						.92
Engagement and representation						.91

In terms of the reliability, Cronbach's alphas for the five factors of psychological contract breach measure were .72 (Work organisation), .82 (Wages and payment system), .78 (Security and flexibility), .86 (Skills and development), and .88 (Engagement and representation). All the five Cronbach's alphas are higher than .70 and show that the internal consistency of this measure is good (Kline, 2000).

The validity of the psychological contract breach measure was tested by content validity and convergent validity. By assessing content validity, it was shown that the fifteen items in this measure stemmed from the construct of psychological contract breach and related and represented of the key facets of the psychological contract breach construct. But the five dimensions of psychological contract breach could be represented better. More specifically, items that measure the employee's autonomy on work could be added in the work organisation factor because the employee may expect to be involved in work design. For the wages and payment system factor, pay-related items could be added because they are supposed to be important items to represent this factor. For the security and flexibility factor, items that are related to security could be involved because there was only one item testing the employee's expectations on security in the pilot study. The skills and development factor could include items with more specific wordings and items that measure the employee's expectations on promotion. Regarding the engagement and representation factor, items that are related to communication among colleagues could be added to better represent this dimension because the communication among colleagues has not measured in the pilot study. In terms of convergent validity, Table 7.11 shows that the items in each factor are significantly related. Ten out of fifteen correlations between the items are greater than .50, which indicate strong relationships (Cohen, 1988). But there are still five correlations less than .50. Thus, the convergent validity of the psychological contract breach measure could be improved further.

Table 7.11 Convergent Validity of Psychological Contract Breach Measure ( $N = 261$ )

<b>Work organisation</b>			
	Item 1	Item 2	Item 3
Item 1	1.00**		
Item 2	.47**	1.00**	
Item 3	.45**	.48**	1.00**
<b>Wage and payment system</b>			
	Item 8	Item 9	Item 10
Item 8	1.00**		
Item 9	.72**	1.00**	
Item 10	.49**	.60**	1.00**
<b>Security and flexibility</b>			
	Item 12	Item 13	Item 15
Item 12	1.00**		
Item 13	.60**	1.00**	
Item 15	.54**	.48**	1.00**
<b>Skills and development</b>			
	Item 16	Item 17	Item 19
Item 16	1.00**		
Item 17	.68**	1.00**	
Item 19	.61**	.70**	1.00**
<b>Engagement and representation</b>			
	Item 21	Item 22	Item 23
Item 21	1.00**		
Item 22	.82**	1.00**	
Item 23	.68**	.67**	1.00**

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\*\* $P < .01$

Through doing EFA, CFA, and reliability and validity analyses, psychological contract breach is shown to be successfully measured. *“Hypothesis 1 Psychological contract breach is measured by a five-factor model. The five factors are work organisation, wages and payment system, security and flexibility, skills and development, and*

*engagement representation*” was supported.

## 7.4.2 Employee Attributions

A similar factor analysis strategy was applied to test the measure of employee attributions. At first, EFA on the constructed measure of employee attributions was conducted in Mplus to identify the number of factors. The EFA examines the relative fit of hypothesised the four-factor model of employee attributions against other models. From one-factor solution to four-factor solution were tested with oblimin rotation on all the fourteen items of employee attribution measure. The results from the EFA are presented in Table 7.12. After doing a comparison, a four-factor solution was regarded as a better solution (CFI = .92, RMSEA = .109, and SRMR = .037) than one-factor solution to three-factor solution, and the Chi-Square change was significant ( $p < 0.05$ ) in comparison to three-factor model. The factor loadings of items from EFA are shown in Table 7.13.

Table 7.12 Results of EFA on Fourteen Employee Attribution Items ( $N = 261$ )

Model	CFI	RMSEA	SRMR	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$
One factors model	.51	.20	.14	864.84	77		
Two factors model	.71	.17	.09	530.92	64	333.92	13*
Three factors model	.81	.15	.08	352.79	52	178.13	12*
Four factors model	.92	.11	.04	168.78	41	184.01	11*

Notes: CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change.

\*  $p < .05$ .

Table 7.13 Factor loadings from EFA for Employee Attribution Items ( $N = 261$ )

Items	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal attributions</b>				
1. I needed to develop my skills and ability to fulfil them.	<b>.83</b>	.01	-.08	.05
2. I needed to make more effort to fulfil them.	<b>.81</b>	.03	.09	-.09
3. I was unlucky.	<b>.04</b>	.33	.25	.05
4. I should grasp the opportunity to fulfil them.	<b>.47</b>	.09	-.14	.17
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.	.05	<b>.75</b>	.07	.01
6. Due to lack of leadership skills, my supervisor could not fulfil them.	-.03	<b>.92</b>	-.06	.03
7. My supervisor did not make the effort to fulfil them.	.09	<b>.68</b>	.16	-.03
<b>Attributions about the organisation</b>				
8. My organisation <u>would</u> not fulfil them.	.01	.11	<b>.78</b>	-.03
9. Due to lack of facilities, my organisation could not fulfil them.	.11	-.11	<b>.68</b>	.13
10. My organisation did not make the effort to fulfil them.	-.06	.09	<b>.80</b>	-.01
<b>Attributions outside of the supervisor and the organisation</b>				
11. My supervisor tried but unforeseen events prevented it from fulfilling them.	-.03	.10	-.01	<b>.80</b>
12. My organisation tried but unforeseen events prevented it from fulfilling them.	.05	-.11	.19	<b>.58</b>
13. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	-.01	-.01	-.07	<b>.84</b>
14. My organisation tried but the incorrect implementation of the organisation's policies prevented it from fulfilling them.	.11	-.05	.32	<b>.48</b>

In order to improve the model fit as much as possible and to ensure that there were at least three items in each factor, two items that had lower factor loadings were deleted, which were “3. I was unlucky” and “14. My organisation tried but the incorrect implementation of the organisation’s policies prevented it from fulfilling them”. After deleting the two items, EFA was conducted on the remaining twelve items. The EFA results are shown in Table 7.14. The four-factor model with values of CFI (.97), RMSEA (.08) and SRMR (.02) was regarded as the most acceptable solution compared the one-factor model to three-factor model, and the Chi-Square change was significant ( $p < .05$ ) in comparison to three-factor model. The factor loadings of items EFA are shown in Table 7.15. The EFA results and factor loadings show that employee attributions are successfully measure by the four-factor model.

Table 7.14 Results of EFA on Twelve Employee Attribution Items ( $N = 261$ )

Model	CFI	RMSEA	SRMR	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$
One factors model	.53	.21	.14	687.03	54		
Two factors model	.72	.18	.09	420.80	43	266.23	11*
Three factors model	.84	.16	.06	242.28	33	178.52	10*
Four factors model	.97	.08	.02	64.34	24	177.94	9*

Notes: CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change.

\*  $p < .05$ .

Table 7.15 Factor loadings from EFA for Employee Attribution Items ( $N = 261$ )

Items	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal attributions</b>				
1. I needed to develop my skills and ability to fulfil them.	<b>.82</b>	.01	-.07	.06
2. I needed to make more effort to fulfil them.	<b>.81</b>	.02	.09	-.09
4. I should grasp the opportunity to fulfil them.	<b>.47</b>	.08	-.14	.16
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.	.05	<b>.76</b>	.07	.01
6. Due to lack of leadership skills, my supervisor could not fulfil them.	-.03	<b>.92</b>	-.06	.02
7. My supervisor did not make the effort to fulfil them.	.09	<b>.68</b>	.16	-.02
<b>Attributions about the organisation</b>				
8. My organisation <u>would</u> not fulfil them.	.01	.10	<b>.77</b>	-.02
9. Due to lack of facilities, my organisation could not fulfil them.	.12	-.12	<b>.69</b>	.12
10. My organisation did not make the effort to fulfil them.	-.06	.06	<b>.82</b>	-.01
<b>Attributions outside of the supervisor and the organisation</b>				
11. My supervisor tried but unforeseen events prevented it from fulfilling them.	-.03	.08	.02	<b>.86</b>
12. My organisation tried but unforeseen events prevented it from fulfilling them.	.06	-.10	.19	<b>.52</b>
13. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	.02	-.04	-.03	<b>.80</b>

The four factors were consistent with the four dimensions of the constructed employee attribution measure. To be more specific,

- *Employee internal factors.* Factor I was labelled Employee internal factors, and

indicates that employees attribute psychological contract breach to factors within themselves. The items in this factor are “I needed to develop my skills and ability to fulfil them”, “I needed to make more effort to fulfil them”, and “I should grasp the opportunity to fulfil them”.

- *Attributions about the supervisor.* Factor II was labelled Attributions about the supervisor, which means when psychological contract breach occurs, employees attribute the breach to the supervisor’s factors. The items of “My supervisor would not fulfil them”, “Due to lack of leadership skills, my supervisor could not fulfil them”, and “My supervisor did not make the effort to fulfil them” are included in this factor.
- *Attributions about the organisation.* Factor III was labelled Attributions about the organisation, and indicated that employee attribute psychological contract breach to factors within the organisation. Items in this factor are “My organisation would not fulfil them”, “Due to lack of facilities, my organisation could not fulfil them”, and “My organisation did not make the effort to fulfil them”.
- *Attributions outside of the supervisor and the organisation.* Factor IV was labelled Attributions outside of the supervisor and the organisation, which shows that employees attribute psychological contract breach to factors beyond the supervisor’s and the organisation’s control. Three items in this factor are “My supervisor tried but unforeseen events prevented it from fulfilling them”, “My organisation tried but unforeseen events prevented it from fulfilling them”, and “My supervisor tried but circumstances beyond the organisation’s control prevented him/her from fulfilling them”.

After doing EFA on employee attribution measure, a CFA was conducted based on the four-factor solution. The results were CFI = .94, RMSEA = .08, SRMR = .06,  $\chi^2 = 130.86$ , and  $df = 48$ . The factor loadings of these twelve items from CFA are shown in Table 7.16. Employee attributions were successfully measured by the four-factor model, but RMSEA in both the EFA’s results and the CFA’s results shows a reasonable model fit. This suggests that this measure needs further development.



Table 7.16 Factor Loadings from CFA for Employee Attribution Items ( $N = 261$ )

Items	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal attributions</b>				
1. I needed to develop my skills and ability to fulfil them.	.81			
2. I needed to make more effort to fulfil them.	.82			
4. I should grasp the opportunity to fulfil them.	.51			
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.		.83		
6. Due to lack of leadership skills, my supervisor could not fulfil them.		.83		
7. My supervisor did not make the effort to fulfil them.		.83		
<b>Attributions about the organisation</b>				
8. My organisation <u>would</u> not fulfil them.			.86	
9. Due to lack of facilities, my organisation could not fulfil them.			.66	
10. My organisation did not make the effort to fulfil them.			.82	
<b>Attributions outside of the supervisor and the organisation</b>				
11. My supervisor tried but unforeseen events prevented it from fulfilling them.				.89
12. My organisation tried but unforeseen events prevented it from fulfilling them.				.56
13. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.				.77

In terms of the reliability, Cronbach's alphas for the four factors of employee attributions measure were .74 (Employee internal factors), .87 (Attributions about the supervisor), .82 (Attributions about the organisation), and .78 (Attributions outside of

the supervisor and the organisation). All the four Cronbach's alphas are higher than .70 and show that the internal consistency of this measure is acceptable (Kline, 2000).

The validity of employee attributions measure was tested by content validity and discriminant validity. By assessing content validity, it was shown that the twelve items in this measure stemmed from the construct of employee attributions and related and represented of the key facets of the employee attributions. But the content validity of this measure could be improved further. For instance, as the psychological contract is implicit and unwritten, the employee's own behaviour of hiding his or her expectations about work and employment conditions may lead to psychological contract breach. The employee's own choice on whether expressing their expectations to the supervisor or the organization is related to the employee's internal factors. Thus, the employee internal attributions factor could be represented better by adding expression-related items. Items that are related to economic environment could be involved in the attributions outside of the supervisor and the organisation because economic environment may play an important role in the external factor but has not been measured in the pilot study. Table 7.17 shows that four correlations between the employee attributions factors are not greater than .30, which indicate weak relationships between employee attributions factors (Cohen, 1988). Thus the employee attributions measure has discriminant validity. The low correlations also show that the four-factor model successfully measures distinct employee attributions.

Table 7.17 Convergent Validity of Employee Attributions Measure ( $N = 261$ )

	Employee internal factors	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Employee internal factors	1.00**			
Attributions about the supervisor	.39**	1.00**		
Attributions about the organisation	.30*	.63**	1.00**	
Attributions outside of the supervisor and the organisation	.24*	.21**	.30**	1.00**

\* $p < .05$ , \*\* $P < .01$

Through doing EFA, CFA, and reliability and validity analyses, employee attributions were successfully measured. Thus, “*Hypothesis 2 Employee attributions are measured by a four-factor model. The four factors are employee internal factors, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation*” was supported.

## 7.5 Proposed Improvement

Although psychological contract breach and employee attributions were successfully measured, Reasonable RMSEA results suggest that these measures could be developed further. In terms of psychological contract breach five-factor measure, the work organisation factor may include employees’ initiative on work, thus items, like employees making decision by themselves, can be developed in Study 2 to measure. In terms of wages and payment system factor, items that are related to employees’ salaries

and rewards are still regarded important although the two relevant items have low factor loadings in Study 1. Thus, other pay-related items could be added in Study 2. Regarding to the security and flexibility factor, besides the three items in study 1, similar items to the three items can be added in Study 2. In terms of the skills and development factor, items that are related to employee promotion and grow can be proposed in Study 2, as promotion and grow are included in the skills and development dimension as well. The engagement and representation dimension not only includes communication between employees and their supervisors, but also contains communication between employees and their colleagues. Thus, the items that are related to communication among colleagues can be added in Study 2.

In terms of employee attributions four-factor measure, as psychological contract is implicit and the employee's own behaviour of hiding his or her expectations may lead to psychological contact breach. Thus, item like speaking out expectations could be added to the employee internal attributions factor. Regarding to attributions about the supervisor factor and attribution about the organisation factor, similar items to the items with high factor loadings in Study 1 could be constructed in Study 2. The last factor refers to the causes outside of the supervisor and the organisation and can include economic environment. Thus, items that are related to economic environment could be developed in Study 2.

## **7.6 Chapter Summary**

The pilot study has tested the constructed measures of psychological contract breach and employee attributions. This chapter has described the sample, procedure, analysis strategy, and measures of the pilot study. The factor analysis results of the constructed psychological contract breach and employee attributions measures, including EFA, CFA, reliability and validity results, have been reported. In addition, the ways to improve the two measures have been proposed. The next chapter will develop the two measures and test psychological contract breach and employee attributions based on the pilot study.

# **Chapter 8 Study 2 Overview and Factor Analysis**

## **Results**

### **8.1 Introduction**

Study 2 tests the overall model of the current research. This chapter will describe the overview of study 2 at first. Then the sample, procedures, and measures of study 2 will be described. In addition, the factor analysis strategy and factor analyses results of study 2 will be reported in this chapter.

### **8.2 Overview**

The key aim of the current research is to explore the role of employee attributions in the relationship between psychological contract breach and employee outcomes by testing two competing models (i.e., moderation model and mediation model). In chapter 3, the direct relationship between psychological contract breach and employee outcomes has been discussed. Based on this, employee attributions have been proposed to moderate the relationship between psychological contract breach and employee outcomes. In chapter 4, the relationships between psychological contract breach and employee attributions and between employee attributions and employee outcomes have been explained. Based on this, employee attributions have been proposed to mediate the relationship between psychological contract breach and employee outcomes. Based on the measures of psychological contract breach and employee attributions developed in Study 1, Study 2 will explore the moderating role and mediating role of employee attributions in the relationship between psychological contract breach and employee

outcomes. In addition, the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions will be explored to better understand why employees make different attributions in response to psychological contract breach. The overall model of this research that is designed to test is shown in Figure 8.1.

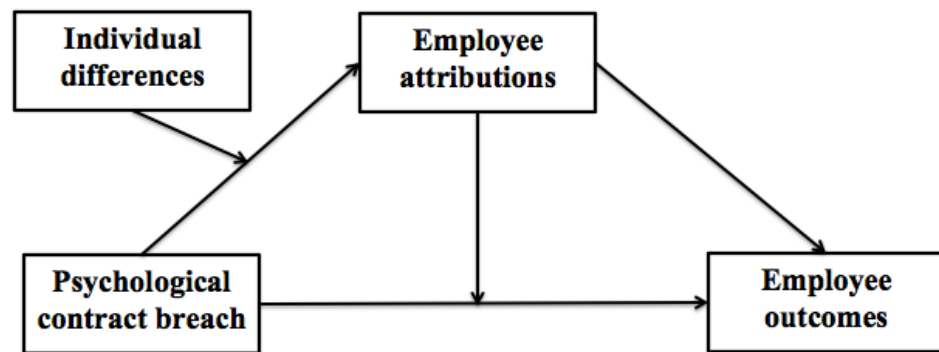


Figure 8.1 Overall Model

### 8.3 Sample

Study 2 was conducted in six Chinese manufacturing organisations, located in a coastal city in the Northern part of China. The data was collected from March 2014 to May 2014. There were 233 people in the first organisation, 500 people in the second one, 328 people in organisation three, 247 people in the fourth organisation, 305 people in the fifth company, and 271 people in organisation six. There were two types of questionnaires, one was employee questionnaire, and another was supervisor questionnaire. Questionnaires were distributed randomly to people who were not on a business trip and who volunteered to participate. In total, 152 supervisor questionnaires and 776 employee questionnaires were distributed. A total of 122 supervisor questionnaires and 634 employee questionnaires were received, for an overall response rate of 80 per cent and 82 per cent, respectively. The final sample consisted of 634 matched questionnaires.

In terms of demographics, Table 8.1 summarises the demographic information of the participants. For supervisors, 87.7 per cent ( $N = 107$ ) were male. Their ages ranged from 21 years old to 64 years old with a mean age of 40 years old. Job tenure ranged from 2 months to 42 years with a mean of 5.6 years. All participants were full-time employees. Their education level ranged from middle school to postgraduate with an average of secondary specialised school.

For employees, 70.3 per cent ( $N = 446$ ) were male. Their ages ranged from 18 years old to 64 years old with a mean age of 34 years old. Job tenure ranged from 2 month to 40 years with a mean of 4.7 years. All participants were full-time employees. Their education level ranged from middle school to postgraduate with an average of secondary specialised school.

Table 8.1 Demographic Information on Participants

<b>Demographic variables</b>	<b>Percentage of supervisors (N = 122)</b>	<b>Percentage of employees (N = 634)</b>
<b>Gender</b>		
Male	87.7 (N = 107)	70.3 (N = 446)
<b>Age</b>		
Below 20 years old	0.0	2.7
20-30 years old	14.6	42.6
31-40 years old	30.2	30.5
41-50 years old	37.4	18.9
51-60 years old	17.7	5.3
<b>Job years</b>		
Less than 1 year	3.2	13.6
1-10 years	47.2	75.7
11-20 years	22.4	6.5
21-30 years	17.6	2.7
31-40 years	8.8	1.4
40-50 years	0.8	0.1
<b>Full time/Part time</b>		
Full time	100.0	100.0
<b>Education level</b>		
Middle school	7.2	21.6
High school	14.4	14.0
Secondary specialised school	19.2	23.1
Junior college	24.0	20.5
Undergraduate	28.0	18.4
Postgraduate	7.2	1.0
No formal qualifications	0.0	1.4

## 8.4 Measures

The survey instruments were in Chinese. After translating the items from English to Chinese, three Chinese students studying PhD degrees in the UK were responsible for the back translation. Then the back-translated version was compared with the original version to identify improper words. To ensure the readability and validity of the meaning of each item, those improper words were retranslated and retested until they matched original ones.



### **8.4.1 Employee Questionnaires**

The employee questionnaires included the measures of psychological contract breach, employee attributions, leadership perceptions, employee well-being, individualism/collectivism, and proactivity. The following sections will introduce these measures in detail.

#### **Psychological Contract Breach**

The measure of psychological contract breach was developed based on pilot study. In the pilot study, Holman and McClelland's (2011) five-dimension classification of job quality was adopted to construct psychological contract breach measure. Holman and McClelland's (2011) model was applied as it is both parsimonious in terms of the number of dimensions and comprehensive in terms of its coverage. The five factors were work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation. There are three items in each of the factors, and fifteen items in total. A factor structure should have no factors with fewer than three items (Costello & Osborne, 2005). As the psychological contract breach measure was a constructed measure, items might be deleted when doing factor analysis to improve model fit. In order to ensure there would be at least three items in each factor in the factor analysis results of Study 2 and not ignore any other important items, another two items were added in each factor. After adding another ten items, there are totally twenty-five items in the new psychological contract breach measure. The five dimensions and twenty-five items of the new psychological contract breach measure are shown in Table 8.2.

Table 8.2 Psychological Contract Breach Measure

To what extent has your organisation provided you with the following:					
	Not provi- ded	Provi- ded a little	Somew- hat provide- d	Provide- d a lot	Comple- tely provide- d
<b>Work organisation</b>					
1. Variety in my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A challenging job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. An interesting job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A job in which I can make decisions by myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Opportunities to show what I can do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Wages and payment system</b>					
6. Adequate health care benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Adequate retirement benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Adequate housing benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Attractive pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Financial rewards for exceptional performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Security and flexibility</b>					
11. The opportunity to balance work and family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Protection against being dismissed without good reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. An opportunity to decide when I take my vacation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Respect for my personal and family circumstances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. A relatively secure job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Opportunities to develop my career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Constructive feedback on my performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Opportunities for promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Opportunities to grow and develop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Opportunities to voice my ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Information on important changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Good communication among colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Good communication with my team leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Among the ten new items, three items were created, and seven items were adopted from established measures, which had high factor loadings and had different expressions from the old items. In factor I (Work organisation), three items that were adopted from pilot study are “Variety in my job”, “A challenging job”, and “An interesting job”. The two added items were adopted from De Vos, Buyens and Schalk’s (2003) measure, which were “A job in which you can make decisions by yourself” and “Opportunities to show what you can do”. These two items were adopted because they are related to work organisation. Work organisation is related to work quality and includes job design and team design (Holman & McClelland, 2011). Job design refers to the content, methods and relationships of jobs (Rush, 1971). One aim of job design is to meet the employee’s personal requirements on the job and to increase the employee’s job satisfaction (Smelser & Baltes, 2001). One key factor in job design is autonomy (Smelser & Baltes, 2001). The two added items could help to measure the content of the employee’s job and the employee’s autonomy and measure how the organisation meets the employee’s personal requirements.

In factor II (Wages and payment system), three items that were adopted from pilot study are “Adequate health care benefits”, “Adequate retirement benefits”, and “Adequate housing benefits”. One new item (i.e., “Attractive pay”) was constructed, and another (i.e., “Financial rewards for exceptional performance”) was adopted from De Vos, et al.’s (2003) measure. Wages and payment system can indicate employment quality in the organisation and refers to wage level, performance-based pay, and benefits (Holman & McClelland, 2011). These two added items were adopted because they can help to measure wage level and performance-based pay.

In factor III (Security and flexibility), three items that were adopted from pilot study are “The opportunity to balance work and family life”, “Protection against being dismissed without good reason”, and “An opportunity to decide when I take my vacation”. One added item (i.e., “Respect for my personal and family circumstances”) was adopted from De Vos, et al.’s (2003) measure, and another item (i.e., “A relatively secure job”) was adopted from Tekleab and Taylor’s (2003) measure. Security and flexibility includes contractual status, flexible working arrangements and working hours (Holman & McClelland, 2011). The item “Respect for my personal and family circumstances” was added because it is related to flexible working arrangements. The

item “A relatively secure job” was added because it can help to measure the security of the employee’s contractual status.

In factor IV (Skills and development), “Opportunities to develop my skills and knowledge”, “Opportunities to develop my career” and “Constructive feedback on my performance” are the three items that were adopted from pilot study. One new item “Opportunities for promotion” was adopted from Chen et al.’s (2008) measure, and another new item “Opportunities to grow and develop” was adopted from De Vos, et al.’s (2003) measure. Skills and development can indicate empowerment quality and contains skill requirements, training, and development opportunities (Holman & McClelland, 2011). The added two items are related to development opportunities provided by the organisation.

In factor V (Engagement and representation), three items that were adopted from pilot study are “Consultation about changes that may affect my job”, “Opportunities to voice my ideas” and “Information on important changes”. Two constructed items were added, which are “Good communication among colleagues” and “Good communication with your team leader”. Engagement and representation refers to employee engagement and communication practices (Holman & McClelland, 2011). The added two items were added because they are related to employee communication practices.

Participants were requested to state, item by item, the extent to which they believed their expectations about the work and employment conditions had been met by this organisation. Each employee was asked, “To what extent has your organisation provided you with the following...” A five-point Likert scale that ranged from “1 = Not provided” to “5 = Completely provided” was used.

### **Employee Attributions**

Employee attributions measure was developed based on the one constructed in pilot study. In the pilot study, Heider’s (1958) internal and external attribution theory was used to construct employee attributions measure. There were four factors in this measure, which were employee internal factors, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the

organisation. There were three items in each of the factors, and twelve items in total. A factor structure should have no factors with fewer than three items (Costello & Osborne, 2005). As the employee attributions measure was a constructed measure, items might be deleted when doing factor analysis to improve model fit. In order to ensure there would be at least three items in each factor in the factor analysis results of Study 2 and not ignore any other important items, another five constructed items were added. After adding another five items, there are totally seventeen items in new employee attributions measure. The four dimensions and seventeen items are shown in Table 8.3.

In factor I (Employee internal factors), items that were adopted from pilot study are “I needed to develop my skills and ability to fulfil them”, “I needed to make more effort to fulfil them” and “I should grasp the opportunity to fulfil them”. One added item in this factor is “I should speak out about my expectations”. This item was added because the psychological contract is implicit and the employee’s own behaviour of hiding his or her expectations may lead to psychological contract breach.

In factor II (Attributions about the supervisor), items that were adopted from pilot study are “My supervisor would not fulfil them”, “Due to a lack of leadership skills, my supervisor could not fulfil them” and “My supervisor did not make the effort to fulfil them”. One added item is “Due to a lack of effective leadership, my supervisor could not fulfil them”. This item was added because it is similar to the item “Due to lack of leadership skills, my supervisor could not fulfil them” that had high factor loading in the pilot study, but differing from the latter one by testing whether the employee attributes psychological contract breach to the supervisor’s overall leadership.

In factor III (Attributions about the organisation), items that were adopted from pilot study are “My organisation would not fulfil them”, “Due to lack of facilities, my organisation could not fulfil them” and “My organisation did not make the effort to fulfil them”. One added item is “My organisation did not fulfil them deliberately”. This item is similar to the item “My organisation would not fulfil them” that had high factor loading in the pilot study, but differing from the latter one by examining whether the employee attributes psychological contract breach to the supervisor’s considerable and intentional decision of not fulfilling the employee’s psychological contract.

In factor IV (Attributions outside of the supervisor and the organisation), items that were adopted from pilot study are “My supervisor tried but unforeseen events prevented him/her from fulfilling them”, “My organisation tried but unforeseen events prevented it from fulfilling them” and “My supervisor tried but circumstances beyond the organisation’s control prevented him/her from fulfilling them”. Two items were added, which were “My supervisor tried but the economic environment prevented him/her from fulfilling them” and “My organisation tried but the economic environment prevented it from fulfilling them”. As economic environment might be involved in the causes beyond the supervisor and the organisation’s control, thus these two items were constructed and added.

Participants were requested to state the extent to which they believed the items were the reasons of why the organisation had not fulfilled its obligations to provide appropriate work and employment conditions. The question followed the format of “To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because...” with responses rated on a five-point Likert scale that anchored from “1 = Strongly disagree” to “5 = Strongly agree”.

Table 8.3 Employee Attributions Measure

To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because:

	Strongly- y disagree	Disagre -e a little	Neither agree nor disagree	Agree a little	Strongly agree
<b>Employee internal factors</b>					
1. I needed to develop my skills and ability to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I needed to make more effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I should speak out my expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I should grasp the opportunity to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions about the supervisor</b>					
5. My supervisor <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Due to a lack of effective leadership, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. My supervisor did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions about the organisation</b>					
9. My organisation <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My organisation did not fulfil them deliberately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Due to lack of facilities, my organisation could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My organisation did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Attributions outside of the supervisor and the organisation</b>					
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My organisation tried but unforeseen events prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. My supervisor tried but the economic environment prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. My organisation tried but the economic environment prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Employee Well-being

As one of the outcomes of psychological contract breach, employee well-being was measured by ten positive affect items of Positive and Negative Affect Schedule (PANAS) (Watson, Clark and Tellegen, 1988). This measure was adopted because it had been used in both cross-cultural and Chinese context and had established research to validate its usage (Bagozzi, Wong & Yi, 1999; Thompson, 2007). Table 8.4 shows the items in this measure. Participants were requested to state how they felt at work. Each employee was asked “Thinking about yourself and how you normally feel at work, to what extent do you generally feel.” A five-point Likert scale that ranged from “Never”(1) to “Always”(5) was used.

Table 8.4 Employee Well-being Measure

**Thinking about yourself and how you normally feel at work, to what extent do you generally feel:**

	Never	Occasion -ally	Some of the time	Most of the time	Always
1. Active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Enthusiastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Determined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Attentive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Inspired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Strong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Interested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Alert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Proud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## **Leadership Perceptions**

Arnold, Arad, Rhoades and Drasgow's (2000) leadership measure was adopted to evaluate employees' leadership perceptions. This measure was adopted because it had been used in a Chinese context and had established research to validate its usage (Miao, Newman, Schwarz & Xu, 2013; Huang, Shi, Zhang and Cheung, 2006; Huang, Iun, Liu and Gong, 2010). In this measure, there are five factors: leading by example, participative decision-making, coaching, informing, and showing concern/interacting with the team. In each factor, there are five items, thus this measure has twenty-five items in total. Table 8.5 shows the items in the leadership perceptions measure.

Leading by example is related to the supervisor's commitment to work, including his or her own work and the employees' work (Arnold, et al., 2000). Participative decision-making is related to the supervisor's behaviour of involving the employee's opinions when making a decision (Arnold, et al., 2000). Coaching refers to the supervisor's actions of training and educating employees in order to help employees to complete their tasks and increase their performance (Arnold, et al., 2000). Informing is related to the supervisor's behaviour of disseminating the organisation's goals, regulations and culture to employees (Arnold, et al., 2000). Showing concern/interacting with the team refers to the supervisor's concern about employees' well-being (Arnold, et al., 2000).

Participants were requested to state the extent of their supervisors' performance from their own perspectives. The question followed the format of "How frequent your supervisor performs each of the following behaviours ..." A five-point Likert scale that ranged from "1 = Never" to "5 = Always" was used.

Table 8.5 Leadership Measure

How frequent your team leader performs each of the following behaviours:

	Never	Occasio -nally	Some of the time	Most of the time	Always
<b>Leading by example</b>					
1. Sets high standards for performance by his/her own behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Works as hard as he/she can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Works as hard as anyone in my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Sets a good example by the way he/she behaves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Leads by example	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Participative decision-making</b>					
6. Encourages work group members to express ideas/suggestions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Listens to my work group's ideas and suggestions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Uses my work group's suggestions to make decisions that affect us	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Gives all work group members a chance to voice their opinions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Makes decisions that are based only on his/her ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Coaching</b>					
11. Encourages work group members to solve problems together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Encourages work group members to exchange information with one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Teaches work group members how to solve problems on their own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Helps my work group focus on our goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Helps develop good relations among work group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Informing</b>					
16. Explains company decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Explains company goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Explains how my work group fits into the company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Explains the purpose of the company's policies to my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Explains his/her decisions and actions to my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Showing concern/interacting with the team</b>					
21. Shows concern for work group members' well-being	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Treats work group members as equals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Gives work group members honest and fair answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Knows what work is being done in my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Finds time to chat with work group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Individualism/collectivism**

Being proposed as a moderator in the relationship between psychological contract breach and employee attributions, individualism/collectivism was evaluated by four items from Triandis, Bontempo, Villareal, Asai & Lucca's (1988) measure. These four items had been tested in a Chinese context and had established psychometrical research to validate their usage (Earley, 1989; Earley, 1993). Table 8.6 shows the items in the individualism/collectivism measure. Participants were requested to state the extent to which they believed the items were acceptable and important. The question followed the format of "To what extent do you agree with the following statements..." A five-point Likert scale that ranged from "1 = Strongly disagree" to "5 = Strongly agree" was used.

Table 8.6 Individualism/collectivism Measure

<b>To what extent do you agree with the following statements:</b>					
	<b>Strongly disagree</b>	<b>Disagree a little</b>	<b>Neither agree nor disagree</b>	<b>Agree a little</b>	<b>Strongly agree</b>
1. An employee should accept the group's decision even when personally he or she has a different opinion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Problem solving by groups gives better results than problem solving by individuals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The needs of people close to me should take priority over my personal needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. In society, people are born into extended families or clans who protect them in shared necessity for loyalty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Employee Proactivity

Employee proactivity was proposed to moderate the relationship between psychological contract breach and employee attributions and was measured by six items from Bateman and Crant's (1993) scale. The six items had been used in a Chinese context and had established research validating its usage (Parker, 1998; Li, Liang & Crant, 2010). Table 8.7 shows the items in the employee proactivity measure. Participants were requested to state their tendency to identify opportunities to change things at work. Each participant was asked "To what extent do you agree with the

following...” The measure was based on a seven-point Likert scale that ranged from “Strongly disagree”(1) to “Strongly agree”(7).

Table 8.7 Employee Proactivity Measure

<b>To what extent do you agree with the following:</b>							
	<b>Stro- ngly disag- -ree</b>	<b>Disag -ree a lot</b>	<b>Disag -ree a little</b>	<b>Neith- er agree nor disagr -ee</b>	<b>Agree a little</b>	<b>Agree a lot</b>	<b>Stron -gly agree</b>
1. If I see something I don't like, I fix it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. No matter what the odds, if I believe in something I will make it happen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I love being a champion for my ideas, even against others' opposition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am always looking for better ways to do things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If I believe in an idea, no obstacle will prevent me from making it happen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I excel at identifying opportunities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 8.4.2 Supervisor Questionnaires

The supervisor questionnaires measure employees’ performance. Supervisor-rated performance is suggested to be less lenient and more reliable than peer-rated performance or self-rated performance (Springer, 1953; Rothaus, et al., 1965; Zedeck, et al., 1974; Klieger & Mosel, 1953). The following section will describe the performance measure in detail.

## **Employee Performance**

Employee performance was measured by two factors, which were in-role performance and extra-role performance. In total, thirteen items that were adopted from established measures were used to assess performance. Table 8.8 shows the items in this measure. Factor I (In-role performance) is related to performance that is specified in the employee's job description and is recognised by the company's formal reward system (Katz & Kahn, 1978). There are five items in Factor I, in which three items were adopted from Goodman and Svyantek's (1999) scale, and the rest two items were adopted from Williams and Anderson's (1991) scale. Factor II (Extra-role performance) is related to the employee's behaviours that benefit the organisation and are not specified in the employee's job description or the company's formal reward system (Organ, 1988). There are eight items in Factor II, which were adopted from Williams and Anderson's (1991) scale. The items had been used in a Chinese context and had established research to validate their usages (Liu, Liu, Kwan & Mao, 2009; Miao, 2011). The supervisors were requested to give a score for each team member and each item. The supervisors were asked "To what extent do you agree with the following..." The measure was based on a seven-point Likert scale that ranged from "Strongly disagree"(1) to "Strongly agree"(7).

Table 8.8 Employee Performance Measure

To what extent do you agree with the following:

	Strong -ly disagr -ee	Disagr -ee a lot	Disagr- ee a little	Neithe- r agree nor disagre -e	Agree a little	Agree a lot	Stron -gly agree
<b>In-role performance</b>							
1. This employee performs tasks that are expected of him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. This employee meets formal performance requirements of the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. This employee demonstrates expertise in all job-related tasks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This employee performs well in the overall job by carrying out tasks as expected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. This employee plans and organises to achieve objectives of the job and meet deadlines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Extra-role performance</b>							
6. This employee helps others who have been absent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. This employee assists me with my work (when not asked).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. This employee goes out of way to help new employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. This employee takes a personal interest in other employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. This employee passes along information to co-workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. This employee conserves and protects organisational property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. This employee does not take underserved work breaks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. This employee does not spend great deal of time with personal phone conversations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **Control Variables**

Employees' and supervisors' gender, age, job tenure and education level were control variables. The reason for controlling these variables was to rule out these variables' potential alternative explanations for the results of the current research. The demographic variables may play a role in shaping employees' beliefs and perceptions of psychological contract breach and supervisors' evaluations of performance, and may influence employee attributions and employee outcomes. For instance, Hind and Baruch (1997) found that gender has an impact on performance evaluations and identified that female and male supervisors apply different information to evaluate employees' performance. Bal et al. (2008) found that age has a moderating effect on the relationship between psychological contract breach and employee outcomes. The younger the employee, the stronger the negative relationships between psychological contract breach and trust and organisational commitment are. The older the employee, the stronger the negative relationship between psychological contract breach and the employee's job satisfaction is. Thus, employees' and supervisors' gender, age, job tenure and education level were controlled to rule out these variables' influences on the results of the research.

## **8.5 Factor Analysis Results**

In this section, the measure development of each variable in Study 2 will be discussed. Meanwhile, the factor analysis results of the variables will be reported.

### **8.5.1 Psychological Contract Breach Measure**

Psychological contract breach was hypothesised to be measured by a five-factor model. The five factors were work organisation, wages and payment system, security and flexibility, skills and development, and engagement representation. In order to test the hypotheses, EFA on the psychological contract breach measure was conducted at first



in Mplus to identify the number of factors. Although a five-factor model had been identified in the pilot study, ten new items were added into the current psychological contract breach measure. Thus, EFA was conducted before doing CFA to identify interrelationships among the twenty-five psychological contract breach items and to group them. The EFA examines the relative fit of the hypothesised five-factor model of psychological contract breach against other models. From one-factor solution to five-factor solution were tested with oblimin rotation on all the twenty-five items of psychological contract breach measure.

The results from the initial EFA are shown in Table 8.9. After comparing with one-factor solution to four-factor solution, a five-factor solution was regarded as a better solution (CFI = .93, RMSEA = .09, and SRMR = .02), and the Chi-Square change was significant ( $p < .05$ ) in comparison to a four-factor solution. Table 8.10 shows the factor loadings of the five-factor model. Although the five-factor model was better than others, the values of CFI and RMSEA were still not acceptable.

Table 8.9 Results of EFA on Twenty-five Psychological Contract Breach Items ( $N = 634$ )

Model	CFI	RMSEA	SRMR	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$
One factor model	.74	.14	.07	3857.95	275		
Two factor model	.79	.13	.06	3081.18	251	776.77	24*
Three factor model	.85	.12	.04	2281.21	228	799.97	23*
Four factor model	.90	.10	.03	1578.56	206	702.65	22*
Five factor model	.93	.09	.02	1140.93	185	437.63	21*

Notes: CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change. \*  $p < .05$ .

Table 8.10 Factor Loadings from EFA for Psychological Contract Breach Items ( $N = 634$ )

Items	Work organisation	Wages and payment system	Security and flexibility	Skills and development	Engagement and representation
<b>Work organisation</b>					
1. Variety in my job	.77	.06	.01	-.14	.16
2. A challenging job	.83	.05	-.03	-.04	.09
3. An interesting job	.79	-.04	.03	.09	.03
4. A job in which I can make decisions by myself	.77	-.04	.03	.08	-.15
5. Opportunities to show what I can do	.74	.01	.06	.12	-.09
<b>Wages and payment system</b>					
6. Adequate health care benefits	.08	.77	.02	-.01	.10
7. Adequate retirement benefits	-.05	.88	.03	.04	.05
8. Adequate housing benefits	.11	.52	.27	.01	-.24
9. Attractive pay	.24	.30	.10	.33	-.14
10. Financial rewards for exceptional performance	.07	.42	.05	.41	-.14
<b>Security and flexibility</b>					
11. The opportunity to balance work and family life	.11	.07	.62	.12	-.03
12. Protection against being dismissed without good reason	.03	-.01	.80	.02	-.08
13. An opportunity to decide when I take my vacation	-.03	.10	.67	.06	-.20
14. Respect for my personal and family circumstances	.07	.04	.72	-.03	.20
15. A relatively secure job	.01	.07	.71	.03	.17
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	.08	.12	.18	.52	.12
17. Opportunities to develop my career	.04	.09	.07	.75	.02
18. Constructive feedback on my performance	.10	.01	.12	.71	-.06
19. Opportunities for promotion	.04	.11	-.10	.85	-.08
20. Opportunities to grow and develop	.08	.03	-.04	.82	.05
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	.04	-.03	.25	.42	.24
22. Opportunities to voice my ideas	.02	-.09	.20	.68	.21
23. Information on important changes	.02	-.05	.13	.59	.22
24. Good communication among colleagues	.10	.08	.14	.20	.62
25. Good communication with my team leader	.17	.16	.07	.18	.61

In order to improve the model fit as much as possible and to ensure that there were at least three items in each factor, two items in Work organisation factor, Wages and payment system factor, Security and flexibility factor and Skills and development factor that had lower factor loadings and contributed less to the factor were deleted separately. Thus, eight items were deleted, which were “1. Variety in my job”, “5. Opportunities to show what I can do”, “9. Attractive pay”, “10. Financial rewards for exceptional performance”, “11. The opportunity to balance work and family life”, “13. An opportunity to decide when I take my vacation”, “16. Opportunities to develop my skills and knowledge”, and “18. Constructive feedback on my performance”.

One issue should be noticed is that in both Study 1 and Study 2, items that are related to the employee’s salary and performance had low factor loadings and were deleted. A plausible reason is that the pay level of the shop-floor workers who were the main participants of the two studies was relatively unchanged over the course of the study and was not increased by exceptional performance, thus little breach may have occurred, thereby affecting the variance on these items. Removal the pay-related items may narrow the breadth of the psychological contract breach measure, but the retained three benefit-related items can reflect the wage and payment factor of the breach measure because benefits also play an important role in the wage and payment dimension and the three benefit-related items had high factor loadings in both of the two studies.

In the last factor (i.e., Engagement and representation), three items loaded in other factor, which were influenced by item “24. Good communication among colleagues” and item “25. Good communication with my team leader”. Thus, the item “24. Good communication among colleagues” and item “25. Good communication with my team leader” were deleted. Then the rest three items loaded in the Engagement and representation factor.

After deleting all the ten items, the five-factor model with values of CFI (.99), RMSEA (.06) and SRMR (.01) was regarded as the most significant solution compared with one-factor model to four-factor model, and the Chi-Square change was significant ( $p < .05$ ) in comparison to four-factor model. The EFA results of the model are shown in Table 8.11. The factor loadings from EFA are shown in Table 8.12.

Table 8.11 Results of EFA on Fifteen Psychological Contract Breach Items ( $N = 634$ )

<b>Model</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b><math>\chi^2</math></b>	<b>df</b>	<b><math>\Delta\chi^2</math></b>	<b><math>\Delta df</math></b>
One factor model	.78	.17	.07	1660.49	90		
Two factors model	.85	.15	.06	1105.03	76	555.46	14*
Three factors model	.91	.13	.04	698.36	63	406.67	13*
Four factors model	.97	.08	.02	268.29	51	430.07	12*
Five factors model	.99	.06	.01	125.92	40	142.37	11*

*Notes:* CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change. \*  $p < .05$ .

Table 8.12 Factor Loadings from EFA for Psychological Contract Breach Items ( $N = 634$ )

Items	Work organisati -on	Wages and payment system	Security and flexibility	Skills and development	Engageme -nt and representa -tion
<b>Work organisation</b>					
2. A challenging job	<b>.73</b>	.06	.03	.04	-.02
3. An interesting job	<b>.96</b>	-.03	.01	-.04	.02
4. A job in which I can make decisions by myself	<b>.67</b>	.05	-.04	.11	-.02
<b>Wages and payment system</b>					
6. Adequate health care benefits	.13	<b>.72</b>	.03	-.04	.06
7. Adequate retirement benefits	-.05	<b>.97</b>	-.01	.02	.02
8. Adequate housing benefits	.09	<b>.52</b>	.15	.12	-.10
<b>Security and flexibility</b>					
12. Protection against being dismissed without good reason	.04	.06	<b>.63</b>	.06	-.01
14. Respect for my personal and family circumstances	.03	.01	<b>.81</b>	-.01	.03
15. A relatively secure job	-.02	.01	<b>.92</b>	.01	.02
<b>Skills and development</b>					
17. Opportunities to develop my career	.06	.05	.18	<b>.68</b>	-.01
19. Opportunities for promotion	.01	.08	-.06	<b>.82</b>	.05
20. Opportunities to grow and develop	.08	-.02	.07	<b>.72</b>	.09
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	.03	.07	.07	-.09	<b>.80</b>
22. Opportunities to voice my ideas	.07	-.04	.09	.30	<b>.56</b>
23. Information on important changes	.03	.03	-.02	.20	<b>.63</b>

The five factors are consistent with the five dimensions of the constructed psychological contract breach measure, and there are three items in each factor.

- *Work organisation.* Factor I was labelled Work organisation and is related to work quality and job design. This factor contains the items of “A challenging job”, “An interesting job”, and “A job in which I can make decisions by myself”.
- *Wages and payment system.* Factor II is Wages and payment system, which refers to employees’ pay and benefits. This factor includes the items of “Adequate retirement benefits”, “Adequate retirement benefits”, and “Adequate housing benefits”.
- *Security and flexibility.* Security and flexibility is Factor III and is related to employee’s contractual status and flexible working arrangements. Three items in this factor are “Protection against being dismissed without good reason”, “Respect for my personal and family circumstances”, and “A relatively secure job”.
- *Skills and development.* Factor IV was labelled Skills and development, which represents skill requirements, training and development opportunities. This factor has the items of “Opportunities to develop my career”, “Opportunities for promotion”, and “Opportunities to grow and develop”.
- *Engagement and representation.* Factor V was labelled Engagement and representation and refers to employee engagement and communication practices. This factor contains the items of “Consultation about changes that may affect my job”, “Opportunities to voice my ideas”, and “Information on important changes”.

After doing the EFA on psychological contract breach measure, a CFA on the five-factor solution was conducted in Mplus. The results from CFA were CFI = .97, RMSEA = .06, SRMR = .03,  $\chi^2 = 260.51$ , and  $df = 80$ . The factor loadings of these fifteen items from CFA are shown in Table 8.13. The results and factor loadings show that psychological contract breach is successfully measured by the five-factor model.

Table 8.13 Factor Loadings from CFA for Psychological Contract Breach Items ( $N = 634$ )

Items	Work organisati -on	Wages and payment system	Security and flexibility	Skills and development	Engagem -ent and represent -ation
<b>Work organisation</b>					
2. A challenging job	.80				
3. An interesting job	.91				
4. A job in which I can make decisions by myself	.75				
<b>Wages and payment system</b>					
6. Adequate health care benefits		.85			
7. Adequate retirement benefits		.90			
8. Adequate housing benefits		.70			
<b>Security and flexibility</b>					
12. Protection against being dismissed without good reason			.74		
14. Respect for my personal and family circumstances			.85		
15. A relatively secure job			.90		
<b>Skills and development</b>					
17. Opportunities to develop my career				.88	
19. Opportunities for promotion				.84	
20. Opportunities to grow and develop				.89	
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job					.78
22. Opportunities to voice my ideas					.92
23. Information on important changes					.79

When testing the hypotheses using structural equation modelling, a second-order factor model of the psychological contract breach was also used to improve model parsimony and to reflect the fact that an employee's perceptions of psychological contract breach may be summative, i.e. a global assessment of breach across all aspects of the job (Pike, Hudson, Murphy & McCuan, 1998). The results from the second-order factor analysis were CFI = .96, RMSEA = .07, SRMR = .04,  $\chi^2 = 335.84$ , and df = 85. The factor loadings of these fifteen items are shown in Table 8.14. The results and factor loadings show that psychological contract breach is can be measured using a second-order factor. In addition, the correlations between the five factors of psychological contract breach ranged from .73 to .87. All the correlations between the five factors are greater than .50, which indicate strong relationships between the five psychological contract breach factors (Cohen, 1988). The high correlations also mean that a single composite measure of psychological contract breach can be used.



Table 8.14 Factor Loadings from Second-order Factor Analyses for Psychological Contract Breach Items ( $N = 634$ )

Items	Work organis- ation	Wages and payment system	Security and flexibilit -y	Skills and develop- ment	Engage- ment and represen t-tation	Psycholo -gical contract breach
<b>Work organisation</b>						
2. A challenging job	<b>.80</b>					
3. An interesting job	<b>.91</b>					
4. A job in which I can make decisions by myself	<b>.75</b>					
<b>Wages and payment system</b>						
6. Adequate health care benefits		<b>.85</b>				
7. Adequate retirement benefits		<b>.90</b>				
8. Adequate housing benefits		<b>.70</b>				
<b>Security and flexibility</b>						
12. Protection against being dismissed without good reason			<b>.74</b>			
14. Respect for my personal and family circumstances			<b>.85</b>			
15. A relatively secure job			<b>.90</b>			
<b>Skills and development</b>						
17. Opportunities to develop my career				<b>.88</b>		
19. Opportunities for promotion				<b>.84</b>		
20. Opportunities to grow and develop				<b>.89</b>		
<b>Engagement and representation</b>						
21. Consultation about changes that may affect my job					<b>.79</b>	
22. Opportunities to voice my ideas					<b>.92</b>	
23. Information on important changes					<b>.79</b>	
<b>Psychological contract breach</b>						
Work organisation						<b>.78</b>
Wages and payment system						<b>.70</b>
Security and flexibility						<b>.81</b>
Skills and development						<b>.94</b>
Engagement and representation						<b>.92</b>

In terms of the reliability, Cronbach's alphas for the five factors of psychological contract breach measure were .90 (Work organisation), .84 (Wages and payment system), .89 (Security and flexibility), .93 (Skills and development), and .90 (Engagement and representation). All the five Cronbach's alphas are higher than .70 and show that the internal consistency of this measure is good (Kline, 2000).

The validity of the psychological contract breach measure was tested by content validity and convergent validity. By assessing content validity, it was shown that the fifteen items in this measure stemmed from the construct of psychological contract breach and related and represented of the key facets of the psychological contract breach construct. Thus, the psychological contract breach measure has high content validity. In terms of convergent validity, Table 8.15 shows that the items in each factor are significantly related. The correlations between the items are greater than .50, which indicate strong relationships (Cohen, 1988). Thus, the convergent validity of the psychological contract breach measure is high.

Table 8.15 Convergent Validity of Psychological Contract Breach Measure ( $N = 634$ )

<b>Work organisation</b>			
	Item 2	Item 3	Item 4
Item 2	1.00**		
Item 3	.74**	1.00**	
Item 4	.59**	.69**	1.00**
<b>Wage and payment system</b>			
	Item 6	Item 7	Item 8
Item 6	1.00**		
Item 7	.77**	1.00**	
Item 8	.56**	.64**	1.00**
<b>Security and flexibility</b>			
	Item 12	Item 14	Item 15
Item 12	1.00**		
Item 14	.62**	1.00**	
Item 15	.66**	.77**	1.00**
<b>Skills and development</b>			
	Item 17	Item 19	Item 20
Item 17	1.00**		
Item 19	.74**	1.00**	
Item 20	.78**	.77**	1.00**
<b>Engagement and representation</b>			
	Item 21	Item 22	Item 23
Item 21	1.00**		
Item 22	.73**	1.00**	
Item 23	.65**	.72**	1.00**

\*\* $P < .01$

Through doing EFA, CFA, and reliability and validity analyses, psychological contract breach is shown to be successfully measured. The constructed psychological contract breach measure can be adopted in the latter structural equation modelling. *“Hypothesis 1 Psychological contract breach is measured by a five-factor model. The five factors are work organisation, wages and payment system, security and flexibility, skills and*

*development, and engagement representation”* was supported.

### **8.5.2 Employee Attributions Measure**

Employee attributions were hypothesised to be measured by a four-factor model. The four factors were employee internal factors, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation. A similar factor analysis strategy was applied to test the measure of employee attributions. At first, EFA on the employee attributions measure was conducted in Mplus. Although a four-factor model had been identified in the pilot study, five new items were added into the current employee attributions measure. Thus, EFA was conducted before doing CFA to identify interrelationships among the seventeen employee attributions items and group them. The EFA examines the relative fit of hypothesised the four-factor model of employee attributions against one-factor model to three-factor model. From one-factor solution to four-factor solution were tested with oblimin rotation on all the seventeen items of employee attributions measure. The results from the EFA are presented in Table 8.16. After doing a comparison, a four-factor solution (CFI = .97, RMSEA = .07, and SRMR = .02) was regarded as a better solution than one-factor solution to three-factor solution, and the Chi-square change was significant ( $p < 0.05$ ) in comparison to three-factor model. The factor loadings of items from EFA are shown in Table 8.17.

Table 8.16 Results of EFA on Seventeen Employee Attributions Items ( $N = 634$ )

<b>Model</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b><math>\chi^2</math></b>	<b>df</b>	<b><math>\Delta\chi^2</math></b>	<b><math>\Delta df</math></b>
One factor model	.54	.20	.16	3118.65	119		
Two factor model	.78	.15	.08	1552.14	103	2006.51	16*
Three factor model	.92	.10	.03	603.03	88	949.11	15*
Four factor model	.97	.07	.02	295.24	74	307.79	14*

*Notes:* CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change. \*  $p < .05$ .

Table 8.17 Factor Loadings from EFA for Employee Attribution Items ( $N = 634$ )

Items	Employee internal factors	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal factors</b>				
1. I needed to develop my skills and ability to fulfil them.	<b>.81</b>	.01	-.03	.07
2. I needed to make more effort to fulfil them.	<b>.92</b>	.03	-.05	-.01
3. I should speak out my expectations.	<b>.70</b>	.02	.10	-.09
4. I should grasp the opportunity to fulfil them.	<b>.82</b>	-.07	.01	.01
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.	-.02	<b>.65</b>	.30	-.03
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	-.01	<b>.87</b>	-.06	-.02
7. Due to a lack of effective leadership, my supervisor could not fulfil them.	.01	<b>.88</b>	-.01	.06
8. My supervisor did not make the effort to fulfil them.	-.01	<b>.56</b>	.28	.02
<b>Attributions about the organisation</b>				
9. My organisation <u>would</u> not fulfil them.	.02	.10	<b>.76</b>	.05
10. My organisation did not fulfil them deliberately.	-.07	.02	<b>.84</b>	-.02
11. Due to lack of facilities, my organisation could not fulfil them.	.02	.16	<b>.35</b>	.29
12. My organisation did not make the effort to fulfil them.	.03	.06	<b>.61</b>	.14
<b>Attributions outside of the supervisor and the organisation</b>				
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	-.01	.06	-.08	<b>.84</b>
14. My organisation tried but unforeseen events prevented it from fulfilling them.	.03	-.05	.22	<b>.62</b>
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	.01	.01	-.05	<b>.88</b>
16. My supervisor tried but the economic environment prevented it from fulfilling them.	-.02	.01	.05	<b>.74</b>
17. My organisation tried but the economic environment prevented it from fulfilling them.	.06	-.03	.25	<b>.56</b>

In order to improve the model fit, two items that had lower factor loadings and contributed less to the factor were deleted, which were “11. Due to lack of facilities, my organisation could not fulfil them” and “17. My organisation tried but the economic environment prevented it from fulfilling them”. After deleting the two items, EFA was conducted on the remaining fifteen items. The EFA results of the model are shown in Table 8.18. The four-factor model with values of CFI (.98), RMSEA (.05) and SRMR (.01) was regarded as the most acceptable solution compared with one-factor model to three-factor model, and the Chi-Square change was significant ( $p < .05$ ) in comparison to three-factor model. The factor loadings of items from EFA are shown in Table 8.19. The EFA results and factor loadings show that employee attributions are successfully measured by the four-factor model.

Table 8.18 Results of EFA on Fourteen Employee Attributions Items ( $N = 634$ )

<b>Model</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b><math>\chi^2</math></b>	<b>df</b>	<b><math>\Delta\chi^2</math></b>	<b><math>\Delta df</math></b>
One factor model	.52	.22	.17	2814.01	90		
Two factors model	.79	.16	.08	1265.85	76	1548.16	14*
Three factors model	.93	.10	.03	441.51	63	824.34	13*
Four factors model	.98	.05	.01	139.66	51	305.85	12*

*Notes:* CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standard root mean square residual;  $\chi^2$  = chi-square; df = degree of freedom;  $\Delta\chi^2$  = chi-square change;  $\Delta df$  = degree of freedom change. \*  $p < .05$ .

Table 8.19 Factor Loadings from EFA for Employee Attributions Items ( $N = 634$ )

Items	Employee internal factors	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal factors</b>				
1. I needed to develop my skills and ability to fulfil them.	<b>.81</b>	.01	-.02	.07
2. I needed to make more effort to fulfil them.	<b>.92</b>	.02	-.04	-.01
3. I should speak out my expectations.	<b>.70</b>	.02	.10	-.08
4. I should grasp the opportunity to fulfil them.	<b>.82</b>	-.07	.01	-.01
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.	-.01	<b>.55</b>	.30	-.03
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	-.01	<b>.87</b>	-.06	-.02
7. Due to a lack of effective leadership, my supervisor could not fulfil them.	.01	<b>.88</b>	-.01	.06
8. My supervisor did not make the effort to fulfil them.	-.01	<b>.56</b>	.27	.01
<b>Attributions about the organisation</b>				
9. My organisation <u>would</u> not fulfil them.	.03	.09	<b>.77</b>	.06
10. My organisation did not fulfil them deliberately.	-.06	-.02	<b>.89</b>	-.02
12. My organisation did not make the effort to fulfil them.	.04	.08	<b>.58</b>	.14
<b>Attributions outside of the supervisor and the organisation</b>				
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	-.01	.03	-.05	<b>.86</b>
14. My organisation tried but unforeseen events prevented it from fulfilling them.	.03	-.02	.21	<b>.57</b>
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	.01	-.01	-.02	<b>.89</b>
16. My supervisor tried but the economic environment prevented it from fulfilling them.	-.01	.01	.08	<b>.71</b>

After doing EFA on employee attribution measure, a CFA was conducted based on the four-factor solution. The results were  $CFI = .96$ ,  $RMSEA = .07$ ,  $SRMR = .04$ ,  $\chi^2 = 305.57$ , and  $df = 84$ . The factor loadings of these fourteen items from CFA are shown in Table 8.20.



Table 8.20 Factor Loadings from CFA for Employee Attributions Items ( $N = 634$ )

Items	Employee internal factors	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal factors</b>				
1. I needed to develop my skills and ability to fulfil them.	.82			
2. I needed to make more effort to fulfil them.	.92			
3. I should speak out my expectations.	.67			
4. I should grasp the opportunity to fulfil them.	.82			
<b>Attributions about the supervisor</b>				
5. My supervisor <u>would</u> not fulfil them.		.77		
6. Due to a lack of leadership skills, my supervisor could not fulfil them.		.78		
7. Due to a lack of effective leadership, my supervisor could not fulfil them.		.87		
8. My supervisor did not make the effort to fulfil them.		.80		
<b>Attributions about the organisation</b>				
9. My organisation <u>would</u> not fulfil them.			.87	
10. My organisation did not fulfil them deliberately.			.85	
12. My organisation did not make the effort to fulfil them.			.71	
<b>Attributions outside of the supervisor and the organisation</b>				
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.				.84
14. My organisation tried but unforeseen events prevented it from fulfilling them.				.68
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.				.87
16. My supervisor tried but the economic environment prevented it from fulfilling them.				.75

The CFA results shown a RMSEA value of .07, indicating a reasonable model fit (Browne and Cudeck, 1993). There were factors having more than three items, thus in order to further improve the model fit, three items with lower factor loadings were deleted. The three items were “3. I should speak out my expectations”, “5. My

supervisor would not fulfil them”, and “14. My organisation tried but unforeseen events prevented it from fulfilling them”. After deleting the three items, each factor had three items. Then, CFA was conducted again and the results were CFI = .97, RMSEA = .06, SRMR = .04,  $\chi^2 = 163.81$ ,  $df = 48$ . The factor loadings of these twelve items from CFA are shown in Table 8.21. The CFA results show a good model fit.

Table 8.21 Factor Loadings from CFA for Employee Attributions Items ( $N = 634$ )

Items	Attributions			
	Employee internal factors	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
<b>Employee internal factors</b>				
1. I needed to develop my skills and ability to fulfil them.	.82			
2. I needed to make more effort to fulfil them.	.93			
4. I should grasp the opportunity to fulfil them.	.81			
<b>Attributions about the supervisor</b>				
6. Due to a lack of leadership skills, my supervisor could not fulfil them.		.79		
7. Due to a lack of effective leadership, my supervisor could not fulfil them.		.91		
8. My supervisor did not make the effort to fulfil them.		.77		
<b>Attributions about the organisation</b>				
9. My organisation <u>would</u> not fulfil them.			.87	
10. My organisation did not fulfil them deliberately.			.85	
12. My organisation did not make the effort to fulfil them.			.71	
<b>Attributions outside of the supervisor and the organisation</b>				
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.				.85
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.				.87
16. My supervisor tried but the economic environment prevented it from fulfilling them.				.74

The four factors were consistent with the four dimensions of the constructed employee attribution measure. To be more specific,

- *Employee internal factors*. Factor I was labelled Employee internal factors, and indicates that employees attribute psychological contract breach to factors within

themselves. The items in this factor are “I needed to develop my skills and ability to fulfil them”, “I needed to make more effort to fulfil them”, and “I should grasp the opportunity to fulfil them”.

- *Attributions about the supervisor.* Factor II was labelled Attributions about the supervisor, which means when employees devise attributional explanations for psychological contract breach, they attribute the breach to their supervisor. The items of “Due to a lack of leadership skills, my supervisor could not fulfil them”, “Due to a lack of effective leadership, my supervisor could not fulfil them”, and “My supervisor did not make the effort to fulfil them” are included in this factor.
- *Attributions about the organisation.* Factor III was labelled Attributions about the organisation, and indicates that employees attribute psychological contract breach to factors within the organisation. Items in this factor are “My organisation would not fulfil them”, “My organisation did not fulfil them deliberately”, and “My organisation did not make the effort to fulfil them”.
- *Factors attributions outside of the supervisor and the organisation.* Factor IV was labelled attributions outside of the supervisor and the organisation, which shows that employees attribute psychological contract breach to factors beyond the organisation’s control. The three items in this factor include “My supervisor tried but unforeseen events prevented it from fulfilling them”, “My supervisor tried but circumstances beyond the organisation’s control prevented him/her from fulfilling them”, and “My supervisor tried but the economic environment prevented it from fulfilling them”.

In terms of the reliability, Cronbach’s alphas for the four factors of employee attributions measure were .93 (Employee internal factors), .87 (Attributions about the supervisor), .71 (Attributions about the organisation), and .74 (Attributions outside of the supervisor and the organisation). All the four Cronbach’s alphas are higher than .70 and show that the internal consistency of this measure is acceptable (Kline, 2000).

The validity of employee attributions measure was tested by content validity and discriminant validity. By assessing content validity, it was shown that the twelve items in this measure stemmed from the construct of employee attributions and related and represented of the key facets of the employee attributions. Thus, the employee

attributions measure has high content validity. In terms of discriminant validity, Table 8.22 shows that three correlations between the employee attributions factors are less than .30, which indicate weak relationships between employee attributions factors (Cohen, 1988). Thus the employee attributions measure has discriminant validity. The low correlations show that the four-factor model successfully measures distinct employee attributions.

Table 8.22 Discriminant Validity of Employee Attributions Measure ( $N = 634$ )

	<b>Employee internal factors</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Employee internal factors	1.00**			
Attributions about the supervisor	-.13**	1.00**		
Attributions about the organisation	-.10*	.84**	1.00**	
Attributions outside of the supervisor and the organisation	.10*	.54**	.71**	1.00**

\* $p < .05$ , \*\* $P < .01$

Through doing EFA, CFA, and reliability and validity analyses, employee attributions were successfully measured. Thus, “*Hypothesis 2 Employee attributions are measured by a four-factor model. The four factors are employee internal factors, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation*” was supported. The employee attributions measure can be adopted in the later structural equation modelling.

### 8.5.3 Employee Well-being Measure

As the employee well-being measure is an established measure, CFA was conducted at first. The CFA results were CFI = .84, RMSEA = .19, SRMR = .07,  $\chi^2 = 857.25$ , and  $df = 35$ . The factor loadings of the ten items from CFA are shown in Table 8.23.

Table 8.23 Factor Loadings from CFA for Ten Employee Well-being Items ( $N = 634$ )

Items	Factor loadings
1. Active	.79
2. Enthusiastic	.84
3. Determined	.83
4. Attentive	.83
5. Inspired	.78
6. Strong	.78
7. Interested	.82
8. Alert	.62
9. Excited	.73
10. Proud	.68

Deleting items with lower factor loadings did not improve the model fit. In order to improve the model fit as much as possible, five items were deleted. The five items were “2. Enthusiastic”, “3. Determined”, “4. Attentive”, “9. Excited” and “10. Proud”. A plausible reason for deleting the five items can improve the model fit is that they are less related to the employee’s feeling at work compared with other items. After deleting the items, the CFA results were CFI = .99, RMSEA = .05, SRMR = .01,  $\chi^2 = 14.32$ , and  $df = 5$ . The factor loadings of the remaining five items from CFA are shown in Table 8.24. The results show that employee well-being is successfully measured.

Table 8.24 Factor Loadings from CFA for Five Employee Well-being Items ( $N = 634$ )

<b>Items</b>	<b>Factor loadings</b>
1. Active	<b>.69</b>
5. Inspired	<b>.81</b>
6. Strong	<b>.81</b>
7. Interested	<b>.84</b>
8. Alert	<b>.64</b>

In terms of the reliability, Cronbach's alpha for the employee well-being measure was .90. The Cronbach's alpha is higher than .70 and shows that the internal consistency of this measure is good (Kline, 2000). In general, through doing CFA and reliability analyses, employee well-being is shown to be successfully measured. The employee well-being measure can be used in the later structural equation modelling.

#### **8.5.4 Leadership Perceptions Measure**

As the leadership measure is an established measure, CFA was conducted to test a five-factor model at first. The CFA results were  $CFI = .87$ ,  $RMSEA = .12$ ,  $SRMR = .06$ ,  $\chi^2 = 2542.17$ , and  $df = 265$ . The factor loadings of the ten items from CFA are shown in Table 8.25.

Table 8.25 Factor Loadings from CFA for Twenty-five Leadership Items ( $N = 634$ )

Items	Leading by example	Participat -ive decision- making	Coaching	Informing	Showing concern/ interacting with the team
<b>Leading by example</b>					
1. Sets high standards for performance by his/her own behaviour	.62				
2. Works as hard as he/she can	.85				
3. Works as hard as anyone in my work group	.85				
4. Sets a good example by the way he/she behaves	.90				
5. Leads by example	.81				
<b>Participative decision-making</b>					
6. Encourages work group members to express ideas/suggestions		.91			
7. Listens to my work group's ideas and suggestions		.94			
8. Uses my work group's suggestions to make decisions that affect us		.66			
9. Gives all work group members a chance to voice their opinions		.84			
10. Makes decisions that are based only on his/her ideas		.03			
<b>Coaching</b>					
11. Encourages work group members to solve problems together			.89		
12. Encourages work group members to exchange information with one another			.85		
13. Teaches work group members how to solve problems on their own			.88		
14. Helps my work group focus on our goals			.87		
15. Helps develop good relations among work group members			.89		
<b>Informing</b>					
16. Explains company decisions				.77	
17. Explains company goals				.77	
18. Explains how my work group fits into the company				.85	
19. Explains the purpose of the company's policies to my work group				.95	
20. Explains his/her decisions and actions to my work group				.85	
<b>Showing concern/interacting with the team</b>					
21. Shows concern for work group members' well-being					.89
22. Treats work group members as equals					.91
23. Gives work group members honest and fair answers					.95
24. Knows what work is being done in my work group					.85
25. Finds time to chat with work group members					.80

In order to improve the model fit as much as possible and to ensure there were at least three items in each factor, ten items that had lower factor loadings and contributed less to the five factors were deleted. The ten items were “1. Sets high standards for performance by his/her own behaviour”, “5. Leads by example”, “10. Makes decisions that are based only on his/her ideas”, “8. Uses my work group’s suggestions to make decisions that affect us”, “12. Encourages work group members to exchange information with one another”, “14. Helps my work group focus on our goals”, “16. Explains company decisions”, “17. Explains company goals”, “24. Knows what work is being done in my work group”, and “25. Finds time to chat with work group members”. After deleting ten items, CFA was conducted on the remaining fifteen items. The CFA results were CFI = .97, RMSEA = .07, SRMR = .03,  $\chi^2 = 343.78$ , and df = 80. The factor loadings from CFA with fifteen items are shown in Table 8.26. The results show that leadership is successfully measured.



Table 8.26 Factor Loadings from CFA for Fifteen Leadership Items ( $N = 634$ )

Items	Leading by example	Particip- ative decision- making	Coaching	Informing	Showing concern/ interacting with the team
<b>Leading by example</b>					
2. Works as hard as he/she can	.85				
3. Works as hard as anyone in my work group	.85				
4. Sets a good example by the way he/she behaves	.90				
<b>Participative decision-making</b>					
6. Encourages work group members to express ideas/suggestions		.91			
7. Listens to my work group's ideas and suggestions		.94			
9. Gives all work group members a chance to voice their opinions		.84			
<b>Coaching</b>					
11. Encourages work group members to solve problems together			.89		
13. Teaches work group members how to solve problems on their own			.88		
15. Helps develop good relations among work group members			.89		
<b>Informing</b>					
18. Explains how my work group fits into the company				.85	
19. Explains the purpose of the company's policies to my work group				.95	
20. Explains his/her decisions and actions to my work group				.85	
<b>Showing concern/interacting with the team</b>					
21. Shows concern for work group members' well-being					.89
22. Treats work group members as equals					.91
23. Gives work group members honest and fair answers					.95

The five factors are consistent with the five dimensions of the established leadership measure, and there are three items in each factor. To be more specific,

- *Leading by example.* Factor I was labelled Leading by example and is related to the supervisor's commitment to the work (Arnold, et al., 2000). This factor

contains the items of “Works as hard as he/she can”, “Works as hard as anyone in my work group”, and “Sets a good example by the way he/she behaves”.

- *Participative decision-making.* Factor II was labelled Participative decision-making and is related to the supervisor’s behaviour of involving the employees’ opinions when making a decision (Arnold, et al., 2000). This factor includes the items of “Encourages work group members to express ideas/suggestions”, “Listens to my work group’s ideas and suggestions”, and “Gives all work group members a chance to voice their opinions”.
- *Coaching.* Factor III was labelled Coaching and is related to the supervisor’s actions of training and educating the employees (Arnold, et al., 2000). This factor contains the items of “Encourages work group members to solve problems together”, “Teaches work group members how to solve problems on their own”, and “Helps develop good relations among work group members”.
- *Informing.* Factor IV was labelled Informing and refers to the supervisor’s behaviour of disseminating the organisation’s goals, regulations and culture to the employees (Arnold, et al., 2000). This factor includes the items of “Explains how my work group fits into the company”, “Explains the purpose of the company’s policies to my work group”, and “Explains his/her decisions and actions to my work group”.
- *Showing concern/interacting with the team.* Factor V was labelled Showing concern/interacting with the team and refers to the supervisor’s regarding of the employees’ well-being (Arnold, et al., 2000). Items in this factor includes “Shows concern for work group members’ well-being”, “Treats work group members as equals”, and “Gives work group members honest and fair answers”.

After doing CFA, a second-order factor analysis was conducted in Mplus. The use of second-order factor analysis can help to explain general areas of leadership more concisely (Pike, Hudson, Murphy & McCuan, 1998) and help to improve the parsimony of the model. As all the five factors measured underlying leadership and this research is aimed to explore the effects of psychological contract breach on overall leadership, the second-order factor of leadership will be applied in the later structural equation modelling analysis. The results from the second-order factor analysis were CFI = .97, RMSEA = .07, SRMR = .03,  $\chi^2 = 370.81$ , and df = 85. The factor loadings of these

fifteen items are shown in Table 8.27. The CFA results show leadership successfully measured by the second-order factor model. In addition, Table 8.28 shows that the five factors of leadership measure are significantly related. The correlations between the five factors are greater than .50, which indicate strong relationship between the five leadership factors (Cohen, 1988). The high correlations also mean that a single composite measure of leadership can be used.

Table 8.27 Factor Loadings from Second-order Factor Analyses for Leadership Items  
(*N* = 634)

Items	Leading by example	Participative decision making	Coaching	Informing	Showing concern/ interacting with the team	Leadership
<b>Leading by example</b>						
2. Works as hard as he/she can	.86					
3. Works as hard as anyone in my work group	.88					
4. Sets a good example by the way he/she behaves	.88					
<b>Participative decision-making</b>						
6. Encourages work group members to express ideas/suggestions		.92				
7. Listens to my work group's ideas and suggestions		.94				
9. Gives all work group members a chance to voice their opinions		.84				
<b>Coaching</b>						
11. Encourages work group members to solve problems together			.88			
13. Teaches work group members how to solve problems on their own			.87			
15. Helps develop good relations among work group members			.88			
<b>Informing</b>						
18. Explains how my work group fits into the company				.83		
19. Explains the purpose of the company's policies to my work group				.94		
20. Explains his/her decisions and actions to my work group				.90		
<b>Showing concern/interacting with the team</b>						
21. Shows concern for work group members' well-being					.88	
22. Treats work group members as equals					.92	
23. Gives work group members honest and fair answers					.95	
<b>Leadership</b>						
Leading by example						.75
Participative decision-making						.92
Coaching						.94
Informing						.82
Showing concern/interacting with the team						.93

Table 8.28 Correlations between Five Leadership Factors ( $N = 634$ )

	<b>Leading by example</b>	<b>Participative decision -making</b>	<b>Coaching</b>	<b>Informing</b>	<b>Showing concern /interacting</b>
Leading by example	1.00**				
Participative decision -making	.69**	1.00**			
Coaching	.72**	.87**	1.00**		
Informing	.62**	.73**	.75**	1.00**	
Showing concern /interacting	.68**	.84**	.86**	.80**	1.00**

\*\* $P < .01$

In terms of the reliability, Cronbach's alphas for the five factors of the leadership measure were .91 (Leading by example), .89 (Participative decision-making), .91 (Coaching), .70 (Informing), and .86 (Showing concern/interacting with the team). All the five Cronbach's alphas are higher than .70 and show that the internal consistency of this measure is good (Kline, 2000). Through doing CFA, second-order factor analysis, and reliability analyses, employees' leadership perceptions are measured successfully. The leadership perceptions measure can be used in the later structural equation modelling.

### 8.5.5 Individualism/collectivism Measure

As the individualism/collectivism measure is an established measure, CFA was conducted at first. The CFA results were CFI = .99, RMSEA = .07, SRMR = .02,  $\chi^2 = 8.01$ , and  $df = 2$ . The factor loadings of the four items from CFA are shown in Table 8.29. The results show that individualism/collectivism is successfully measured.

Table 8.29 Factor Loadings from CFA for Four Individual/collectivism Items ( $N = 634$ )

Items	Factor loadings
1. An employee should accept the group's decision even when personally he or she has a different opinion.	<b>.48</b>
2. Problem solving by groups gives better results than problem solving by individuals.	<b>.69</b>
3. The needs of people close to me should take priority over my personal needs.	<b>.69</b>
4. In society, people are born into extended families or clans who protect them in shared necessity for loyalty.	<b>.77</b>

In terms of the reliability, Cronbach's alpha for the individualism/collectivism measure was .84. The Cronbach's alpha is higher than .70 and shown that the internal consistency of this measure is good (Kline, 2000). Through doing CFA and reliability and validity analyses, individualism/collectivism is shown to be successfully measured. The individualism/collectivism measure can be used in the later structural equation modelling.

### 8.5.6 Employee Proactivity Measure

As the employee proactivity measure is an established measure, CFA was conducted at first. The CFA results were  $CFI = .64$ ,  $RMSEA = .23$ ,  $SRMR = .10$ ,  $\chi^2 = 301.67$ , and  $df = 9$ . The factor loadings of the six items from CFA are shown in Table 8.30.

Table 8.30 Factor Loadings from CFA for Six Employee Proactivity Items ( $N = 634$ )

Items	Factor loadings
1. If I see something I don't like, I fix it.	.51
2. No matter what the odds, if I believe in something I will make it happen.	.72
3. I love being a champion for my ideas, even against others' opposition.	.33
4. I am always looking for better ways to do things.	.52
5. If I believe in an idea, no obstacle will prevent me from making it happen.	.59
6. I excel at identifying opportunities.	.47

In order to improve the model fit, at first the items with lower factor loadings were deleted (i.e., item “3. I love being a champion for my ideas, even against others' opposition” and item “6. I excel at identifying opportunities”), but the results ( $CFI = .88$ ,  $RMSEA = .20$ ,  $SRMR = .06$ ,  $\chi^2 = 54.38$ , and  $df = 2$ ) still did not show a good model fit. Table 8.31 shows the factor loadings of the remaining four items.

Table 8.31 Factor Loadings from CFA for Four Employee Proactivity Items ( $N = 634$ )

Items	Factor loadings
1. If I see something I don't like, I fix it.	.46
2. No matter what the odds, if I believe in something I will make it happen.	.83
4. I am always looking for better ways to do things.	.57
5. If I believe in an idea, no obstacle will prevent me from making it happen.	.46

As deleting the items with lower factor loadings still did not show an acceptable model fit, removing other items was considered. Among the six items, the expressions of item “2. No matter what the odds, if I believe in something I will make it happen” and item

“4. I am always looking for better ways to do things” are likely to be too strong and absolute for the shop-floor workers. The shop-floor workers may tend to obey their supervisors and do what have been told, thus the two items may be not appropriate for them. Deleting these two items shown a better model fit. Thus item 2 and item 4 were deleted. The CFA results on the four-items model were CFI = .97, RMSEA = .08, SRMR = .03,  $\chi^2 = 10.60$ , and  $df = 2$ . The factor loadings of the four items from CFA are shown in Table 8.32. The CFA results and factor loadings show that the four-items model measures employee proactivity successfully.

Table 8.32 Factor Loadings from CFA for Employee Proactivity Items ( $N = 634$ )

Items	Factor loadings
1. If I see something I don't like, I fix it.	<b>.50</b>
3. I love being a champion for my ideas, even against others' opposition.	<b>.55</b>
5. If I believe in an idea, no obstacle will prevent me from making it happen.	<b>.83</b>
6. I excel at identifying opportunities.	<b>.32</b>

In terms of the reliability, Cronbach’s alpha for the employee proactivity measure was .81. The Cronbach’s alpha is higher than .70 and shown that the internal consistency of this measure is good (Kline, 2000). Through doing CFA and reliability and validity analyses, employee proactivity is shown to be successfully measured. The employee proactivity measure can be used in the later structural equation modelling.

### 8.5.7 Employee Performance Measure

As the employee performance measure is an established measure, CFA was conducted to test a two-factor model at first. The CFA results were CFI = .81, RMSEA = .13, SRMR = .08,  $\chi^2 = 786.88$ , and  $df = 64$ . The factor loadings of the thirteen items from CFA are shown in Table 8.33.



Table 8.33 Factor Loadings from CFA for Thirteen Employee Performance Items ( $N = 634$ )

Items	In-role performance	Extra-role performance
<b>In-role Performance</b>		
1. This employee performs tasks that are expected of him/her.	.78	
2. This employee meets formal performance requirements of the job.	.81	
3. This employee demonstrates expertise in all job-related tasks.	.81	
4. This employee performs well in the overall job by carrying out tasks as expected.	.78	
5. This employee plans and organises to achieve objectives of the job and meet deadlines.	.65	
<b>Extra-role Performance</b>		
6. This employee helps others who have been absent.		.43
7. This employee assists me with my work (when not asked).		.45
8. This employee goes out of way to help new employees.		.53
9. This employee takes a personal interest in other employees.		.81
10. This employee passes along information to co-workers.		.63
11. This employee conserves and protects organisational property.		.72
12. This employee does not take underserved work breaks.		.66
13. This employee does not spend great deal of time with personal phone conversations.		.53

In order to improve the model fit as much as possible and to ensure there were at least three items in each factor, seven items that had lower factor loadings and contributed less to the two factors were deleted. The seven items were “5. This employee plans and organises to achieve objectives of the job and meet deadlines”, “1. This employee performs tasks that are expected of him/her”, “6. This employee helps others who have been absent”, “7. This employee assists me with my work (when not asked)”, “13. This employee does not spend great deal of time with personal phone conversations”, “8.

This employee goes out of way to help new employees”, and “10. This employee passes along information to co-workers”. After deleting these items, CFA was conducted on the remaining six items. The CFA results were CFI = .99, RMSEA = .06, SRMR = .03,  $\chi^2 = 26.25$ , and  $df = 8$ . The factor loadings of the remaining six items from CFA are shown in Table 8.34. The CFA results and factor loadings show performance is successfully measured.

Table 8.34 Factor Loadings from CFA for Six Employee Performance Items ( $N = 634$ )

Items	In-role performance	Extra-role performance
<b>In-role Performance</b>		
2. This employee meets formal performance requirements of the job.	<b>.79</b>	
3. This employee demonstrates expertise in all job-related tasks.	<b>.84</b>	
4. This employee performs well in the overall job by carrying out tasks as expected.	<b>.76</b>	
<b>Extra-role Performance</b>		
9. This employee takes a personal interest in other employees.		<b>.80</b>
11. This employee conserves and protects organisational property.		<b>.75</b>
12. This employee does not take underserved work breaks.		<b>.70</b>

The two factors are consistent with the two dimensions of the established employee performance measure. To be more specific,

- *In-role performance.* Factor I was labelled In-role performance and is related to the performance that is specified in the employee’s job description and is recognised by the company’s formal reward system (Katz & Kahn, 1978). This factor contains the items of “This employee meets formal performance requirements of the job”, “This employee demonstrates expertise in all job-related tasks”, “This employee demonstrates expertise in all job-related tasks”, and “This employee performs well in the overall job by carrying out tasks as expected”.
- *Extra-role performance.* Factor II was labelled Extra-role performance and is related to the employee’s behaviour that benefits the organisation and is not

specified in the employee's job description or the company's formal reward system (Organ, 1988). This factor includes the items of "This employee takes a personal interest in other employees", "This employee conserves and protects organisational property", and "This employee does not take underserved work breaks".

In terms of the reliability, Cronbach's alphas for the two factors of employee performance measure were .79 (In-role performance) and .73 (Extra-role performance). Both of the two Cronbach's alphas were higher than .70 and show that the internal consistency of this measure was good (Kline, 2000). Through doing CFA and reliability analyses, employee performance is shown to be successfully measured. The employee performance measure can be used in the later structural equation modelling.

#### **8.5.8 Common Method Bias**

The common method bias of the variables of five dimensions of psychological contract breach, four dimensions of employee attributions, five dimensions of leadership, employee well-being, individualism/collectivism, and employee proactivity was examined by unmeasured latent method factor technique. The model fit results for measurement model were CFI = .93, RMSEA = .05, SRMR = .05,  $\chi^2 = 3094.90$ , and  $df = 1294$ . In order to test the common method bias, a first-order method factor that involves all the items of the variables was added to construct a new model. The model fit results were CFI = .94, RMSEA = .04, SRMR = .07,  $\chi^2 = 2697.76$ , and  $df = 1240$ . The model fit results of the new model were then compared with the model fit results of measurement model. The CFI values and RMSEA values show that the new model had a slightly better model fit. But the SRMR value shows that the measurement model had better model fit. This might suggest a small amount of common method bias but it can also indicate variance in the data due to an unmeasured variable. However, the presence of moderating effects of employee attributions that will be reported in the next chapter indicates that common method bias did not unduly influence the findings. This is because moderation effects cannot occur if all participants score all items highly or in the same direction (which would occur if common bias was prevalent).

## **8.6 Chapter Summary**

This chapter has described the overview of study 2 first. Then the sample, procedures, and measures of study 2 have been described. In addition, the factor analysis strategy and factor analysis results of study 2 have been reported. Psychological contract breach, employee attributions, employee well-being, leadership perceptions, performance, individualism/collectivism and employee proactivity have been successfully measured. The measures of these variables will be used in structural equation modelling in next chapter.

## **Chapter 9 Study 2 Structural Equation Modelling**

### **Results**

#### **9.1 Introduction**

This chapter will report structural equation modelling results of study 2. To be more specific, the results of the direct relationship between psychological contract breach and employee outcomes (i.e., employee well-being, leadership perceptions and performance) will be reported. Based on this, the results of the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes will be reported. This will be followed by the results of the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Finally, the results of the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions will be described.

#### **9.2 Direct Relationship between Psychological Contract Breach and Employee Outcomes**

Direct effects model (Figure 6.1) was tested in Mplus. This section will report the results of the direct relationship between psychological contract breach and employee outcomes in direct effects model. To be more specific, the results of the direct relationships between psychological contract breach and employee well-being, leadership perceptions and performance will be reported (Figure 9.1).

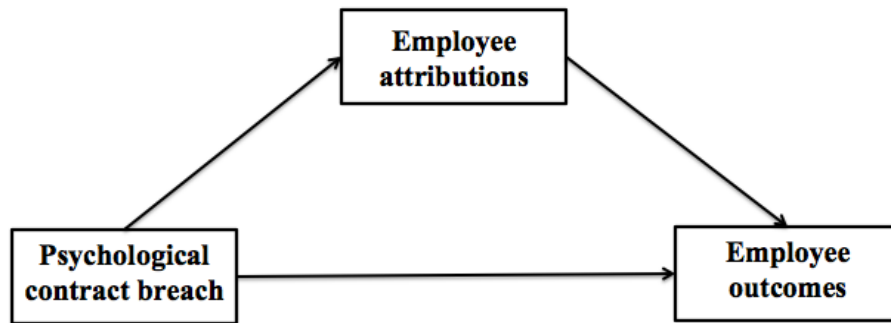


Figure 6.1 Direct Effects Model

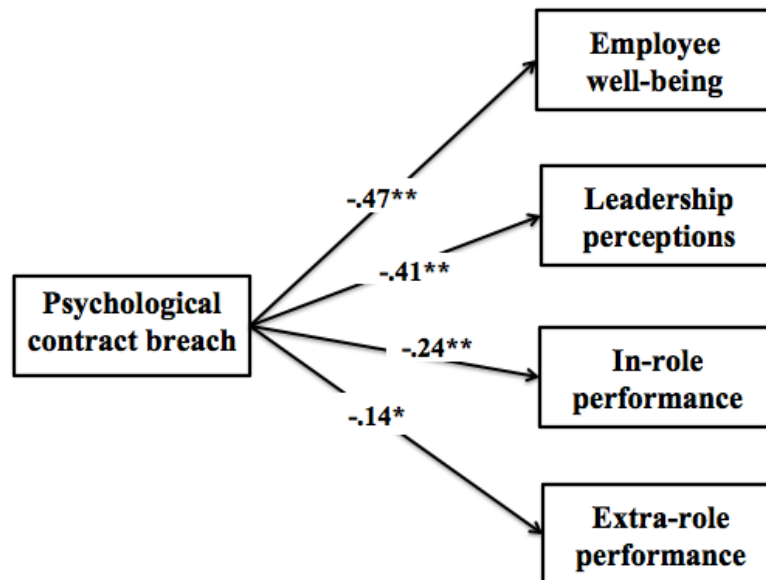


Figure 9.1 Specific Direct Effects Model

*Notes:* Paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

The SEM results for direct effects model were CFI = .93, RMSEA = .05, SRMR = .05,  $\chi^2 = 3004.86$ , and  $df = 1279$ . CFI is just below the cut off point (i.e. .95), but other values indicate a good model fit. Table 9.1 shows the results of psychological contract breach affecting employee outcomes. The SEM results show that psychological contract breach is negatively related to employee well-being ( $b = -.47$ ,  $p < .01$ ), employees' favourable leadership perceptions ( $b = -.41$ ,  $p < .01$ ), in-role performance

( $b = -.24, p < .01$ ), and extra-role performance ( $b = -.14, p < .05$ ). These results supported *Hypothesis 3*, *Hypothesis 5* and *Hypothesis 7* that psychological contract breach is negatively related to employee well-being, favourable leadership perceptions and performance.

Table 9.1 Effects of Psychological Contract Breach on Employee Outcomes ( $N = 634$ )

	<b>Employee well-being</b>	<b>Favourable leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Psychological contract breach	$b = -.47^{**}$	$b = -.41^{**}$	$b = -.24^{**}$	$b = -.14^*$

Notes: \* $p < .05$ , \*\* $p < .01$ ; paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

This study then applied the first-order five factors of psychological contract breach (i.e., Work organisation, Wages and payment system, Security and flexibility, Skills and development, and Engagement and representation) to test the direct effects model in Mplus and to examine the relationship between the five dimensions of psychological contract breach and employee outcomes. The reason for conducting the supplemental analyses is to identify whether there are particularly different effects of the five psychological contract breach dimensions on employee outcomes when compared with the effects of global psychological contract breach on employee outcomes. The SEM results for direct effects model that uses five psychological contract breach dimensions were CFI = .94, RMSEA = .05, SRMR = .04,  $\chi^2 = 2810.45$ , and  $df = 1242$ . CFI is just below the cut off point (i.e. .95), but other values indicate a good model fit. Table 9.2 shows the results of five psychological contract breach affecting employee outcomes.

- *Work organisation.* Work organisation is negatively related to employee well-being ( $b = -.29, p < .01$ ) and in-role performance ( $b = -.13, p < .05$ ), and is not significantly related to favourable leadership perceptions ( $b = -.07, ns.$ ) or extra-role performance ( $b = -.15, ns.$ ).
- *Wages and payment system.* Wages and payment system is negatively related to employee well-being ( $b = -.19, p < .01$ ) and favourable leadership perceptions ( $b = -.10, p < .05$ ), and is not significantly related to in-role performance ( $b = .06, ns.$ ) or extra-role performance ( $b = .05, ns.$ ).

- *Security and flexibility.* Security and flexibility is positively related to employee well-being ( $b = .19, p < .01$ ), and is not significantly related to favourable leadership perceptions ( $b = .05, ns.$ ), in-role performance ( $b = -.02, ns.$ ) or extra-role performance ( $b = -.02, ns.$ ).
- *Skills and development.* Skills and development is negatively related to in-role performance ( $b = -.26, p < .05$ ), and is not related to employee well-being ( $b = .10, ns.$ ), favourable leadership perceptions ( $b = .03, ns.$ ) or extra-role performance ( $b = -.10, ns.$ ).
- *Engagement and representation.* Engagement and representation is negatively related to employee well-being ( $b = -.24, p < .05$ ) and favourable leadership perceptions ( $b = -.25, p < .01$ ), and is not significantly related to in-role performance ( $b = .18, ns.$ ) or extra-role performance ( $b = .09, ns.$ ).

Table 9.2 Effects of Five-factor Psychological Contract Breach on Employee Outcomes ( $N = 634$ )

	<b>Employee well-being</b>	<b>Favourable leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Work organisation	$b = -.29^{**}$	$b = -.07$	$b = -.13^*$	$b = -.15$
Wages and payment system	$b = -.19^{**}$	$b = -.10^*$	$b = .06$	$b = .05$
Security and flexibility	$b = .19^{**}$	$b = .05$	$b = -.02$	$b = -.02$
Skills and development	$b = .10$	$b = .03$	$b = -.26^*$	$b = -.10$
Engagement and representation	$b = -.24^*$	$b = -.25^{**}$	$b = .18$	$b = .09$

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

To summarise, psychological contract breach is significantly related to all employee outcomes. The five dimensions of psychological contract breach are partially related to in-role performance, employee evaluations of leadership and employee well-being, but are not significantly related to extra-role performance. In particular, the five dimensions are seemed to be most consistently related to employee well-being.



Compared with the global psychological contract breach, the five dimensions of psychological contract breach show a much smaller effect on employee outcomes. Results are more consistent if psychological contract breach is measured as a single entity than separate elements. Thus, global psychological contract breach plays a more important role in understanding employees' responds to psychological contract breach.

### 9.3 Moderating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes

The results of the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes will be reported in this section. Figure 6.2 shows the moderation model. One latent interaction term, which consists of psychological contract breach and one dimension of employee attributions, was tested each time in Mplus. As there are four dimensions of employee attributions, the moderation model was tested four times with four different latent interaction terms.

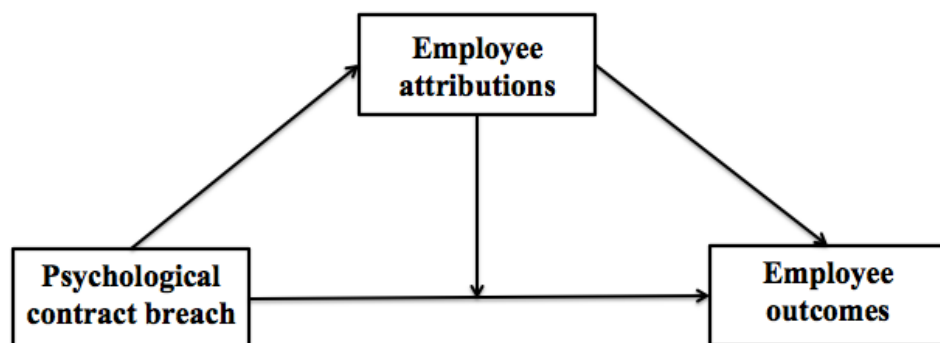


Figure 6.2 Moderation Model

Table 9.3 shows the summary of the interaction effects of employee attributions. The relationship between psychological contract breach and employee well-being is moderated by attributions about the supervisor and attributions about the organisation.

The relationship between psychological contract breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationship between psychological contract breach and in-role performance is moderated by employee internal attributions, attributions about the supervisor and attributions about the organisation. The relationship between psychological contract breach and extra-role performance is moderated by employee internal attributions and attributions about the supervisor. Thus, *Hypothesis 4*, *Hypothesis 6* and *Hypothesis 8* that employee attributions moderate the relationships between psychological contract breach and employee well-being, leadership perceptions and performance are partially supported. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 9.3 Moderating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	X
Attributions about the organisation	X		X	
Attributions outside of the supervisor and the organisation		X		

### 9.3.1 Employee Internal Attributions

The moderation model (Figure 6.2) was tested by using employee internal attributions as the moderator. In this section, the results of the moderating role of employee internal attributions in the relationship between psychological contract breach and employee outcomes will be reported. Figure 9.6 and Table 9.4 show the moderation results.

Employee internal attributions moderate the relationships between psychological contract breach and in-role performance, extra-role performance and leadership perceptions. But employee internal attributions do not moderate the relationship between psychological contract breach and employee well-being.

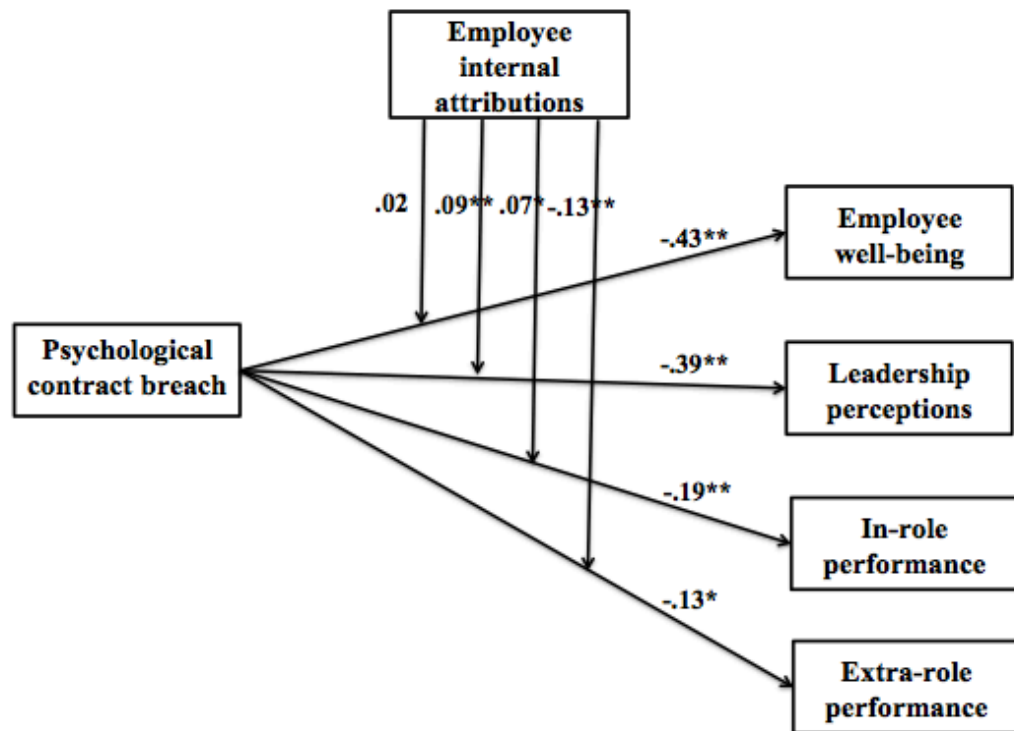


Figure 9.2 Specific Moderation Model (Psychological contract breach & employee internal attributions)

*Notes:* Paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

Table 9.4 Moderating Role of Employee Internal Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Psychological contract breach	$b = -.47^{**}$	$b = -.43^{**}$	$b = -.41^{**}$	$b = -.39^{**}$	$b = -.24^{**}$	$b = -.19^{**}$	$b = -.14^*$	$b = -.13^*$
Employee internal attributions	$b = .12^*$	$b = .14^*$	$b = .20^{**}$	$b = .29^{**}$	$b = .06$	$b = .09$	$b = .01$	$b = -.05$
Interaction term		$b = .02$		$b = .09^{**}$		$b = .07^*$		$b = -.13^{**}$
$R^2$		0.34		0.16		0.06		0.09
$\Delta R^2$		0		0.02		0.01		0.05

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from psychological contract breach to four employee attributions and from attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation to employee outcomes are not shown.

**Leadership perceptions.** Employee internal attributions moderate the relationships between psychological contract breach and leadership perceptions ( $b = .09$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .16$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of leadership perceptions. Plotting the interaction (Figure 9.3) shows that the negative relationship between psychological contract breach and favourable leadership perceptions is stronger when employee internal attributions are low (i.e., employees do not blame themselves for psychological contract breach) but weaker when employee internal attributions are high.

Simple slope analysis shows that the slopes for both low employee internal attributions ( $-1$  SD,  $t = -8.79$ ,  $p < .01$ ) and high employee internal attributions ( $+1$  SD,  $t = -5.45$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make internal attributions for psychological contract breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees make internal attributions for psychological contract breach, the negative relationship between the breach and favourable leadership perceptions is significant as well.

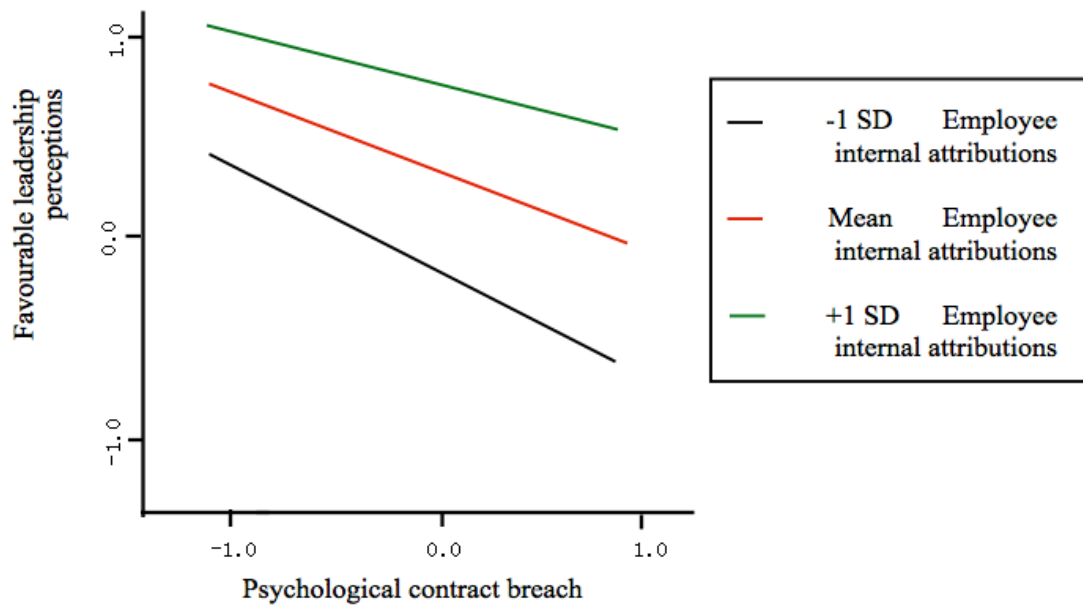


Figure 9.3 Interaction between Psychological Contract Breach and Employee Internal Attributions on Favourable Leadership Perceptions

***In-role performance.*** Employee internal attributions moderate the relationships between psychological contract breach and in-role performance ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .06$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 9.4) shows that the negative relationship between psychological contract breach and in-role performance is stronger when employee internal attributions are low (i.e., employees do not blame themselves for psychological contract breach) but weaker when employee internal attributions are high.

Simple slope analysis shows that the slope for low employee internal attributions (-1 SD,  $t = -8.22$ ,  $p < .01$ ) is significant, while the slope for high employee internal attributions (+1 SD,  $t = -1.70$ , *ns.*) is not. Thus, when employees are less likely to make internal attributions for psychological contract breach, the negative relationship between the breach and in-role performance is significant. But when employees make internal attributions for psychological contract breach, there is no significant relationship between the breach and in-role performance.

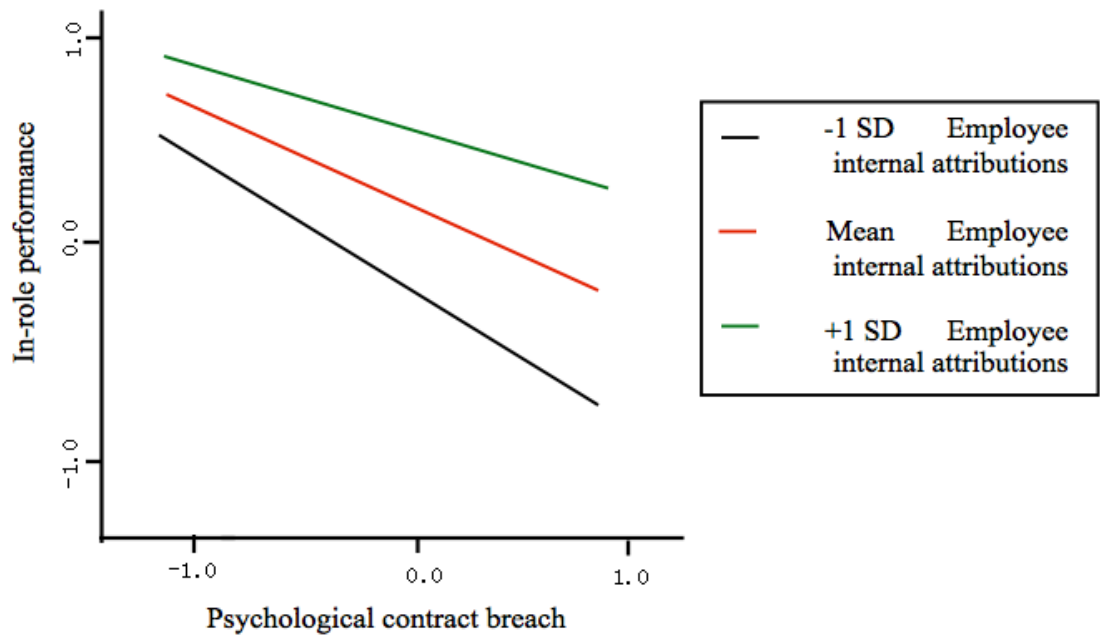


Figure 9.4 Interaction between Psychological Contract Breach and Employee Internal Attributions on In-role Performance

**Extra-role performance.** Employee internal attributions moderate the relationships between psychological contract breach and extra-role performance ( $b = -.13$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .09$ ,  $\Delta R^2 = .05$ ). The interaction term explains additional 5% of variance of extra-role performance. Plotting the interaction (Figure 9.5) shows that the negative relationship between psychological contract breach and extra-role performance is weaker when employee internal attributions are low (i.e., employees do not blame themselves for psychological contract breach) but stronger when employee internal attributions are high.

Simple slope analysis shows that the slope for high employee internal attributions (+1 SD,  $t = -3.67$ ,  $p < .01$ ) is significant, while the slope for low employee internal attributions (-1 SD,  $t = 0.00$ , *ns.*) is not. Thus, when employees make internal attributions for psychological contract breach, the negative relationship between the breach and extra-role performance is significant. But when employees are less likely to make internal attributions for psychological contract breach, there is not significant relationship between the breach and extra-role performance.

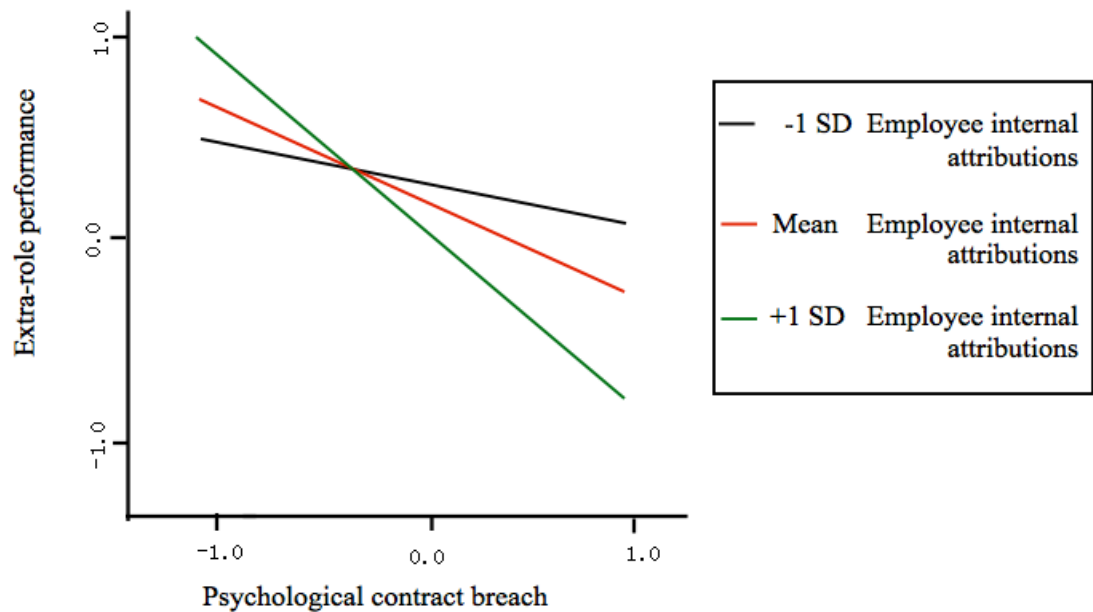


Figure 9.5 Interaction between Psychological Contract Breach and Employee Internal Attributions on Extra-role Performance

### 9.3.2 Attributions about the Supervisor

The moderation model (Figure 6.2) was tested by using attributions about the supervisor as the moderator. In this section, the interaction effects of attributions about the supervisor on the relationship between psychological contract breach and employee outcomes will be reported. Figure 9.6 and Table 9.5 show the moderation results. Attributions about the supervisor moderate the relationships between psychological contract breach and in-role performance, extra-role performance and employee well-being. But attributions about the supervisor do not moderate the relationship between psychological contract breach and leadership perceptions.

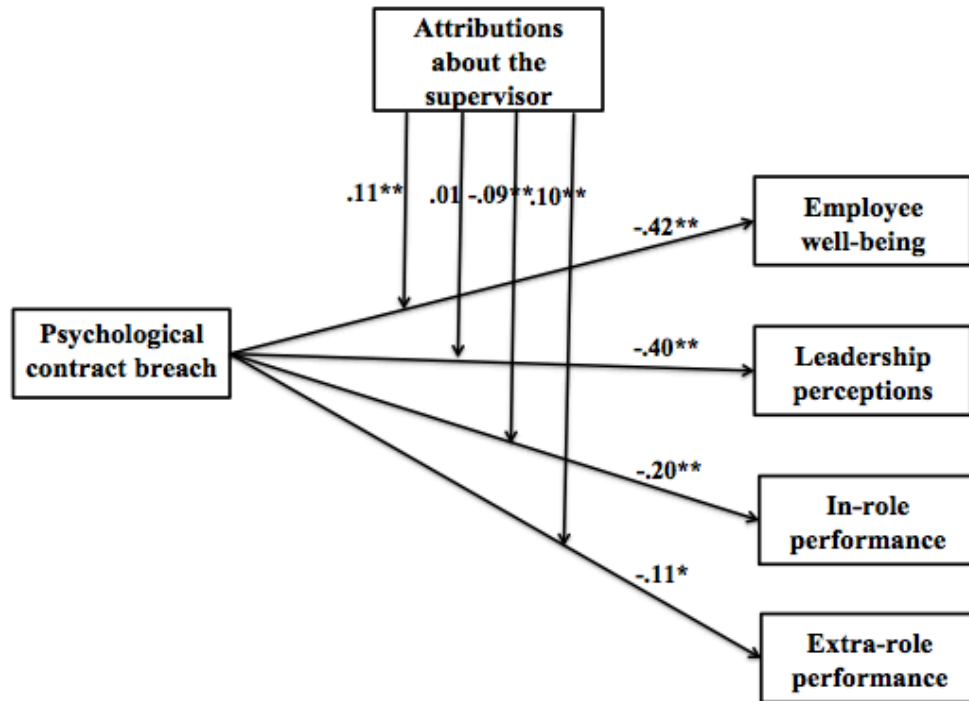


Figure 9.6 Specific Moderation Model (Psychological contract breach & attributions about the supervisor)

Notes: Paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

Table 9.5 Moderating Role of Attributions about the supervisor in the Relationship between Psychological Contract Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Psychological contract breach	$b = -.47^{**}$	$b = -.42^{**}$	$b = -.41^{**}$	$b = -.40^{**}$	$b = -.24^{**}$	$b = -.20^{**}$	$b = -.14^{*}$	$b = -.11^{*}$
Attributions about the supervisor	$b = .03$	$b = .06$	$b = -.37^{**}$	$b = -.44^{**}$	$b = -.32^{**}$	$b = -.33$	$b = -.04$	$b = -.04$
Interaction term		$b = .11^{**}$		$b = .01$		$b = -.09^{**}$		$b = .10^{*}$
$R^2$		0.26		0.46		0.3		0.06
$\Delta R^2$		0.03		0.00		0.01		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from psychological contract breach to four employee attributions and from employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation to employee outcomes are not shown.



**Employee well-being.** Attributions about the supervisor moderate the relationships between psychological contract breach and employee well-being ( $b = .11$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .26$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of employee well-being. Plotting the interaction (Figure 9.7) shows that the negative relationship between psychological contract breach and employee well-being is stronger when attributions about the supervisor are low (i.e., employees do not blame the supervisor for psychological contract breach) but weaker when attributions about the supervisor are high.

Simple slope analysis shows that the slopes for both low attributions about the supervisor ( $-1$  SD,  $t = -9.71$ ,  $p < .01$ ) and high attributions about the supervisor ( $+1$  SD,  $t = -5.64$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and employee well-being is significant. When employees make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and employee well-being is significant as well.

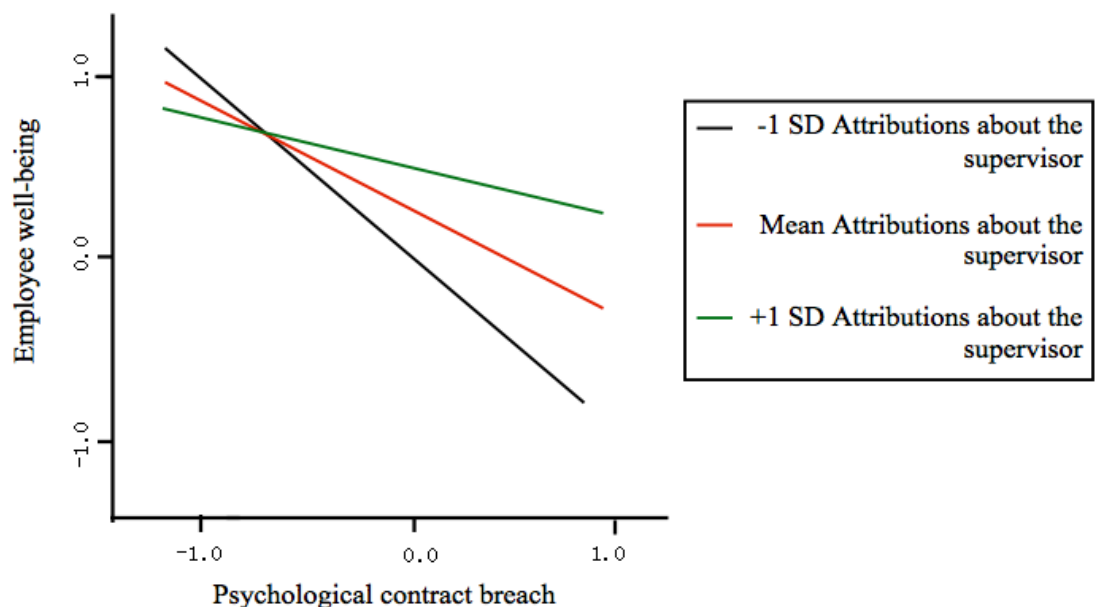


Figure 9.7 Interaction between Psychological Contract Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between psychological contract breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .03$ ,  $\Delta R^2 = .01$ ). The interaction term explains additional 1% of variance of in-role performance. Plotting the interaction (Figure 9.8) shows that the negative relationship between psychological contract breach and in-role performance is stronger when attributions about the supervisor are high (i.e., employees do blame the supervisor for psychological contract breach) but weaker when attributions about the supervisor are low.

Simple slope analysis shows that the slopes for both low attributions about the supervisor ( $-1$  SD,  $t = -2.01$ ,  $p < .01$ ) and high attributions about the supervisor ( $+1$  SD,  $t = -5.28$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and in-role performance is significant. When employees make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and in-role performance is significant as well.

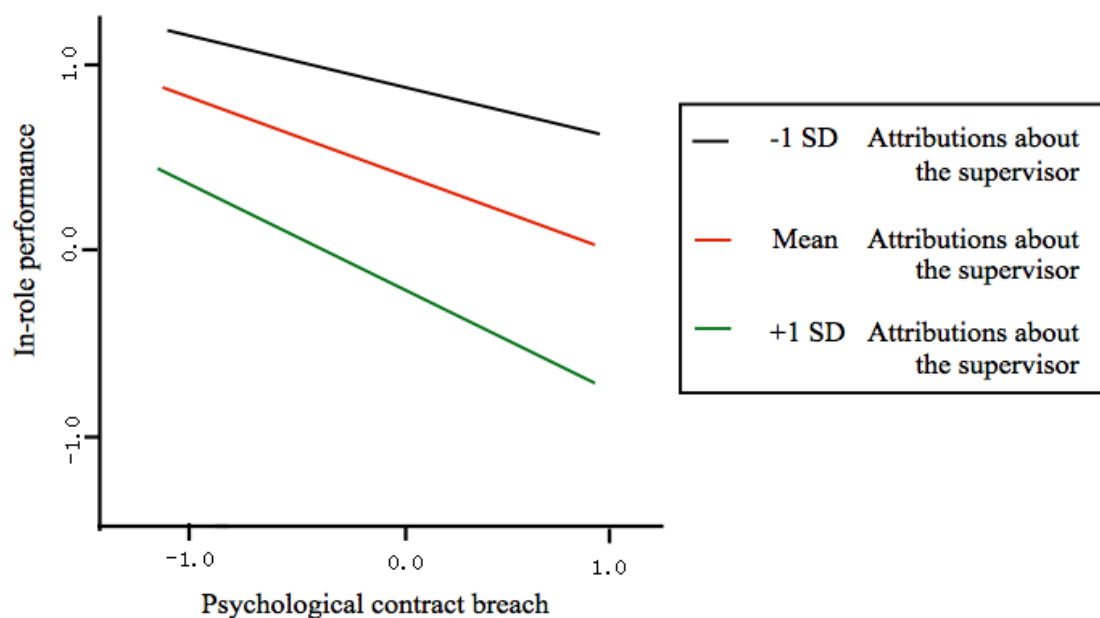


Figure 9.8 Interaction between Psychological Contract Breach and Attributions about the Supervisor on In-role Performance

**Extra-role performance.** Attributions about the supervisor moderate the relationships between psychological contract breach and extra-role performance ( $b = .10$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .06$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of extra-role performance. Plotting the interaction (Figure 9.9) shows that the negative relationship between psychological contract breach and extra-role performance is stronger when attributions about the supervisor are low (i.e., employees do not blame the supervisor for psychological contract breach) but weaker when attributions about the supervisor are high.

Simple slope analysis shows that the slope for low attributions about the supervisor ( $-1$  SD,  $t = -2.98$ ,  $p < .01$ ) is significant, but the slope for high attributions about the supervisor ( $+1$  SD,  $t = -.14$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and extra-role performance is significant. But, when employees make attributions about the supervisor for psychological contract breach, there is no significant relationship between the breach and extra-role performance.

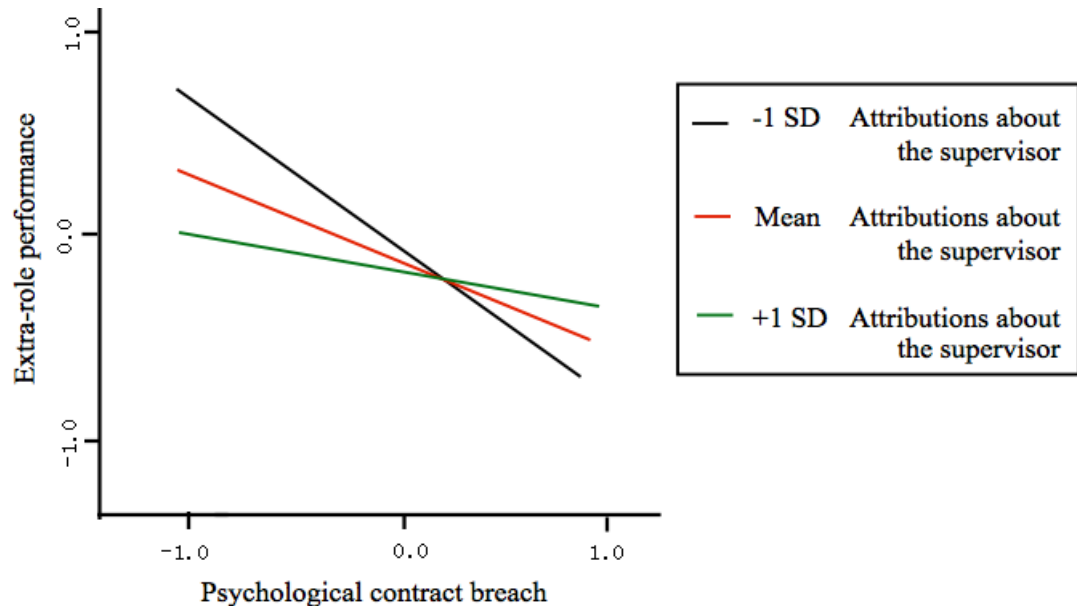


Figure 9.9 Interaction between Psychological Contract Breach and Attributions about the Supervisor on Extra-role Performance

### 9.3.3 Attributions about the Organisation

The moderation model (Figure 6.2) was tested by using attributions about the organisation as the moderator. In this section, the interaction effects of attributions about the organisation on the relationship between psychological contract breach and employee outcomes will be reported. Figure 9.10 and Table 9.6 shows the moderation results. Attributions about the organisation moderated the relationships between psychological contract breach and in-role performance and employee well-being. But attributions about the supervisor did not moderate the relationships between psychological contract breach and extra-role performance and leadership perceptions.

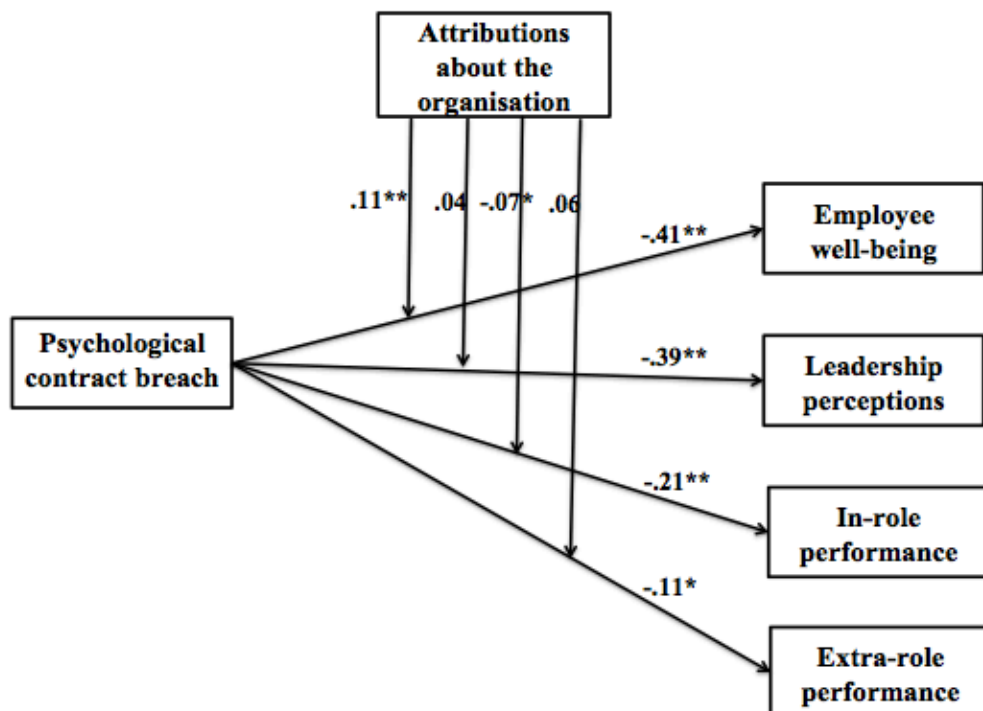


Figure 9.10 Specific Moderation Model (Psychological contract breach & attributions about the organisation)

*Notes:* Paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

Table 9.6 Moderating Role of Attributions about the Organisation in the Relationship between Psychological Contract Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Psychological contract breach	$b = -.47^{**}$	$b = -.41^{**}$	$b = -.41^{**}$	$b = -.39^{**}$	$b = -.24^{**}$	$b = -.21^{**}$	$b = -.14^*$	$b = -.11^*$
Attributions about the organisation	$b = -.09$	$b = -.09$	$b = .20^{**}$	$b = .44^{**}$	$b = .37^{**}$	$b = .40^{**}$	$b = .13$	$b = .27^{**}$
Interaction term		$b = .11^{**}$		$b = .04$		$b = -.07^*$		$b = .06$
$R^2$		0.31		0.14		0.09		0.05
$\Delta R^2$		0.02		0.00		0.01		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from psychological contract breach to four employee attributions and from employee internal attributions, attributions about the supervisor and attributions outside of the supervisor and the organisation to employee outcomes are not shown.

**Employee well-being.** Attributions about the organisation moderate the relationships between psychological contract breach and employee well-being ( $b = .11$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .31$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 9.11) shows that the negative relationship between psychological contract breach and employee well-being is stronger when attributions about the organisation are low (i.e., employees do not blame the supervisor for psychological contract breach) but weaker when attributions about the organisation are high. However, the plotting also shows that when psychological contract breach is high, there is no big difference in employee well-being no matter whether employees attribute to the organisation or not. Thus, when psychological contract breach occurs, there is no obvious moderating effect of attributions about the organisation on the relationship between psychological contract breach and employee well-being.

Simple slope analysis shows that the slopes for both low attributions about the organisation ( $-1$  SD,  $t = -9.53$ ,  $p < .01$ ) and high attributions about the organisation ( $+1$  SD,  $t = -5.46$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the organisation for psychological contract breach, the negative relationship between the breach and employee well-being is significant. When employees make attributions about the organisation for psychological contract breach,

the negative relationship between the breach and employee well-being is significant as well.

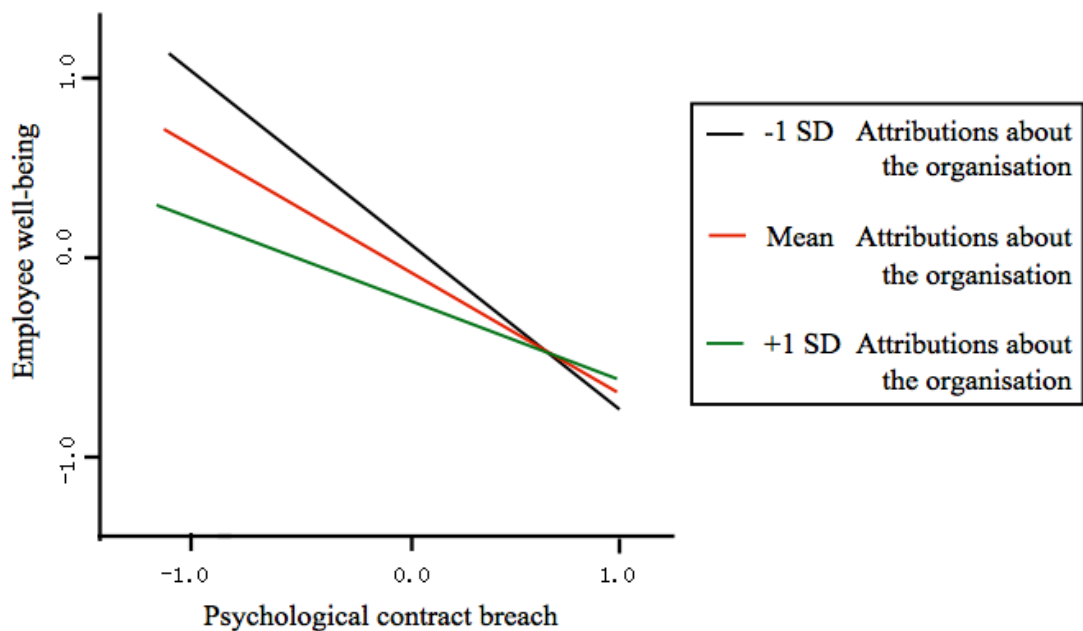


Figure 9.11 Interaction between Psychological Contract Breach and Attributions about the Organisation on Employee Well-being

***In-role performance.*** Attributions about the organisation moderate the relationships between psychological contract breach and in-role performance ( $b = -.07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .09$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 9.12) shows that the negative relationship between psychological contract breach and in-role performance is stronger when attributions about the organisation are low (i.e., employees do not blame the organisation for psychological contract breach) but weaker when attributions about the organisation are high.

Simple slope analysis shows that the slopes for both low attributions about the organisation ( $-1\ SD$ ,  $t = -2.56$ ,  $p < .01$ ) and high attributions about the organisation ( $+1\ SD$ ,  $t = -5.10$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the organisation for psychological contract breach, the negative relationship between the breach and in-role performance is significant. When employees make attributions about the organisation for psychological contract breach,

the negative relationship between the breach and in-role performance is significant as well.

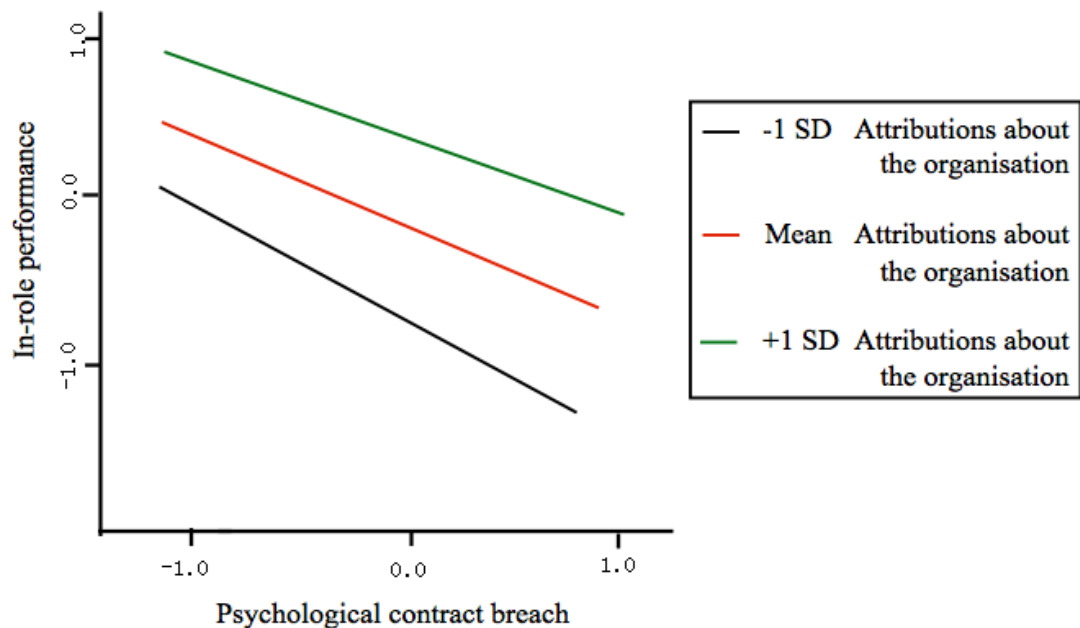


Figure 9.12 Interaction between Psychological Contract Breach and Attributions about the Organisation on In-role Performance

### 9.3.4 Attributions outside of the Supervisor and the Organisation

The moderation model (Figure 6.2) was tested by using attributions outside of the supervisor and the organisation as the moderator. In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between psychological contract breach and employee outcomes will be reported. Figure 9.13 and Table 9.7 show the moderation results. Attributions outside of the supervisor and the organisation moderate the relationships between psychological contract breach and leadership perceptions. But attributions outside of the supervisor and the organisation do not moderate the relationship between psychological contract breach and employee well-being, in-role performance and extra-role performance.

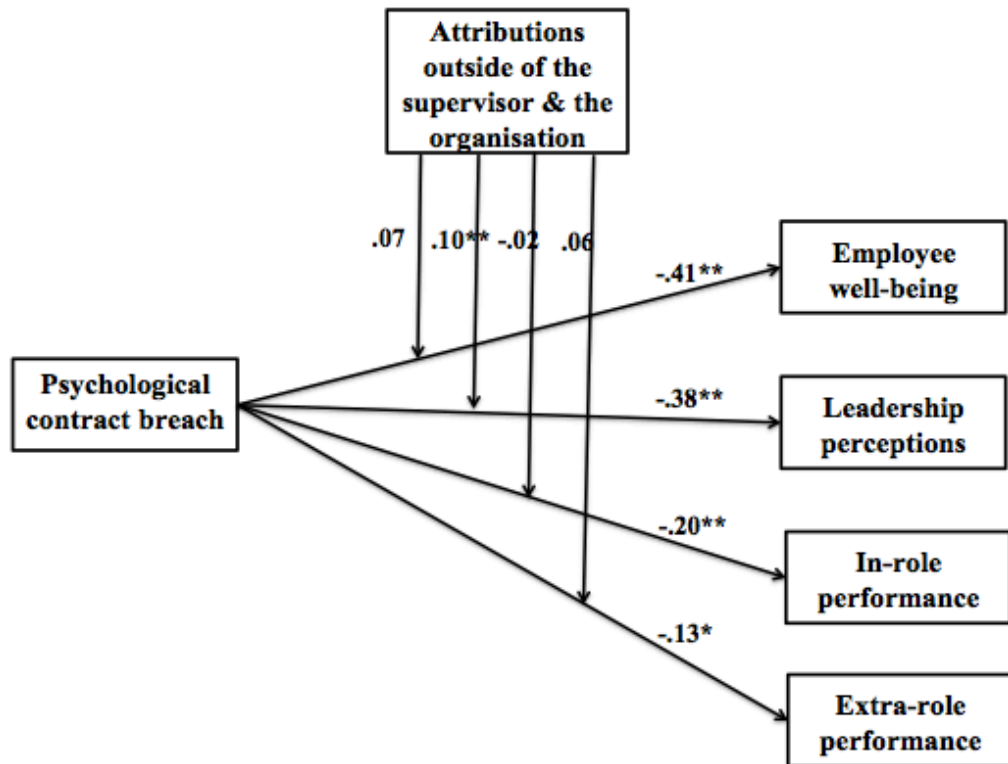


Figure 9.13 Specific Moderation Model (Psychological contract breach & attributions outside of the supervisor and the organisation)

Notes: Paths from psychological contract breach to employee attributions and from employee attributions to employee outcomes are not shown.

Table 9.7 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Psychological Contract Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Psychological contract breach	$b = -.47^{**}$	$b = -.41^{**}$	$b = -.41^{**}$	$b = -.38^{**}$	$b = -.24^{**}$	$b = -.20^{**}$	$b = -.14^{*}$	$b = -.13^{*}$
Attributions outside of the supervisor and the organisation	$b = -.06$	$b = -.03$	$b = .13^{*}$	$b = .23^{**}$	$b = .07$	$b = .07$	$b = -.01$	$b = -.02$
Interaction term		$b = .07$		$b = .10^{**}$		$b = -.02$		$b = .06$
$R^2$		0.27		0.16		0.05		0.05
$\Delta R^2$		0.01		0.03		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from psychological contract breach to four employee attributions and from employee internal attributions, attributions about the supervisor and attributions about the organisation to employee outcomes are not shown.



**Leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between psychological contract breach and leadership perceptions ( $b = .10$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .16$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of leadership perceptions. Plotting the interaction (Figure 9.14) shows that the negative relationship between psychological contract breach and favourable leadership perceptions is stronger when attributions outside of the supervisor and the organisation are low (i.e., employees do not attribute psychological contract breach to factors beyond the supervisor's and the organisation's control) but weaker when attributions outside of the supervisor and the organisation are high.

Simple slope analysis shows that the slopes for both low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = -8.79$ ,  $p < .01$ ) and high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = -5.10$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions outside of the supervisor and the organisation for psychological contract breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees make attributions outside of the supervisor and the organisation for psychological contract breach, the negative relationship between the breach and favourable leadership perceptions is significant as well.

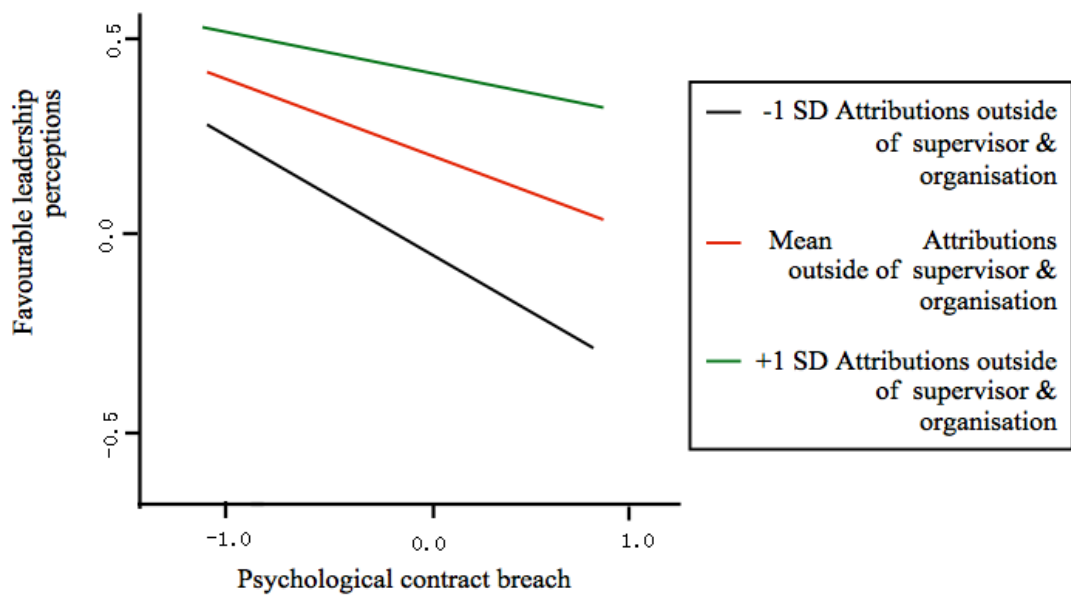


Figure 9.14 Interaction between Psychological Contract Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

*Summary.* In general, employee attributions play a moderating role in the relationship between psychological contract breach and employee outcomes. Employee internal attributions moderate all the relationships between psychological contract breach and employee outcomes except employee well-being. Attributions about the supervisor moderate all the relationships between psychological contract breach and employee outcomes except leadership perceptions. In particular, employee internal attributions and attributions about the supervisor are two important moderators in the relationship between psychological contract breach and employee outcomes. The relationship between psychological contract breach and in-role performance is moderated by all employee attributions except attributions outside of the supervisor and the organisation. In particular, employee attributions play an important role in the relationship between psychological contract breach and in-role performance.

## 9.4 Moderation Analysis Using the Five Dimensions of Psychological Contract Breach

This study then applied the first-order five factors of psychological contract breach (i.e., Work organisation, Wages and payment system, Security and flexibility, Skills and development, and Engagement and representation) to test the moderation model (Figure 6.2) and to examine the moderating role of employee attributions in the relationship between the five dimensions of psychological contract breach and employee outcomes. The reason for conducting the supplemental analyses is to identify whether the moderation results of using five psychological contract breach dimensions are different from the moderation results of using global psychological contract breach. One latent interaction term, which consists of one psychological contract breach dimension and one employee attributions dimension, was tested each time in Mplus.

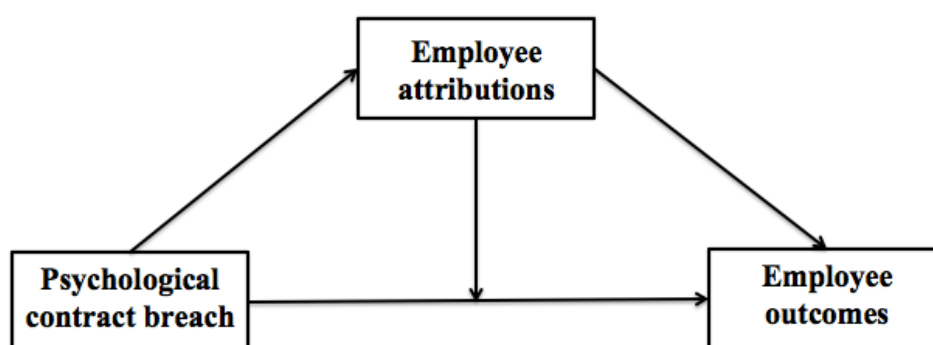


Figure 6.2 Moderation Model

Table 9.8 shows the summary of the interaction effects of employee attributions when applying five psychological contract breach dimensions. The numbers in Table 9.8 indicate the relationships between how many psychological contract breach dimensions and employee outcomes in which employee attributions play a moderating role. For instance, the first 5 in the first row means that employee internal attributions moderate the relationships between all the five psychological contract breach dimensions and leadership perceptions.

Results show that employee internal attributions moderate the relationships between all the five psychological contract breach dimensions and leadership perceptions and extra-role performance. Employee internal attributions moderate the relationships between all the five psychological contract breach dimensions except work

organisation breach and in-role performance. Attributions about the supervisor moderate the relationships between all the five psychological contract breach dimensions and employee well-being and in-role performance. Attributions about the supervisor moderate the relationships between all the five psychological contract breach dimensions except engagement and representation breach and extra-role performance. Attributions about the organisation moderate the relationships between all the five psychological contract breach dimensions except wage and payment system breach and employee-well-being. Attributions about the supervisor moderate the relationships between wage and payment system breach, security and flexibility breach and skills and development breach and in-role performance. Attributions outside of the supervisor and the organisation moderate the relationships between all the five psychological contract breach dimensions and leadership perceptions.

By comparing the moderating role of employee attributions in the relationship between five psychological contract breach dimensions and employee outcomes (Table 9.8) with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes (Table 9.3), it is shown that there are generally no differences in the results whether using global psychological contract breach or using the five dimensions of psychological contract breach. Using five psychological contract breach dimensions to conduct SEM analysis may cause over testing and make the model more complicated. Next, five examples (i.e., one example for each psychological contract breach dimension) will be given. The completed report on the results of the moderating role of employee attributions in the relationship between five psychological contract breach dimensions and employee outcomes can be found in Appendix I.

Table 9.8 Moderating Role of Employee Attributions in the Relationship between Five Psychological Contract Breach Dimensions and Employee Outcomes

	Employee well-being	Leadership perceptions	In-role performance	Extra-role performance
Employee internal attributions		5	4	5
Attributions about the supervisor	5		5	4
Attributions about the organisation	4		3	
Attributions outside of the supervisor and the organisation		5		

Table 9.3 Moderating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes

	Employee well-being	Leadership perceptions	In-role performance	Extra-role performance
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	X
Attributions about the organisation	X		X	
Attributions outside of the supervisor and the organisation		X		

**Work organisation breach.** Attributions about the supervisor moderate the relationships between work organisation breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .23$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Table 9.9 shows the moderation results. Plotting the interaction (Figure 9.15) shows that when employees tend to make attributions about

the supervisor (i.e., employees blame the supervisor for work organisation breach), the negative relationship between work organisation breach and in-role performance is stronger than when employees are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for high attributions about the supervisor (+1 SD,  $t = -3.39$ ,  $p < .01$ ) is significant, but the slope for low attributions about the supervisor (-1 SD,  $t = -.85$ , *ns.*) is not. Thus, when employees make attributions about the supervisor for work organisation breach, the negative relationship between the breach and in-role performance is significant. But when employees are less likely to make attributions about the supervisor for psychological contract breach, there is no significant relationship between the breach and in-role performance.

Table 9.9 Moderating Role of Attributions about the Supervisor in the Relationship between Work Organisation Breach and In-role Performance ( $N = 634$ )

	In-role performance	In-role performance
Work organisation breach	$b = -.13^*$	$b = -.15^*$
Attributions about the supervisor	$b = -.34^{**}$	$b = -.36^{**}$
Interaction term		$b = -.09^*$
$R^2$		.23
$\Delta R^2$		.02

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to four employee attributions, from employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation to four employee outcomes, from attributions about the supervisor to employee well-being, leadership perceptions and extra-role performance, from five psychological contract breach dimensions except work organisation breach to four employee outcomes, and from work organisation breach to employee well-being, leadership perceptions and extra-role performance are not shown.

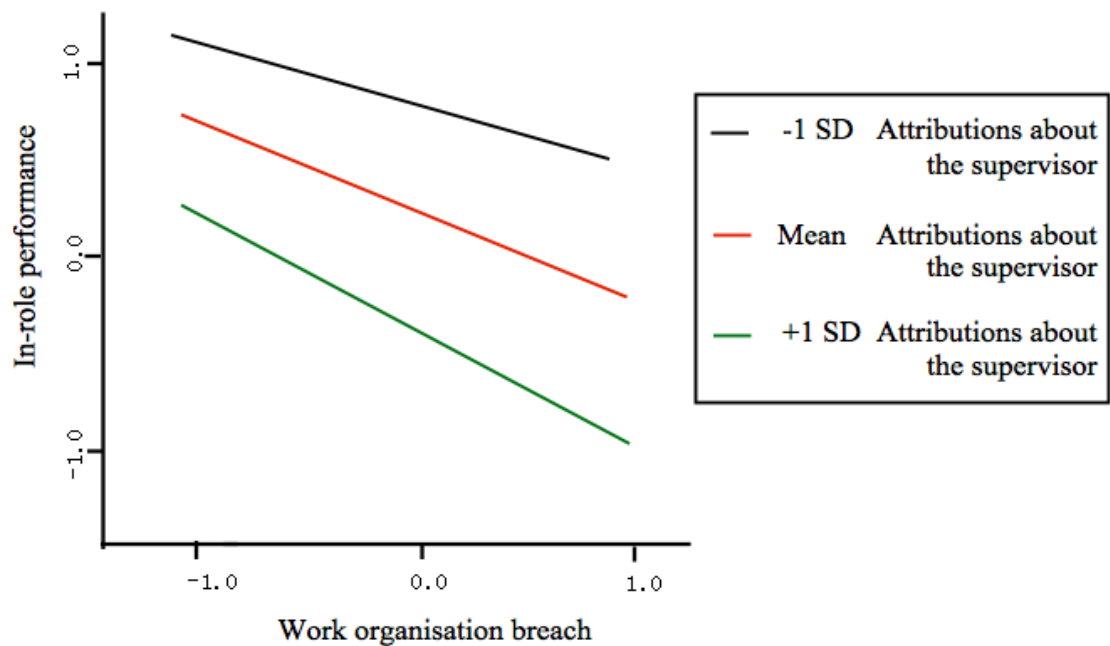


Figure 9.15 Interaction between Work Organisation Breach and Attributions about the Supervisor on In-role Performance

**Wage and payment system breach.** Employee internal attributions moderate the relationships between wage and payment system breach and leadership perceptions ( $b = .05$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .07$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of leadership perceptions. Table 9.10 shows the moderation results. Plotting the interaction (Figure 9.16) shows that the negative relationship between wage and payment system breach and favourable leadership perceptions is weaker when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach) than when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for low employee internal attributions (-1 SD,  $t = -2.85$ ,  $p < .01$ ) is significant, but the slope for high employee internal attributions (+1 SD,  $t = -1.26$ , ns.) is not. Thus, when employees are less likely to make employee internal attributions for wage and payment system breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are make employee internal attributions for wage and payment system breach, there is no significant relationship between the breach and favourable

leadership perceptions.

Table 9.10 Moderating Role of Employee Internal Attributions in the Relationship between Wage and Payment System Breach and Leadership Perceptions ( $N = 634$ )

	Leadership perceptions	Leadership perceptions
Wage and payment system breach	$b = -.10^*$	$b = -.13^*$
Employee internal attributions	$b = .25^{**}$	$b = .26^{**}$
Interaction term		$b = .05^*$
$R^2$		.07
$\Delta R^2$		.01

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to four employee attributions, from attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation to four employee outcomes, from employee internal attributions to employee well-being, in-role performance and extra-role performance, from five psychological contract breach dimensions except wage and payment system breach to employee outcomes, and from wage and payment system breach to employee well-being, in-role performance and extra-role performance are not shown.

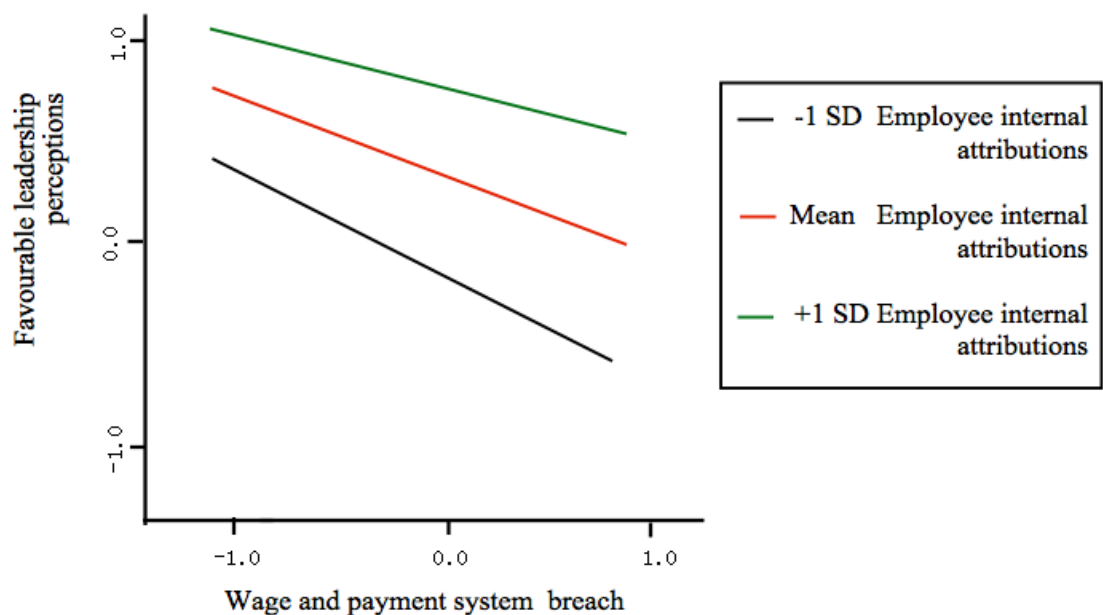


Figure 9.16 Interaction between Wage and Payment System Breach and Employee Internal Attributions on Favourable Leadership Perceptions



***Security and flexibility breach.*** Attributions about the supervisor moderate the relationships between security and flexibility breach and extra-role performance ( $b = .13$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .06$ ,  $\Delta R^2 = .05$ ). The interaction term explains additional 5% of variance of extra-role performance. Table 9.11 shows the moderation results. Plotting the interaction (Figure 9.17) shows that the relationship between security and flexibility breach and extra-role performance is positive when employees tend to make attributions about the supervisor (i.e., employees blame the supervisor for the breach), but is negative when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor (-1 SD,  $t = -1.80$ , *ns.*) and high attributions about the supervisor (+1 SD,  $t = .80$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below -1.15 or above 2.15. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 2.52, and the standard deviation is .74. The mean value minus two standard deviations equals 1.01, which is not over the minimum value of the moderator (i.e., 1). The slope for low attributions about the supervisor (-2 SD,  $t = -2.72$ ,  $p < .01$ ) is significant, but for high attributions about the supervisor (+2 SD,  $t = 1.84$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for security and flexibility breach, the negative relationship between the breach and extra-role performance is significant. When employees make attributions about the supervisor for security and flexibility breach, there is no significant relationship between the breach and extra-role performance.

Table 9.11 Moderating Role of Attributions about the Supervisor in the Relationship between Security and Flexibility Breach and Extra-role Performance ( $N = 634$ )

	Extra-role performance	Extra-role performance
Security and flexibility breach	$b = -.02$	$b = -.05$
Attributions about the supervisor	$b = -.05$	$b = -.04$
Interaction term		$b = .13^{**}$
$R^2$		.06
$\Delta R^2$		.05

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to four employee attributions, from employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation to four employee outcomes, from attributions about the supervisor to employee well-being, leadership perceptions and in-role performance, from all psychological contract breach dimensions except security and flexibility to four employee outcomes, and from security and flexibility breach to employee well-being, leadership perceptions and in-role performance are not shown.

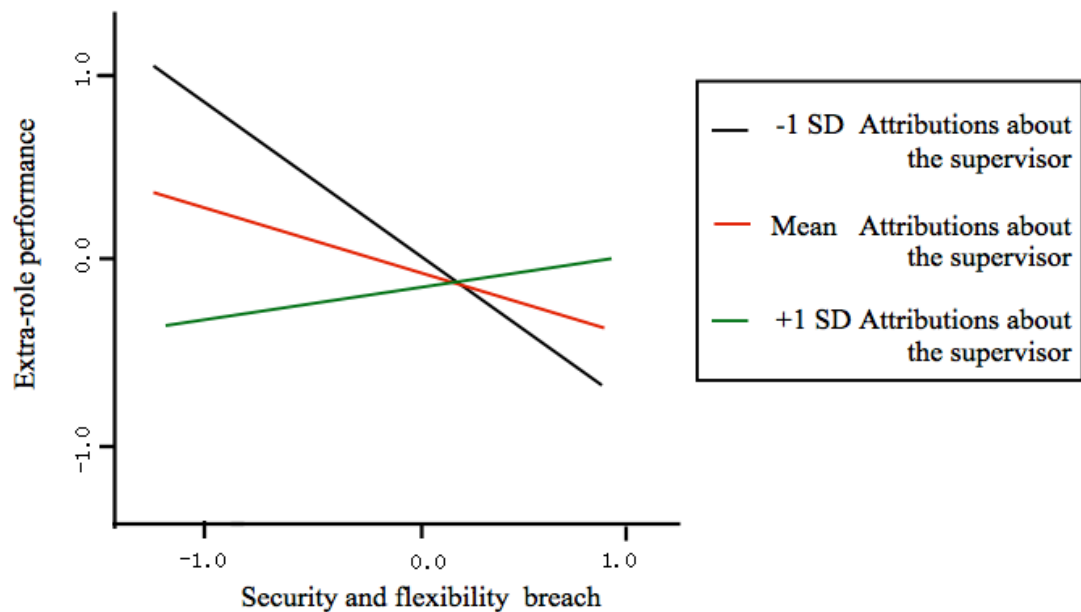


Figure 9.17 Interaction between Security and Flexibility Breach and Attributions about the Supervisor on Extra-role Performance

**Skills and development breach.** Employee internal attributions moderate the relationships between skills and development breach and in-role performance ( $b = .07$ ,

SE = .03,  $p < .05$ ;  $R^2 = .12$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Table 9.12 shows the moderation results. Plotting the interaction (Figure 9.18) shows that the negative relationship between skills and development breach and in-role performance is weaker when employees tend to make employee internal attributions (i.e., employees blame themselves for the breach) than when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for low employee internal attributions (-1 SD,  $t = -3.02$ ,  $p < .01$ ) is significant, but for high employee internal attributions (+1 SD,  $t = -1.88$ , ns.) is not. Thus, when employees are less likely to make employee internal attributions for skills and development breach, the negative relationship between the breach and in-role performance is significant. When employees are more likely to make employee internal attributions for skills and development breach, there is no relationship between the breach and in-role performance.

Table 9.12 Moderating Role of Employee Internal Attributions in the Relationship between Skills and Development Breach and In-role Performance ( $N = 634$ )

	In-role performance	In-role performance
Skills and development breach	$b = -.26^*$	$b = -.30^*$
Employee internal attributions	$b = .08$	$b = .11^*$
Interaction term		$b = .07^*$
$R^2$		.12
$\Delta R^2$		.01

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to four employee attributions, from attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation to four employee outcomes, from employee internal attributions to employee well-being, leadership perceptions and extra-role performance, from all five psychological contract breach dimensions except skills and development breach to four employee outcomes, and from skills and development breach to employee well-being, leadership perceptions and extra-role performance are not shown.

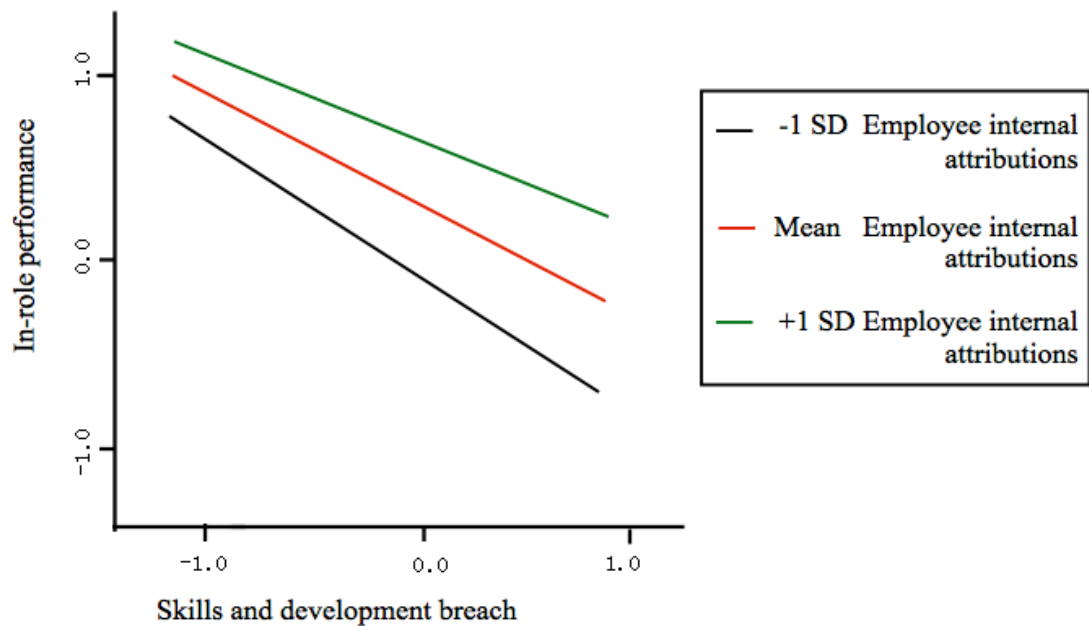


Figure 9.18 Interaction between Skills and Development Breach and Employee Internal Attributions on In-role Performance

**Engagement and representation breach.** Attributions about the supervisor moderate the relationships between engagement and representation breach and employee well-being ( $b = .08$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .12$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Table 9.13 shows the moderation results. Plotting the interaction (Figure 9.19) shows that the negative relationship between engagement and representation breach and employee well-being is stronger when attributions about the supervisor are low (i.e., employees do not blame the supervisor for the breach) but weaker when attributions about the supervisor are high.

Simple slope analysis shows that the slope for low attributions about the supervisor (-1 SD,  $t = -2.91$ ,  $p < .01$ ) is significant, but for high attributions about the supervisor (+1 SD,  $t = -1.46$ , ns.) is not. Thus, when employees are less likely to make attributions about the supervisor for engagement and representation breach, the negative relationship between the breach and employee well-being is significant. When employees make attributions about the supervisor for engagement and representation breach, there is no significant relationship between the breach and employee well-being.

Table 9.13 Moderating Role of Attributions about the Supervisor in the Relationship between Engagement and Representation Breach and Employee well-being ( $N = 634$ )

	Employee well-being	Employee well-being
Engagement and representation breach	$b = -.24^{**}$	$b = -.24^*$
Attributions about the supervisor	$b = -.01$	$b = .01$
Interaction term		$b = .08^{**}$
$R^2$		.12
$\Delta R^2$		.02

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions to four employee attributions, from employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation to four employee outcomes, from attributions about the supervisor to leadership perceptions, in-role performance and extra-role performance, from all psychological contract breach dimensions except engagement and representation breach to four employee outcomes, and from engagement and representation breach to leadership perceptions, in-role performance and extra-role performance are not shown.

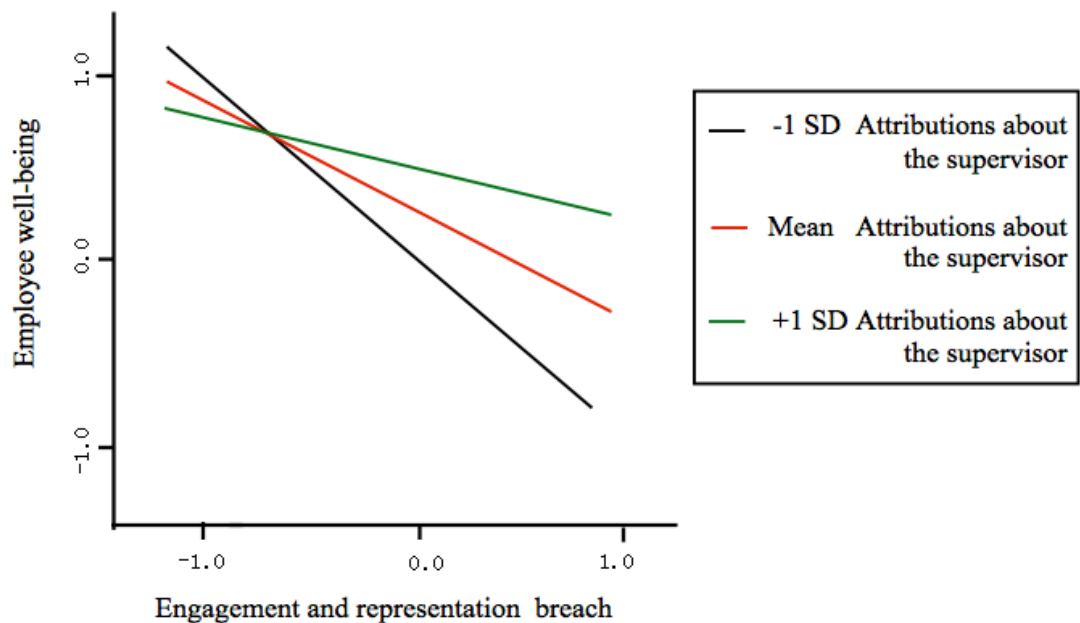


Figure 9.19 Interaction between Engagement and Representation Breach and Attributions about the Supervisor on Employee Well-being

*Summary.* In general, by comparing the moderating role of employee attributions in the relationship between five psychological contract breach dimensions and employee outcomes with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, it is shown that there are generally no differences in the results whether using global psychological contract breach or using the five dimensions of psychological contract breach. Using five psychological contract breach dimensions to conduct SEM analysis may cause over testing and make the model more complicated. Moderation results are more consistent if psychological contract breach is measured as a single entity than separate elements.

## **9.5 Direct Relationship between Psychological Contract Breach and Employee Attributions**

According to Baron and Kenny's (1986) recommendations on conducting a mediation model, the path from psychological contract breach to employee attributions should be established at first before examining the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Direct effects model (Figure 6.1) was tested in Mplus. This section will report the results of the direct relationship between psychological contract breach and employee attributions in direct effects model. To be more specific, the results of the direct relationships between psychological contract breach and employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation will be reported. Results show that *Hypothesis 9*, that psychological contract breach is positively related to employee attributions, is partially supported. Psychological contract breach is found to be negatively related to employee internal attributions.

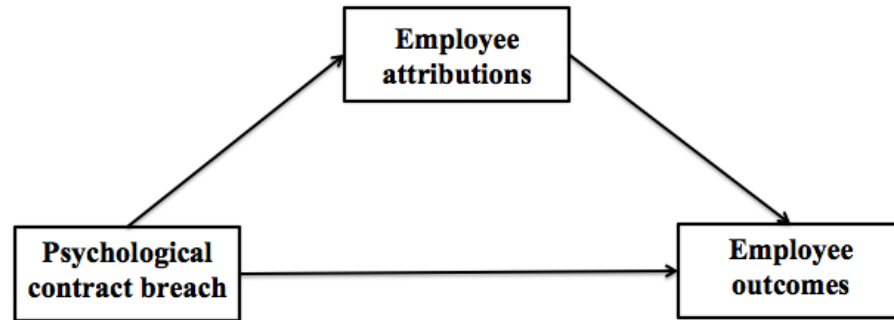


Figure 6.1 Direct Effects Model

The SEM results for direct effects model were  $CFI = .93$ ,  $RMSEA = .05$ ,  $SRMR = .05$ ,  $\chi^2 = 3004.86$ , and  $df = 1279$ . CFI is just below the cut off point (i.e. .95), but other values indicate a good model fit. Figure 9.20 and Table 9.14 shows the results of the relationship between psychological contract breach and employee attributions. Psychological contract breach is negatively associated with employee internal attribution ( $b = -.21, p < .01$ ), and is positively related to attributions about the supervisor ( $b = .36, p < .01$ ), attributions about the organisation ( $b = .40, p < .01$ ), and attributions outside of the supervisor and the organisation ( $b = .14, p < .05$ ).

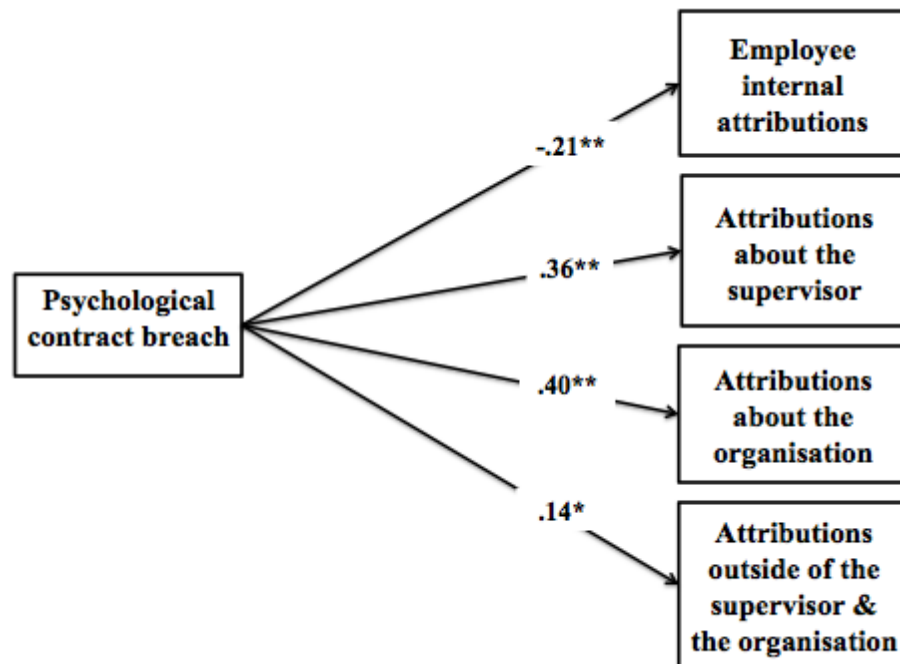


Figure 9.20 Effects of Psychological Contract Breach on Employee Attributions  
*Notes:* paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 9.14 Effects of Psychological Contract Breach on Employee Attributions ( $N = 634$ )

	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Psychological contract breach	$b = -.21^{**}$	$b = .36^{**}$	$b = .40^{**}$	$b = .14^*$

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

This study then applied the first-order five factors of psychological contract breach (i.e., Work organisation, Wages and payment system, Security and flexibility, Skills and development, and Engagement and representation) to test the relationship between the five dimensions of psychological contract breach and employee attributions. The reason for conducting the supplemental analyses is to identify whether the relationship between five psychological contract breach dimensions and employee attributions is



different from the relationship between global psychological contract breach and employee attributions. Table 9.15 shows the direct effects results. The SEM results for the direct effects model that uses five psychological contract breach dimensions were CFI = .94, RMSEA = .05, SRMR = .04,  $\chi^2 = 2810.45$ , and  $df = 1242$ . CFI is just below the cut off point (i.e. .95), but other values indicate a good model fit.

- *Work organisation.* Work organisation breach is positively related to attributions about the supervisor ( $b = .12, p < .05$ ), attributions about the organisation ( $b = .15, p < .01$ ), attributions outside of the supervisor and the organisation ( $b = .16, p < .01$ ), and is not significantly related to employee internal attributions ( $b = -.03, ns.$ ).
- *Wages and payment system.* Wages and payment system breach is not significantly related to employee internal attributions ( $b = -.01, ns.$ ), attributions about the supervisor ( $b = -.05, ns.$ ), attributions about the organisation ( $b = -.08, ns.$ ) or attributions outside of the supervisor and the organisation ( $b = -.02, ns.$ ).
- *Security and flexibility.* Security and flexibility breach is positively related to attributions about the supervisor ( $b = .17, p < .01$ ), and is not significantly related to employee internal attributions ( $b = -.11, ns.$ ), attributions about the organisation ( $b = .06, ns.$ ), or attributions outside of the supervisor and the organisation ( $b = -.11, ns.$ ).
- *Skills and development.* Skills and development breach is not significantly related to employee internal attributions ( $b = .15, ns.$ ), attributions about the supervisor ( $b = -.01, ns.$ ), attributions about the organisation ( $b = .03, ns.$ ) or attributions outside of the supervisor and the organisation ( $b = .17, ns.$ ).
- *Engagement and representation.* Engagement and representation breach is positively related to attributions about the organisation ( $b = .22, p < .05$ ), and is not significantly related to employee internal attributions ( $b = -.21, ns.$ ), attributions about the supervisor ( $b = .09, ns.$ ), or attributions outside of the supervisor and the organisation ( $b = -.10, ns.$ ).

Table 9.15 Effects of Five-factor Psychological Contract Breach on Employee Attributions

	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Work organisation breach	$b = -.03$	$b = .12^*$	$b = .15^{**}$	$b = .16^{**}$
Wages and payment system breach	$b = -.01$	$b = -.05$	$b = -.08$	$b = -.02$
Security and flexibility breach	$b = -.11$	$b = .17^{**}$	$b = .06$	$b = -.11$
Skills and development breach	$b = .15$	$b = -.01$	$b = .03$	$b = .17$
Engagement and representation breach	$b = -.21$	$b = .09$	$b = .22^*$	$b = -.10$

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

In general, the global psychological contract breach is significantly related to all employee attribution factors. In terms of the five dimensions of psychological contract breach, the significant relationship between the five dimensions of psychological contract breach and employee attributions becomes weaker. The results are more consistent if psychological contract breach is measured as a single entity than separate elements.

## 9.6 Direct Relationship between Employee Attributions and Employee Outcomes

According to Baron and Kenny's (1986) recommendations on conducting a mediation

model, the path from employee attributions to employee outcomes should be established before examining the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Direct effects model (Figure 6.1) was tested in Mplus. This section will report the results of the direct relationship between employee attributions and employee outcomes in the direct effects model. *Hypothesis 10a*, *Hypothesis 11a*, *Hypothesis 12a* and *Hypothesis 12b* that employee attributions are significantly related to employee well-being, leadership perceptions and performance are partially supported.

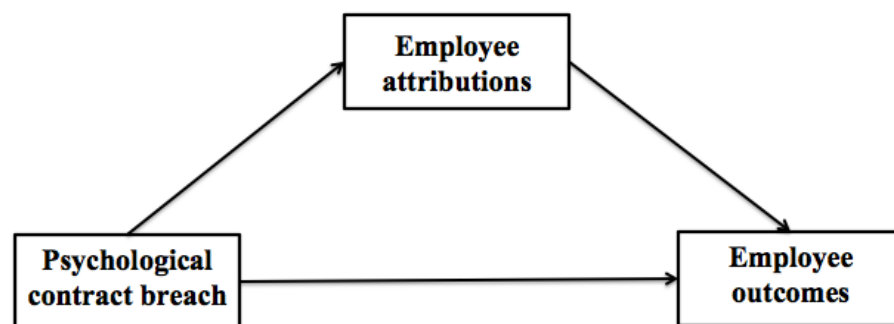


Figure 6.1 Direct Effects Model

The SEM results for direct effects model were CFI = .93, RMSEA = .05, SRMR = .05,  $\chi^2 = 3004.86$ , and  $df = 1279$ . CFI is just below the cut off point (i.e. .95), but other values indicate a good model fit. Figure 9.21 and Table 9.16 shows the effects of employee attributions on employee outcomes.

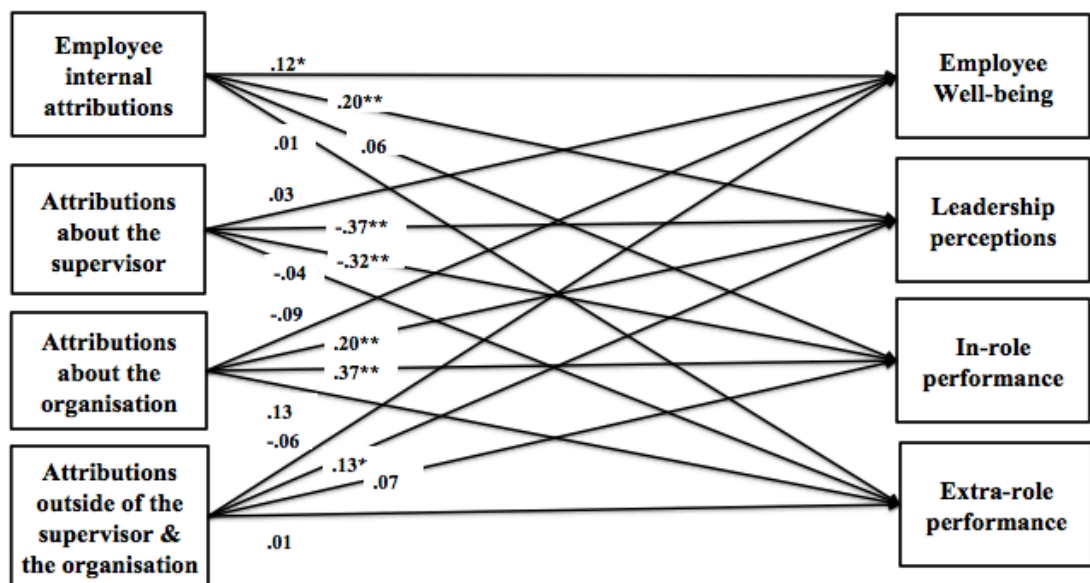


Figure 9.21 Effects of Employee Attributions on Employee Outcomes  
*Notes:* paths from psychological contract breach to employee outcomes and from psychological contract breach to employee attributions are not shown.

Table 9.16 Effects of Employee Attributions on Employee Outcomes ( $N = 634$ )

	Employee well-being	Leadership Perceptions	In-role performance	Extra-role performance
Employee internal attributions	$b = .12^*$	$b = .20^{**}$	$b = .06$	$b = .01$
Attributions about the supervisor	$b = .03$	$b = -.37^{**}$	$b = -.32^{**}$	$b = -.04$
Attributions about the organisation	$b = -.09$	$b = .20^{**}$	$b = .37^{**}$	$b = .13$
Attributions outside of the supervisor and the organisation	$b = -.06$	$b = .13^*$	$b = .07$	$b = .01$

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from psychological contract breach to employee outcomes and from psychological contract breach to employee attributions are not shown.

- *Employee attributions and employee well-being.* The results of the relationships between employee attributions and employee well-being show that employee internal factors ( $b = .12$ ,  $p < .05$ ) is significant related to employee well-being. But

attributions about the supervisor ( $b = .03$ , *ns.*), attributions about the organisation ( $b = -.09$ , *ns.*), and attributions outside of the supervisor and the organisation ( $b = -.06$ , *ns.*) are not significantly related to employee well-being.

- *Employee attributions and favourable leadership perceptions.* In terms of the relationship between employee attributions and employees' favourable leadership perceptions, results show that employee internal factors ( $b = .20$ ,  $p < .01$ ), attributions about the supervisor ( $b = -.37$ ,  $p < .01$ ), attributions about the organisation ( $b = .20$ ,  $p < .01$ ), and attributions outside of the supervisor and the organisation ( $b = .13$ ,  $p < .05$ ) are significantly related to favourable leadership perceptions.
- *Employee attributions and in-role performance.* In terms of the relationships between employee attributions and in-role performance, attributions about the supervisor ( $b = -.32$ ,  $p < .01$ ) and attributions about the organisation ( $b = .37$ ,  $p < .01$ ) are significantly related to in-role performance. But employee internal attributions ( $b = .06$ , *ns.*) and attributions outside of the supervisor and the organisation ( $b = .07$ , *ns.*) are not significantly related to in-role performance.
- *Employee attributions and extra-role performance.* None of employee internal attributions ( $b = .01$ , *ns.*), attributions about the supervisor ( $b = -.04$ , *ns.*), attributions about the organisation ( $b = .13$ , *ns.*), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*) is significantly related to extra-role performance.

In general, employee attributions are significantly related to leadership perceptions and are partially related to employee well-being and in-role performance. There is no significant relationship between employee attributions and extra-role performance. Based on these results, the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes has been explored.

## 9.7 Mediating Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes

Mediation model examined the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Figure 6.3 shows the mediation model. The mediation model with completed paths can be found in Appendix II. *Hypothesis 10b* that employee attributions mediate the relationship between psychological contract breach and employee well-being is not supported. *Hypothesis 11b* that employee attributions mediate the relationship between psychological contract breach and leadership perceptions is supported except attributions outside of the supervisor and the organisation. *Hypothesis 12c* that employee attributions mediate the relationship between psychological contract breach and performance is not supported except attributions about the supervisor and attributions about the organisation mediate the relationship between psychological contract breach and in-role performance.

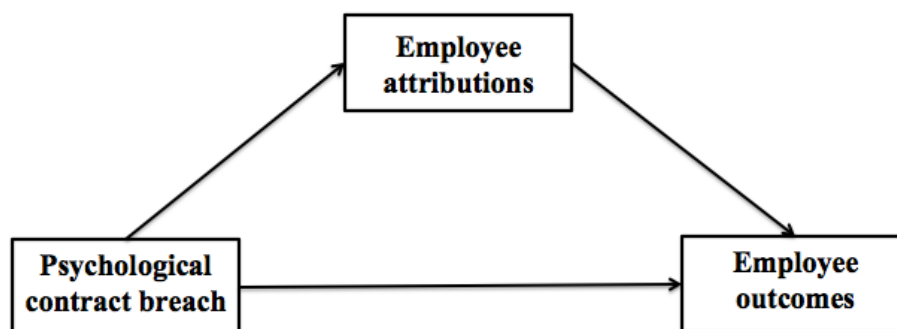


Figure 6.3 Mediation Model

The SEM results for the mediation model were CFI = .93, RMSEA = .05, SRMR = .05,  $\chi^2 = 3004.86$ , and  $df = 1279$ . The CFI value was just below cut off point (i.e., .95), but other values indicate a good model fit. To further examine the mediating roles of employee attributions, a bootstrapping analysis (sample = 10,000) was applied to test

the significance of the indirect effects.

- *Employee well-being.* The parameter estimate results of the indirect effect of psychological contract breach on employee well-being through employee internal attributions ( $b = -.03$ , ns., 95% CI [.01, -.07]), attributions about the supervisor ( $b = .01$ , ns., 95% CI [.08, -.06]), attributions about the organisation ( $b = -.04$ , ns., 95% CI [.04, -.12]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , ns., 95% CI [.01, -.03]) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).
- *Favourable leadership perceptions.* The parameter estimate result of the indirect effect of psychological contract breach on favourable leadership perceptions through employee internal attributions is  $-.04$  ( $p < .05$ ) with a 95% CI [-.03, -.25]. The parameter estimate result of the indirect effect of psychological contract breach on favourable leadership perceptions through attributions about the supervisor is  $-.13$  ( $p < .01$ ) with a 95% CI [-.06, -.24]. The parameter estimate result of the indirect effect of psychological contract breach on favourable leadership perceptions through attributions about the organisation is  $.08$  ( $p < .05$ ) with a 95% CI [.18, .01]. All confidence intervals do not cross zero, then the indirect effects are statistically significant (Preacher and Hayes, 2008). The parameter estimate result of the indirect effect of psychological contract breach on favourable leadership perceptions through attributions outside of the supervisor and the organisation ( $b = .02$ , ns., 95% CI [.05, -.01]) is not significant.
- *In-role performance.* The parameter estimate result of the indirect effect of psychological contract breach on in-role performance through attributions about the supervisor is  $-.11$  ( $p < .05$ ) with a 95% CI [-.03, -.25]. The parameter estimate result of the indirect effect of psychological contract breach on in-role performance through employee internal attributions is  $.15$  ( $p < .01$ ) with a 95% CI [.29, .05]. Both confidence intervals do not cross zero, thus the indirect effects are statistically significant (Preacher and Hayes, 2008). The parameter estimate results of the indirect effect of psychological contract breach on in-role performance

through employee internal attributions ( $b = -.01$ , ns., 95% CI [.01, -.05]) and attributions outside of the supervisor and the organisation ( $b = .01$ , ns., 95% CI [.05, -.02]) are not significant.

- *Extra-role performance.* The parameter estimate results of the indirect effect of psychological contract breach on extra-role performance through employee internal attributions ( $b = -.01$ , ns., 95% CI [.05, -.04]), attributions about the supervisor ( $b = -.02$ , ns., 95% CI [.11, -.14]), attributions about the organisation ( $b = .05$ , ns.), and attributions outside of the supervisor and the organisation ( $b = .01$ , ns., 95% CI [.20, -.08]) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).

In general, the relationship between psychological contract breach and leadership perceptions is mediated by employee internal attributions, attributions about the supervisor, attributions about the organisation. Compared with the relationships between psychological contract breach and employee well-being and performance, employee attributions are more likely to play a mediating role in the relationship between psychological contract breach and leadership perceptions.

## **9.8 Mediation Analysis Using the Five Dimensions of Psychological Contract Breach**

This study then applied the first-order five factors of psychological contract breach (i.e., Work organisation, Wages and payment system, Security and flexibility, Skills and development, and Engagement and representation) to test the mediation model (Figure 6.3) and to examine the mediating role of employee attributions in the relationship between the five dimensions of psychological contract breach and employee outcomes. The reason for conducting the supplemental analyses is to identify whether the mediation results of using five psychological contract breach dimensions are different from the mediation results of using global psychological contract breach.



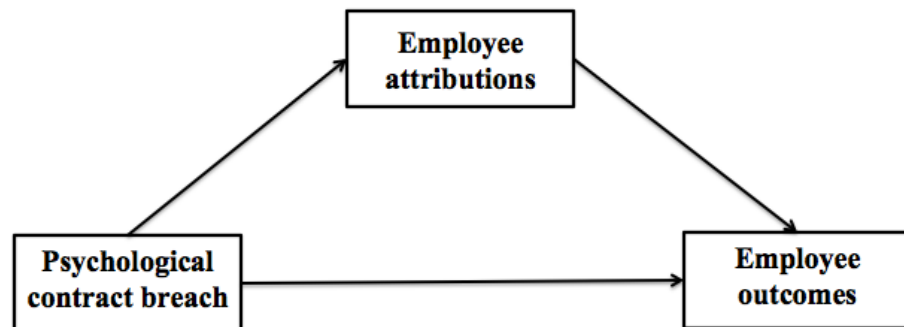


Figure 6.3 Mediation Model

Table 9.17 shows the summary of the indirect effects of employee attributions when applying five psychological contract breach dimensions. The numbers in Table 9.17 indicate the relationships between how many psychological contract breach dimensions and employee outcomes in which employee attributions play a mediating role. For instance, the number 1 in the second row means that attributions about the supervisor mediate the relationships between only one of the five psychological contract breach dimensions and leadership perceptions.

Table 9.17 Indirect Effects of Employee Attributions on the Relationship between Five Psychological Contract Breach Dimensions and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions				
Attributions about the supervisor		1		
Attributions about the organisation			1	
Attributions outside of the supervisor and the organisation				

The SEM results were CFI = .94, RMSEA = .05, SRMR = .04,  $\chi^2 = 2810.45$ , and df = 1242. The CFI value was just below cut off point (i.e., .95), but other values indicate a good model fit. Results show that there are only two significant indirect effects of employee attributions on the relationship between the five dimensions of psychological contract breach and employee outcomes. Attributions about the supervisor significantly mediate the relationship between security and flexibility breach and leadership perceptions. Attributions about the organisation significantly mediate the relationship between work organisation breach and in-role performance.

By comparing with the mediating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions play a much weaker mediating role in the relationship between the five psychological contract breach dimensions and employee outcomes. Next, examples will be given. The completed report on the results of the mediating role of employee attributions in the relationships between the five psychological contract breach dimensions and employee outcomes can be found in Appendix III.

- *Work Organisation.* The parameter estimate result of the indirect effect of work organisation breach on in-role performance through attributions about the organisation is -.05 ( $p < .05$ ) with a 95% CI [-.14, -.01]. The confidence interval does not cross zero, thus the indirect effect is statistically significant (Preacher and Hayes, 2008). The parameter estimate results of the indirect effect of work organisation breach on in-role performance through employee internal attributions ( $b = -.01$ , ns., 95% CI [.01, -.02]), attributions about the supervisor ( $b = -.04$ , ns., 95% CI [.01, -.02]), and attributions outside of the supervisor and the organisation ( $b = .02$ , ns., 95% CI [.06, -.01]) are not significant.
- *Wage and payment system breach.* The parameter estimate results of the indirect effect of wages and payment system breach on employee well-being through employee internal attributions ( $b = -.01$ , ns., 95% CI [.02, -.02]), attributions about the supervisor ( $b = .01$ , ns., 95% CI [.02, -.02]), attributions about the organisation ( $b = -.01$ , ns., 95% CI [.02, -.04]), and attributions outside of the supervisor and

the organisation ( $b = -.01$ , ns, 95% CI [.01, -.01].) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).

- Security and flexibility breach.* The parameter estimate result of the indirect effect of security and flexibility breach on employees' favourable evaluations of leadership through attributions about the supervisor is  $-.07$  ( $p < .05$ ) with a 95% CI [-0.01, -.16]. The confidence interval does not cross zero, thus the indirect effect is statistically significant (Preacher and Hayes, 2008). The parameter estimate results of the indirect effect of security and flexibility breach on employees' favourable evaluations of leadership through employee internal attributions ( $b = .02$ , ns., 95% CI [.02, -.06]), attributions about the organisation ( $b = .01$ , ns., 95% CI [.07, -.03]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , ns., 95% CI [.01, -.05]) are not significant.
- Skills and development breach.* The parameter estimate results of the indirect effect of skills and development breach on extra-role performance through employee internal attributions ( $b = .01$ , ns., 95% CI [.06, -.03]), attributions about the supervisor ( $b = .01$ , ns., 95% CI [.05, -.05]), attributions about the organisation ( $b = -.01$ , ns., 95% CI [.06, -.08]), and attributions outside of the supervisor and the organisation ( $b = .01$ , ns., 95% CI [.07, -.05]) are not significant. All confidence intervals cross zero, thus the indirect effects are statistically not significant (Preacher and Hayes, 2008).
- Engagement and representation breach.* The parameter estimate results of the indirect effect of engagement and representation breach on extra-role performance through employee internal attributions ( $b = -.01$ , ns., 95% CI [.05, -.06]), attributions about the supervisor ( $b = -.01$ , ns., 95% CI [.05, -.07]), attributions about the organisation ( $b = .03$ , ns., 95% CI [.15, -.06]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , ns., 95% CI [.03, -.05]) are not significant. All confidence intervals cross zero, thus the indirect effects are statistically not significant (Preacher and Hayes, 2008).

*Summary.* In general, there are only two significant indirect effects of employee attributions on the relationship between the five dimensions of psychological contract breach and employee outcomes. Compared with the mediating role of employee attributions in the relationship between global psychological contract breach and employee outcomes (five significant indirect effects), employee attributions play a much weaker mediating role in the relationship between the five psychological contract breach dimensions and employee outcomes. The research suggests that global psychological contract breach plays a more important role in understanding employees' responds to psychological contract breach.

## **9.9 Moderating Role of Individual Differences in the Relationship between Psychological Contract breach and Employee Attributions**

The moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions will be reported in this section. Figure 6.4 shows the individual differences model, which was tested in Mplus. One latent interaction term, which consists of psychological contract breach and one individual difference, was tested each time. Thus, the individual differences model was tested two times with two individual differences. *Hypothesis 13* and *Hypothesis 14* that individualism/collectivism and employee proactivity moderate the relationship between psychological contract breach and employee attributions are partially supported.

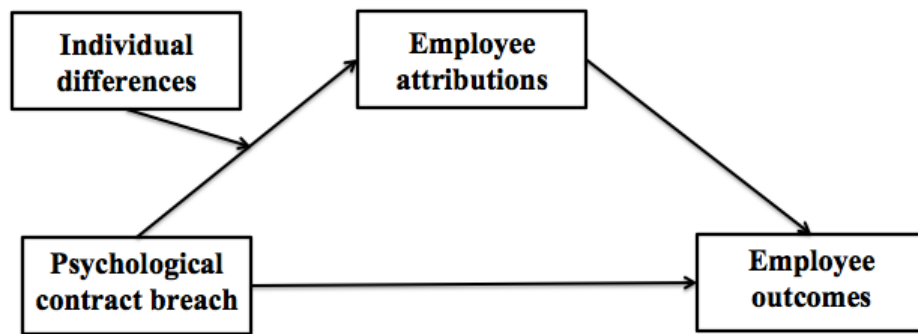


Figure 6.4 Individual Differences Model

Table 9.18 shows the overview of the interaction effects of individual differences. Individualism/collectivism moderate the relationships between psychological contract breach and attributions about the organisation and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationship between psychological contract breach and attributions about the supervisor. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 9.18 Moderating Role of Individual Differences in the Relationship between Psychological Contract Breach and Employee Attributions

	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Individualism /collectivism			X	X
Employee proactivity		X		

### 9.9.1 Individualism/collectivism

In this section, the interaction effects of individualism/collectivism on the relationship between psychological contract breach and employee attributions will be reported.

Figure 9.22 and Table 9.19 shows the moderation results. Individualism/collectivism moderate the relationships between psychological contract breach and attributions about the organisation and attributions outside of the supervisor and the organisation. But individualism/collectivism do not moderate the relationships between psychological contract breach and employee internal attributions and attributions about the supervisor.

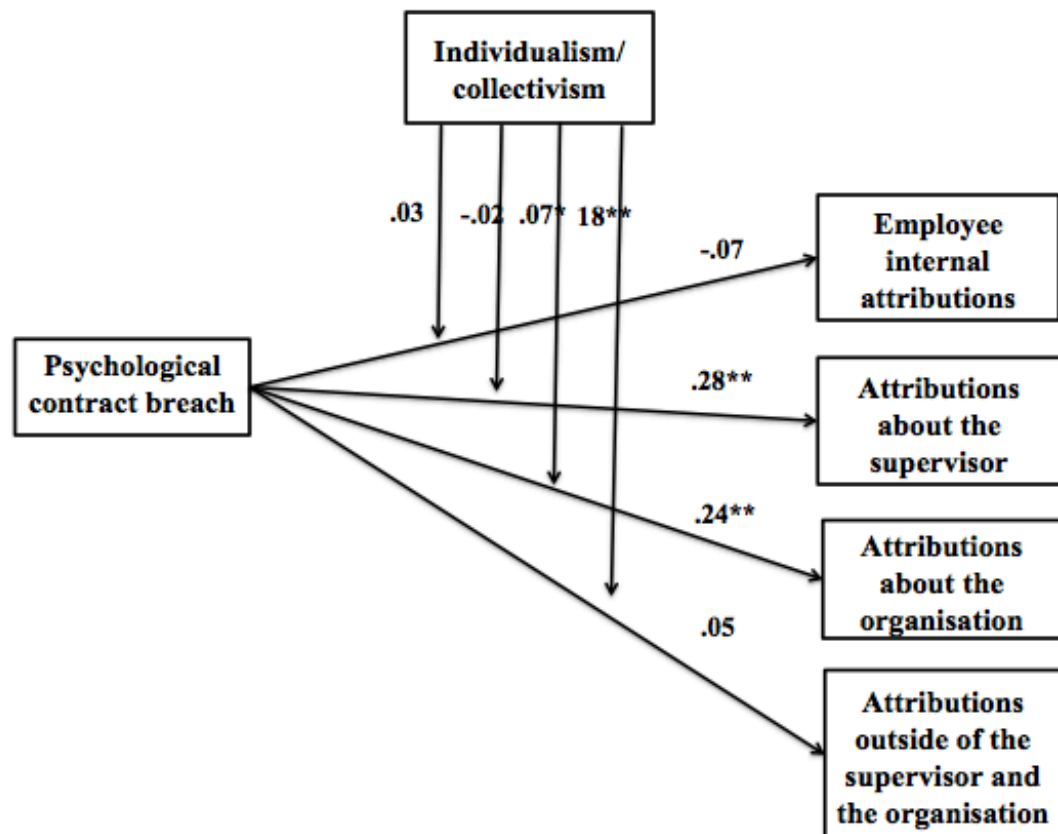


Figure 9.22 Specific Individual Differences Model

*Notes:* paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 9.19 Moderating Role of Individualism/collectivism in the Relationship between Psychological Contract Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Psychological contract breach	$b = -.23^{**}$	$b = -.07$	$b = .37^{**}$	$b = .28^{**}$	$b = .40^{**}$	$b = .24^{**}$	$b = .14^{**}$	$b = .05$
Individualism /collectivism	$b = .37^{**}$	$b = .37^{**}$	$b = -.06$	$b = -.06$	$b = -.14$	$b = -.15$	$b = -.01$	$b = -.05$
Interaction term		$b = .03$		$b = -.02$		$b = .07^*$		$b = .18^{**}$
$R^2$		0.09		0.06		0.07		0.09
$\Delta R^2$		0.00		0.00		0.01		0.08

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the organisation.** Individualism/collectivism moderate the relationships between psychological contract breach and attributions about the organisation ( $b = .07$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .07$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the organisation. Plotting the interaction (Figure 9.23) shows that the positive relationship between psychological contract breach and attributions about the organisation is weaker for individualistic employees but is stronger for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism ( $-1$  SD,  $t = 3.82$ ,  $p < .01$ ) and for high collectivism and low individualism ( $+1$  SD,  $t = 6.90$ ,  $p < .01$ ) are both significant. Thus, when employees report individualism, the positive relationship between psychological contract breach and attributions about the organisation is significant. When employees report collectivism, the positive relationship between psychological contract breach and attributions about the organisation is significant as well.

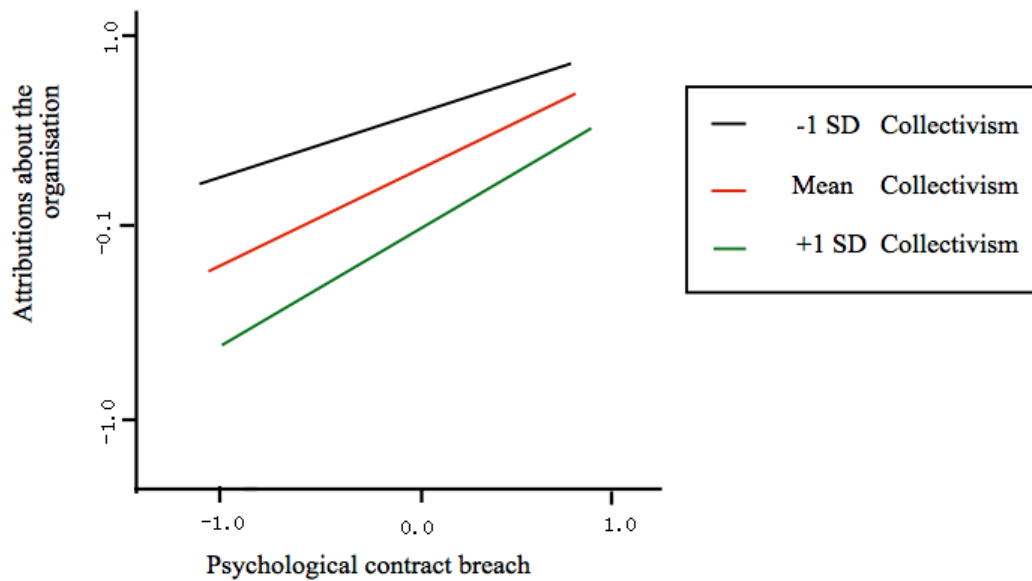


Figure 9.23 Interaction between Psychological Contract Breach and Individualism/collectivism on Attributions about the Organisation

***Attributions outside of the supervisor and the organisation.***

Individualism/collectivism moderate the relationships between psychological contract breach and attributions outside of the supervisor and the organisation ( $b = .18$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .09$ ,  $\Delta R^2 = .08$ ). The interaction term explains additional 8% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 9.24) shows that the relationship between psychological contract breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism (-1 SD,  $t = -2.06$ ,  $p < .05$ ) and for high collectivism and low individualism (+1 SD,  $t = 3.63$ ,  $p < .01$ ) are both significant. Thus, when employees report individualism, the negative relationship between psychological contract breach and attributions outside of the supervisor and the organisation is significant. When employees report collectivism, the positive relationship between psychological contract breach and attributions outside of the supervisor and the organisation is significant as well.



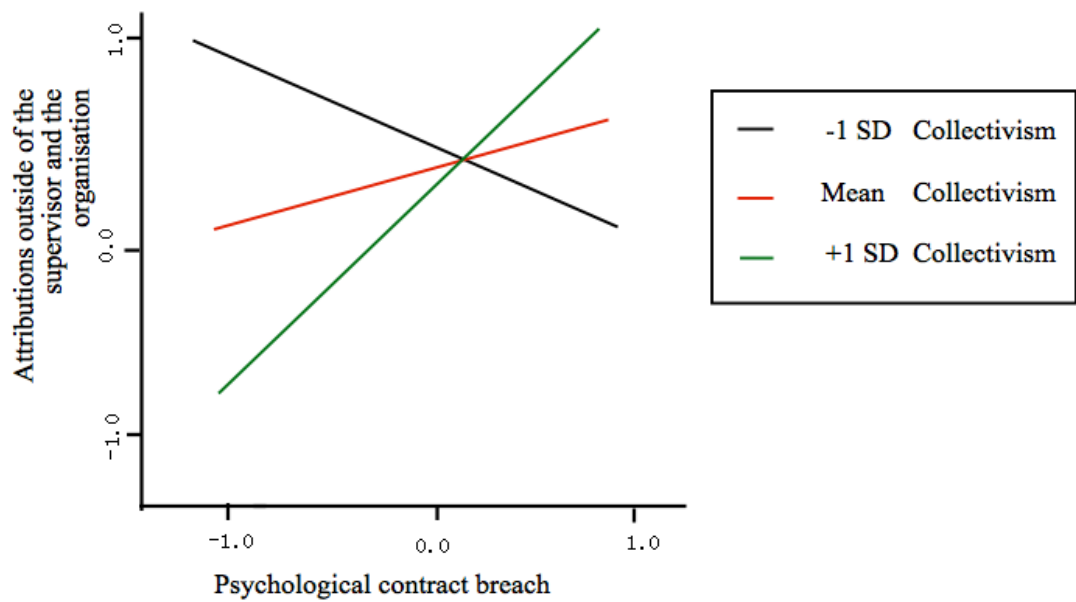


Figure 9.24 Interaction between Psychological Contract Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

### 9.9.2 Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between psychological contract breach and employee attributions will be reported. Figure 9.25 and Table 9.20 shows the moderation results. Employee proactivity moderates the relationship between psychological contract breach and attributions about the supervisor. But employee proactivity does not moderate the relationships between psychological contract breach and employee internal attributions, attributions about the organisation and attributions outside the supervisor and the organisation.

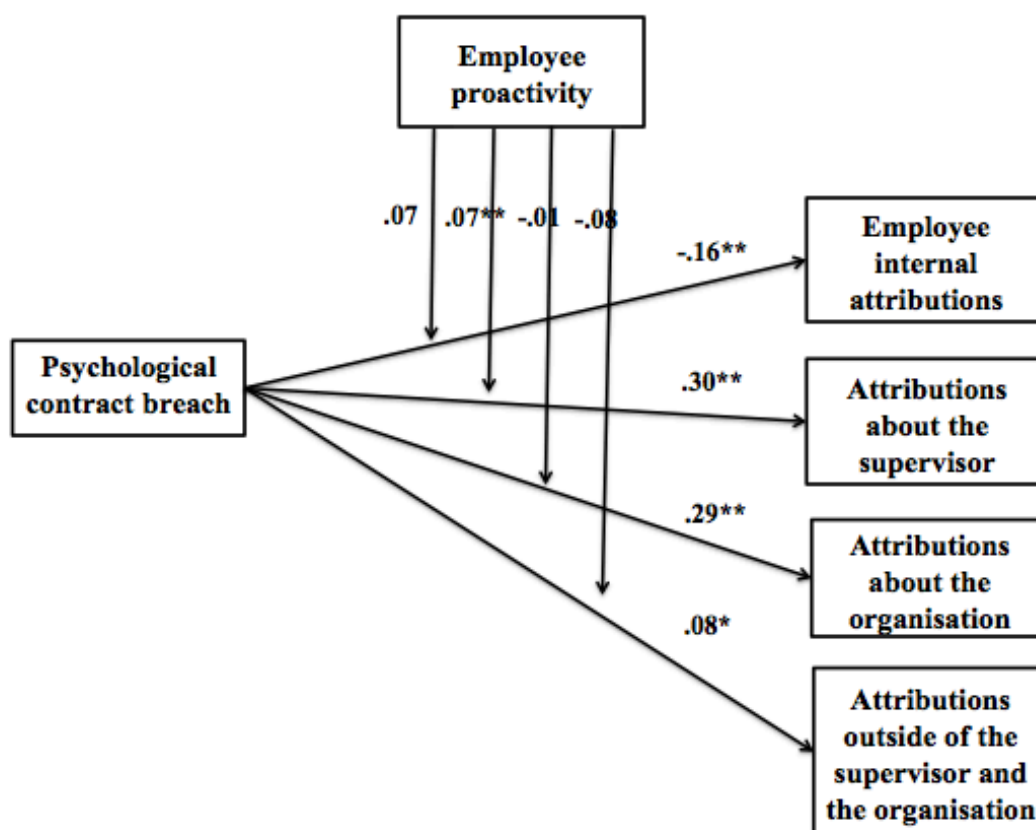


Figure 9.25 Specific Individual Differences Model  
*Notes:* paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 9.20 Moderating Role of Employee Proactivity in the Relationship between Psychological Contract Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Psychological contract breach	$b = -.23^{**}$	$b = -.16^{**}$	$b = .37^{**}$	$b = .30^{**}$	$b = .40^{**}$	$b = .29^{**}$	$b = .14^{**}$	$b = .08^{*}$
Employee proactivity	$b = .02$	$b = .05$	$b = .08$	$b = .10$	$b = .10^{*}$	$b = .10^{*}$	$b = .08$	$b = .06$
Interaction term		$b = .07$		$b = .07^{**}$		$b = -.01$		$b = -.08$
$R^2$		0.05		0.21		0.19		0.04
$\Delta R^2$		0.01		0.01		0.00		0.02

*Notes:*  $^{*}p < .05$ ,  $^{**}p < .01$ ; paths from psychological contract breach to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the supervisor.** Employee proactivity moderates the relationships between psychological contract breach and attributions about the supervisor ( $b = .07$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .21$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Plotting the interaction (Figure 9.26) shows that the positive relationship between psychological contract breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slopes for low employee proactivity (-1 SD,  $t = 5.17$ ,  $p < .01$ ) and for high employee proactivity (+1 SD,  $t = 8.23$ ,  $p < .01$ ) are both significant. Thus, when employees report low employee proactivity, the positive relationship between psychological contract breach and attributions about the supervisor is significant. When employees report high employee proactivity, the positive relationship between psychological contract breach and attributions about the supervisor is significant as well.

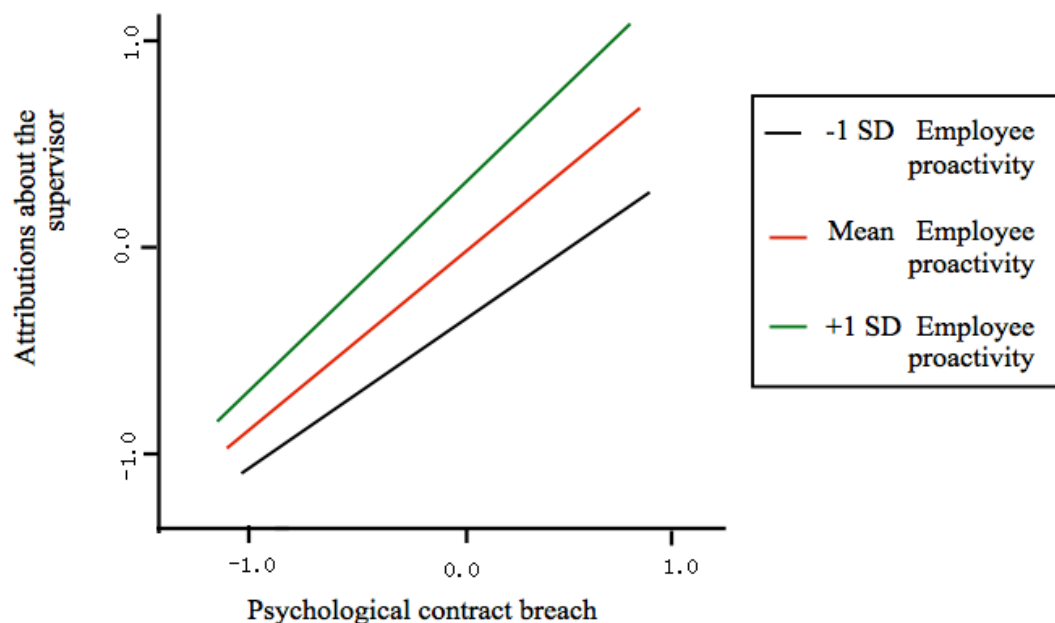


Figure 9.26 Interaction between Psychological Contract Breach and Employee Proactivity on Attributions about the Supervisor

In general, individual differences (i.e., individualism/collectivism and employee proactivity) play a weak moderating role in the relationship between psychological

contract breach and employee attributions. The next section will report the results of the moderating role of individual differences in the relationship between five psychological contract breach dimensions and employee attributions.

## 9.10 Individual Differences Analysis Using the Five Dimensions of Psychological Contract Breach

This study then applied the first-order five factors of psychological contract breach (i.e., Work organisation, Wages and payment system, Security and flexibility, Skills and development, and Engagement and representation) to test the individual differences model (Figure 6.4) and to examine the moderating role of individual differences in the relationship between the five dimensions of psychological contract breach and employee attributions. The reason for conducting the supplemental analyses is to identify whether the moderation results of using five psychological contract breach dimensions are different from the moderation results of using global psychological contract breach.

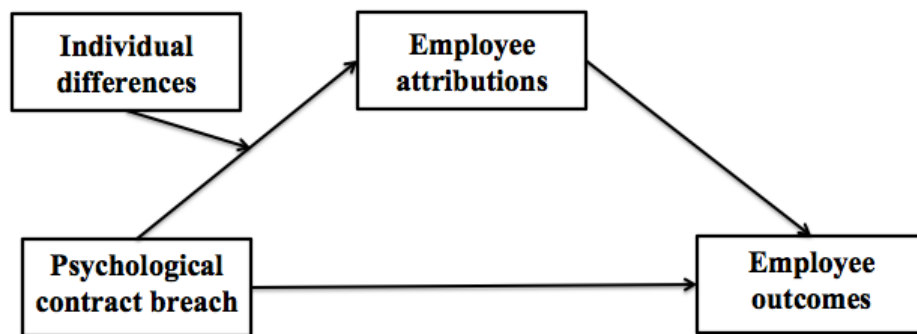


Figure 6.4 Individual Differences Model

Table 9.21 shows the summary of the interaction effects of individual differences when applying five psychological contract breach dimensions. The numbers in Table 9.21 indicate the relationships between how many psychological contract breach dimensions and employee attributions in which individual differences play a moderating role. For

instance, the number 5 means that employee proactivity moderates the relationships between all the five psychological contract breach dimensions and attributions about the supervisor.

Results show that individualism/collectivism moderate the relationships between security and flexibility breach, skills and development breach, engagement and representation breach and attributions about the supervisor. Individualism/collectivism moderate the relationship between all the five psychological contract breach except security and flexibility breach and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationships between work organisation breach and security and flexibility breach and employee internal attributions. Employee proactivity moderates the relationship between all the five psychological contract breach dimensions and attributions about the supervisor. Employee proactivity moderates the relationships between wage and payment system breach and security and flexibility breach and attributions outside of the supervisor and the organisation.

By comparing the moderating role of individual differences in the relationship between five psychological contract breach dimensions and employee attributions (Table 9.21) with the moderating role of individual differences in the relationship between global psychological contract breach and employee attributions (Table 9.18), it is shown that employee proactivity plays a little stronger moderating role when applying the five dimensions of psychological contract breach. But the results are more consistent if psychological contract breach is measured as a single entity than separate elements. Moreover, using global psychological contract breach can help to explain general areas of psychological contract breach more concisely. Next, five examples (i.e., one example for each psychological contract breach dimension) will be given. The completed report on the results of the moderating role of individual differences in the relationship between five psychological contract breach dimensions and employee attributions can be found in Appendix IV.

Table 9.21 Moderating Role of Individual Differences in the Relationship between Five Psychological Contract Breach Dimensions and Employee Attributions

	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Individualism /collectivism			3	4
Employee proactivity	2	5		2

Table 9.18 Moderating Role of Individual Differences in the Relationship between Psychological Contract Breach and Employee Attributions

	Employee internal attributions	Attributions about the supervisor	Attributions about the organisation	Attributions outside of the supervisor and the organisation
Individualism /collectivism			X	X
Employee proactivity		X		

**Work organisation breach.** Individualism/collectivism moderate the relationships between work organisation breach and attributions outside of the supervisor and the organisation ( $b = .17$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .10$ ,  $\Delta R^2 = .08$ ). The interaction term explains additional 8% of variance of attributions outside of the supervisor and the organisation. Table 9.22 shows the moderation results. Plotting the interaction (Figure 9.27) shows that the relationship between work organisation breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slope for low collectivism and high individualism ( $-1$  SD,  $t = -.39$ ,  $ns.$ ) is not significant, but for high collectivism and low individualism ( $+1$  SD,  $t = 4.00$ ,  $p < .01$ ) is significant. Thus, when employees report individualism, there is no relationship between work organisation breach and attributions outside of the supervisor and the organisation. When employees report collectivism, the positive

relationship between work organisation breach and attributions outside of the supervisor and the organisation is significant.

Table 9.22 Moderating Role of Individualism/collectivism in the Relationship between Work Organisation Breach and Attributions outside of the Supervisor and the Organisation ( $N = 634$ )

	<b>Attributions outside of the supervisor and the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Work organisation breach	$b = .16^{**}$	$b = .14^{**}$
Individualism/collectivism	$b = -.07$	$b = -.09$
Interaction term		$b = .17^{**}$
$R^2$		.10
$\Delta R^2$		.08

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions except work organisation breach to four employee attributions, from work organisation breach to four employee attributions except attributions outside of the supervisor and the organisation, from employee attributions to employee outcomes, and from five psychological contract breach dimensions to employee outcomes are not shown.

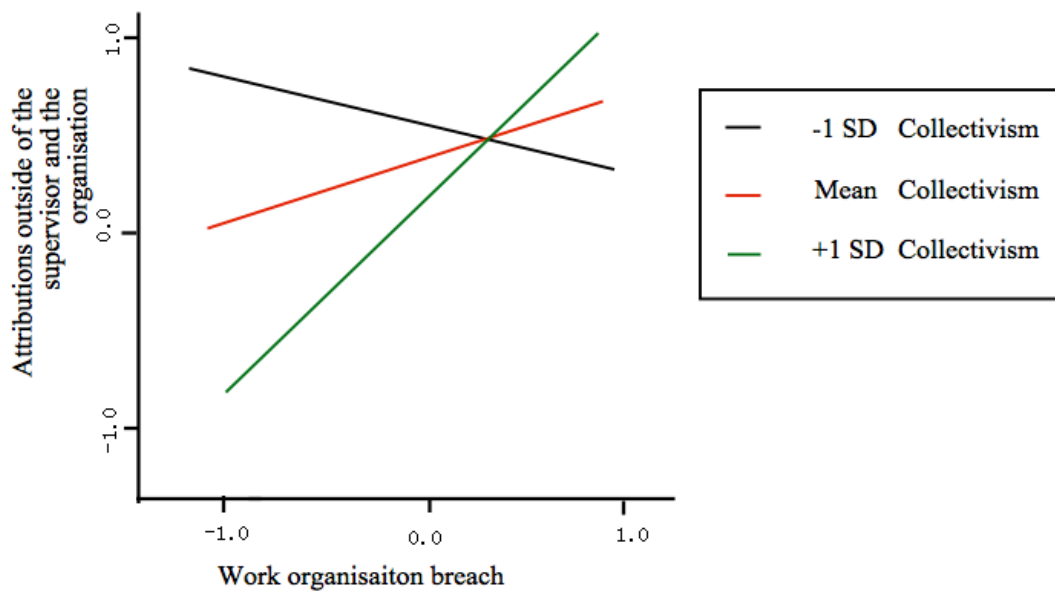


Figure 9.27 Interaction between Work Organisation Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

**Wage and payment system breach.** Individualism/collectivism moderate the relationships between wage and payment system breach and attributions outside of the supervisor and the organisation ( $b = .10$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .05$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of attributions outside of the supervisor and the organisation. Table 9.23 shows the moderation results. Plotting the interaction (Figure 9.28) shows that the relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism (-1 SD,  $t = -1.80$ , *ns.*) and for high collectivism and low individualism (+1 SD,  $t = .60$ , *ns.*) are both non-significant. The region of significance shows that simple slopes are significant when the moderator is above -4.78 and below -1.75. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 3.71 and the standard deviation is .67. The mean value minus two standard deviations equals 2.37, which is not over



the minimum value of the moderator (i.e., 1). Then the slope for low collectivism and high individualism (-2 SD,  $t = -1.98$ ,  $p < .05$ ) is significant, but for high collectivism and low individualism (+2SD,  $t = 1.18$ , *ns.*) is not. Thus, when employees report individualism, there negative relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is significant. When employees report collectivism, there is no significant relationship between wage and payment system breach and attributions outside of the supervisor and the organisation.

Table 9.23 Moderating Role of Individualism/collectivism in the Relationship between Wage and Payment System Breach and Attributions outside of the Supervisor and the Organisation ( $N = 634$ )

	<b>Attributions outside of the supervisor and the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Wage and payment system breach	$b = -.01$	$b = -.05$
Individualism/collectivism	$b = -.07$	$b = -.08$
Interaction term		$b = .10^*$
$R^2$		.05
$\Delta R^2$		.03

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions except wage and payment system breach to four employee attributions, from wage and payment system breach to four employee attributions except attributions outside of the supervisor and the organisation, from employee attributions to employee outcomes, and from five psychological contract breach dimensions to employee outcomes are not shown.

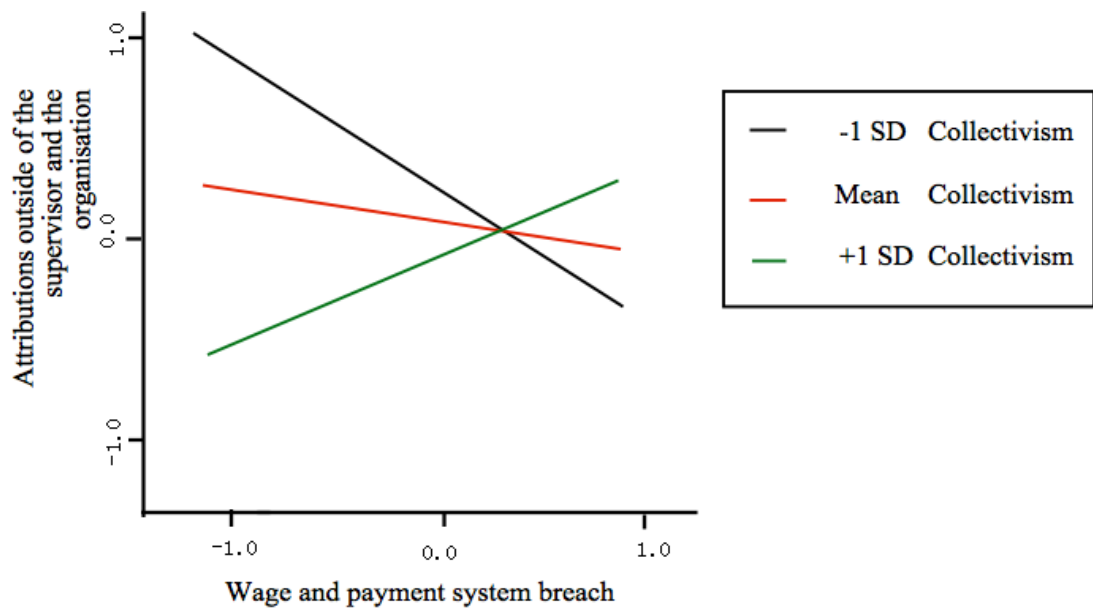


Figure 9.28 Interaction between Wage and Payment System Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

**Security and flexibility breach.** Employee proactivity moderates the relationships between security and flexibility breach and attributions about the supervisor ( $b = .06$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .08$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Table 9.24 shows the moderation results. Plotting the interaction (Figure 9.29) shows that the positive relationship between security and flexibility breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity (-1 SD,  $t = 1.43$ ,  $ns.$ ) is not significant, but for high employee proactivity (+1 SD,  $t = 3.31$ ,  $p < .01$ ) is significant. Thus, when employees report low employee proactivity, there is no relationship between security and flexibility breach and attributions about the supervisor. When employees report high employee proactivity, the positive significant relationship between security and flexibility breach and attributions about the supervisor is significant.

Table 9.24 Moderating Role of Employee Proactivity in the Relationship between Security and Flexibility Breach and Attributions about the Supervisor ( $N = 634$ )

	Attributions about the supervisor	Attributions about the supervisor
Security and flexibility breach	$b = .16^{**}$	$b = .15^*$
Employee proactivity	$b = .08$	$b = .09^*$
Interaction term		$b = .06^{**}$
$R^2$		.08
$\Delta R^2$		.01

Notes:  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions except security and flexibility breach to four employee attributions, from security and flexibility breach to four employee attributions except attributions about the supervisor, from employee attributions to employee outcomes, and from five psychological contract breach dimensions to employee outcomes are not shown.

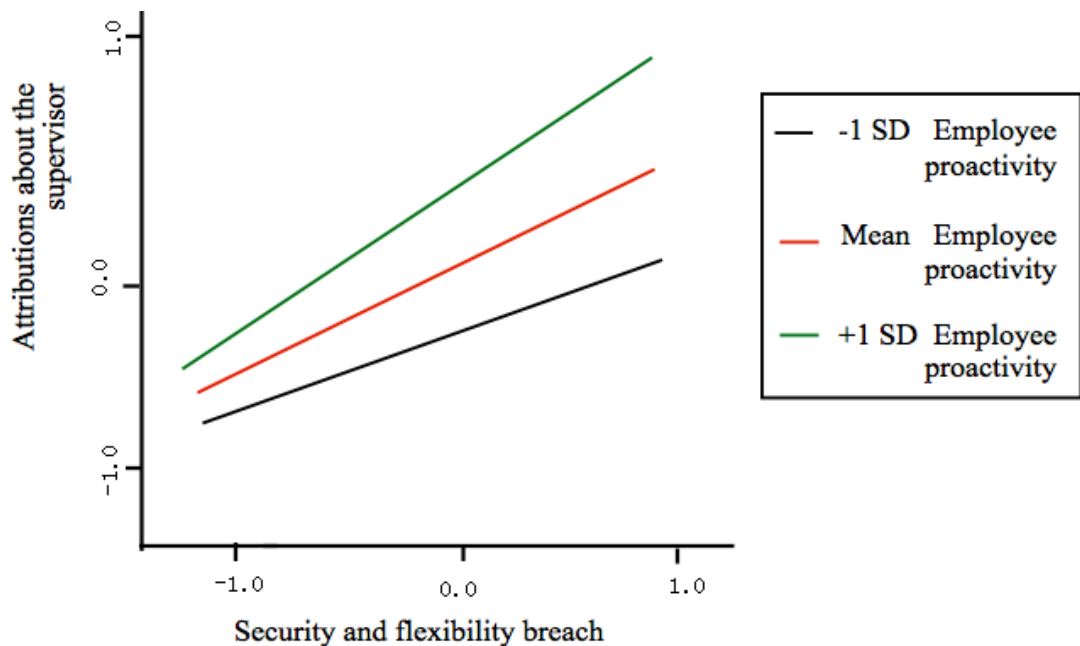


Figure 9.29 Interaction between Security and Flexibility Breach and Employee Proactivity on Attributions about the Supervisor

**Skills and development breach.** Individualism/collectivism moderate the relationships between skills and development breach and attributions outside of the supervisor and

the organisation ( $b = .18$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .14$ ,  $\Delta R^2 = .08$ ). The interaction term explains additional 8% of variance of attributions outside of the supervisor and the organisation. Table 9.25 shows the moderation results. Plotting the interaction (Figure 9.30) shows that the positive relationship between skills and development breach and attributions outside of the supervisor and the organisation is weaker for individualistic employees but is stronger for collectivistic employees.

Simple slope analysis shows that the slope for low collectivism and high individualism ( $-1$  SD,  $t = .41$ ,  $ns.$ ) is not significant, but for high collectivism and low individualism ( $+1$  SD,  $t = 3.35$ ,  $p < .01$ ) is significant. Thus, when employees report individualism, there is no significant relationship between skills and development breach and attributions outside of the supervisor and the organisation. But when employees report collectivism, the positive relationship between skills and development breach and attributions outside of the supervisor and the organisation is significant.

Table 9.25 Moderating Role of Individualism/collectivism in the Relationship between Skills and Development Breach and Attributions outside of the Supervisor and the Organisation ( $N = 634$ )

	<b>Attributions outside of the supervisor and the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Skills and development breach	$b = .15$	$b = .23^*$
Individualism/collectivism	$b = -.07$	$b = -.10$
Interaction term		$b = .18^{**}$
$R^2$		.14
$\Delta R^2$		.08

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions except skills and development breach to four employee attributions, from skills and development breach to four employee attributions except attributions outside of the supervisor and the organisation, from employee attributions to employee outcomes, and from five psychological contract breach dimensions to employee outcomes are not shown.

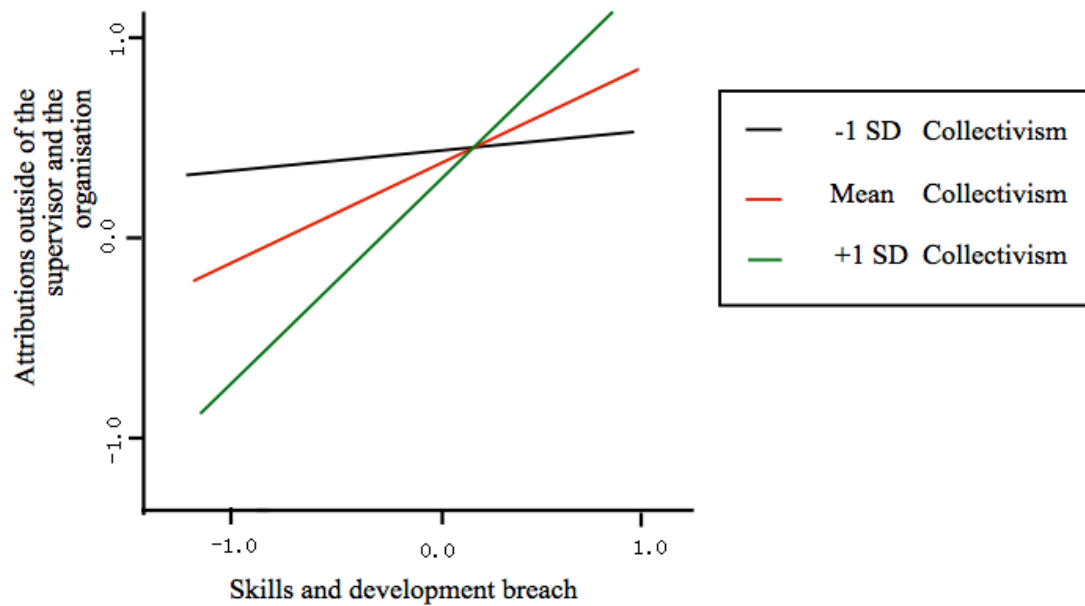


Figure 9.30 Interaction between Skills and Development Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

**Engagement and representation breach.** Employee proactivity moderates the relationships between engagement and representation breach and attributions about the supervisor ( $b = .05$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .02$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Table 9.26 shows the moderation results. Plotting the interaction (Figure 9.31) shows that the positive relationship between engagement and representation breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slopes for both low employee proactivity (-1 SD,  $t = .67$ , *ns.*) and high employee proactivity (+1 SD,  $t = 1.79$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -5.76 or above 1.32. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of +2 SD is located in the region of significance. The mean score of the moderator is 4.27 and the standard deviation is 1.07. The mean value plus two standard deviations equals 6.41, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between engagement and representation

breach and attributions about the supervisor regardless of whether employees are proactive or not.

Table 9.26 Moderating Role of Employee Proactivity in the Relationship between Engagement and Representation Breach and Attributions about the Supervisor ( $N = 634$ )

	Attributions about the supervisor	Attributions about the supervisor
Engagement and representation breach	$b = .10$	$b = .11$
Employee proactivity	$b = .08$	$b = .10^*$
Interaction term		$b = .05^*$
$R^2$		.02
$\Delta R^2$		.01

*Notes:*  $*p < .05$ ,  $**p < .01$ ; paths from five psychological contract breach dimensions except engagement and representation breach to four employee attributions, from engagement and representation breach to four employee attributions except attributions about the supervisor, from employee attributions to employee outcomes, and from five psychological contract breach dimensions to employee outcomes are not shown.

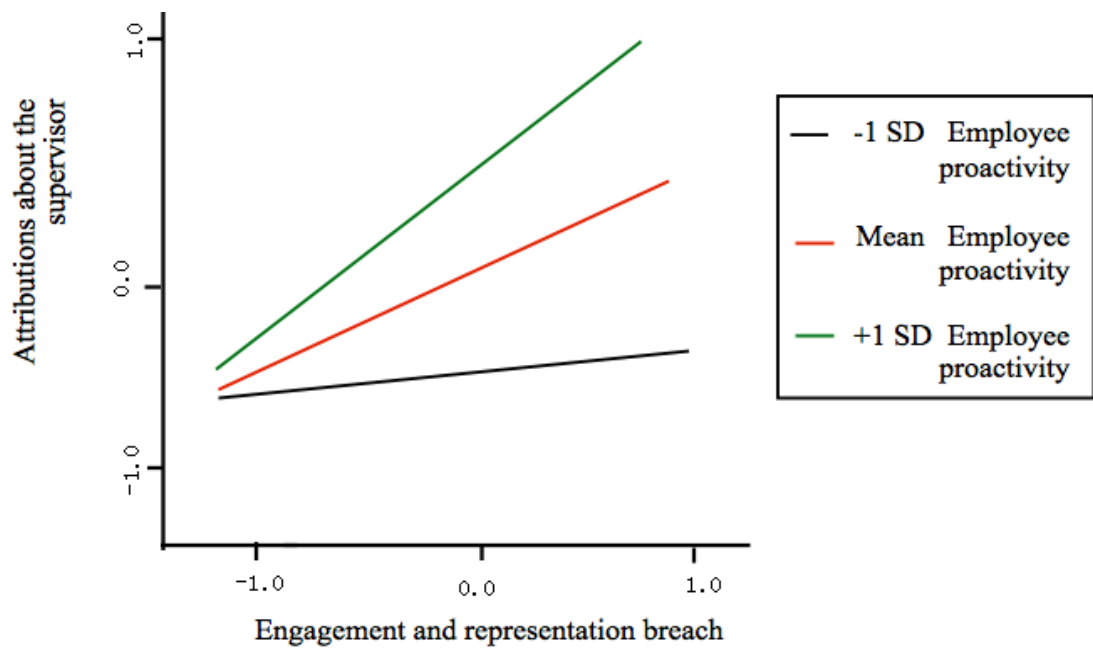


Figure 9.31 Interaction between Engagement and Representation Breach and Employee Proactivity on Attributions about the Supervisor

In general, individualism/collectivism plays a weaker and employee proactivity plays a little stronger moderating role when applying the five dimensions of psychological contract breach. The results of the moderating role of individual differences are more consistent if psychological contract breach is measured as a single entity than separate elements. Moreover, using global psychological contract breach can help to explain general areas of psychological contract breach more concisely.

## 9.11 Chapter Summary

This chapter has reported the structural equation modelling results of study 2. To be more specific, the results of the direct relationships between psychological contract breach and employee outcomes, between psychological contract breach and employee attributions and between employee attributions and employee outcomes have been reported. Based on this, the results of the moderating and the mediating roles of

employee attributions in the relationship between psychological contract breach and employee outcomes have been reported. Finally, the results of the moderating role of individual differences in the relationship between psychological contract breach and employee attributions have been described. Table 9.27 shows the hypotheses of this research and whether they are supported. In the next chapter, these results will be discussed with theories and prior research.



Table 9.27 Overview Table on Hypotheses' Results

<b>Hypotheses</b>	<b>Results</b>
<i>H1.</i> Psychological contract breach is measured by a five-factor model. The five factors are work organisation, wages and payment system, security and flexibility, skills and development, and engagement representation.	Supported
<i>H2.</i> Employee attributions in response to psychological contract breach are measured by a four-factor model. The four factors are employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation.	Supported
<i>H3.</i> Psychological contract breach is negatively related to employee well-being.	Supported
<i>H4.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation moderate the relationship between psychological contract breach and employee well-being.	Partially supported
<i>H5.</i> Psychological contract breach is negatively related to employees' favourable leadership perceptions.	Supported
<i>H6.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation moderate the relationship between psychological contract breach and employees' favourable leadership perceptions.	Partially supported
<i>H7.</i> Psychological contract breach is negatively related to employees' in-role performance and extra-role performance.	Supported
<i>H8.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation moderate the relationships between psychological contract breach and employee in-role performance and extra-role performance.	Partially supported
<i>H9.</i> Psychological contract breach is positively related to employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation.	Partially supported
<i>H10a.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation are negatively related to employee well-being.	Not supported

<b>Hypotheses</b>	<b>Results</b>
<i>H10b.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and employee well-being.	Not supported
<i>H9a.</i> Employee internal attributions, attribution about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation are negatively related to favourable leadership perceptions.	Partially supported
<i>H11b.</i> Employee internal attributions, attribution about the supervisor, attributions about the organisation, and the attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and favourable leadership perceptions.	Partially supported
<i>H12a.</i> Employee internal attributions are positively related to employee in-role performance and extra-role performance.	Not supported
<i>H12b.</i> Attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation are negatively related to in-role performance and extra-role performance.	Partially supported
<i>H12c.</i> Employee internal attributions, attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation mediate the relationship between psychological contract breach and employee performance.	Partially supported
<i>H13.</i> When individualism is high, the relationship between psychological contract breach and employee internal attributions is stronger than when it is low. When collectivism is high, the relationships between psychological contract breach and attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation are stronger than when it is low.	Partially supported
<i>H14.</i> When proactivity is high, the relationship between psychological contract breach and employee internal attributions is weaker than when it is low, and the relationships between psychological contract breach and attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation are stronger than when it is low.	Partially supported

# **Chapter 10 Discussion**

## **10.1 Introduction**

This chapter will describe the overview of the current research at first. Then the contributions of the research will be discussed from three aspects, which are theoretical aspect, methodological aspect, and practical aspect. The limitations of the current research and recommendations for future research will be stated in this chapter as well.

## **10.2 Overview of the Research**

Overall, this study responds to a central question regarding what role do employee attributions play in the relationship between psychological contract breach and employee outcomes (i.e., employee well-being, leadership perceptions and performance). As one key construct of the psychological contract literature, psychological contract breach is a subjective experience that is based on an individual's perception that another party has failed to realise the obligations that have been promised (Robinson, 1996). Psychological contract breach is worth studying because prior research has shown that psychological contract breach can lead to negative effects on both employees' attitudes and behaviours (i.e., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000, Zhao, et al., 2007). Research has shown that the effects of psychological contract breach on employee consequences vary across individuals (Robinson & Rousseau, 1994; Bal, et al., 2008). This suggests that employees react differently to the perceptions of psychological contract breach. There is a need for a better understanding of processes by which psychological contract breach affects employee outcomes.

Attribution theory has been proposed as a means of helping to understand individual differences in reactions to psychological contract breach. According to Campbell and Swift (2006), attribution theory proposes that people make causal explanations for events that they have experienced, and their future behaviours and attitudes can be influenced by these explanations. Hastie (1984) proposed that unexpected events generate more attributional activities than expected events. In addition, compared with positive events, negative events tend to generate more attributional activities (Peeters & Czapinski, 1990). As both an unexpected and negative event for employees, psychological contract breach may then stimulate more employee attributions. But little research has examined the role of employee attributions in the process of psychological contract breach affecting employee outcomes. Therefore, the first aim of this research is to explore the role of employee attributions in the relationship between psychological contract breach and employee outcomes.

People make different causal attributions in response to psychological contract breach. The reasons why people make different causal explanations in response to psychological contract breach need better understanding. The employee's individualism/collectivism and proactivity may help to explain the reasons, but little research has explored the roles of the employee's individualism/collectivism and proactivity in the relationship between psychological contract breach and employee attributions. Therefore, this research is aimed to identify whether and how the employee's individualism/collectivism and proactivity influence the relationship between psychological contract breach and the employee's attributions.

In terms of the effects of psychological contract breach, most research on psychological contract breach has examined its effects on employee performance and has shown that psychological contract breach is negatively related to the employee's performance (e.g., Turnley, et al., 2003; Zhao, et al., 2007; Restubog, et al., 2007; Suazo, 2009; Bal, et al., 2010). However, little research has examined this negative relationship in a non-Western context. Thus, this research is aimed to explore the relationship between psychological contract breach and employee performance in China.

Although research has shown that psychological contract breach can not only negatively affect the employee's behaviours, such as in-role performance and

organisational citizenship behaviours, but also negatively influence the employee's attitudes, like the employee's organisational commitment, trust and job satisfaction (i.e., Rousseau & Anton, 1988; Cavanaugh & Noe, 1999; Coyle-Shapiro & Kessler, 2000; Lo & Aryee, 2003), little research has examined the employee's well-being and leadership perceptions responses to the psychological contract breach. This research is aimed to identify the effects of psychological contract breach on employee well-being and leadership perceptions. The overall model of this research is shown in Figure 10.1. The following sections will discuss the contributions of the research based on the research overview.

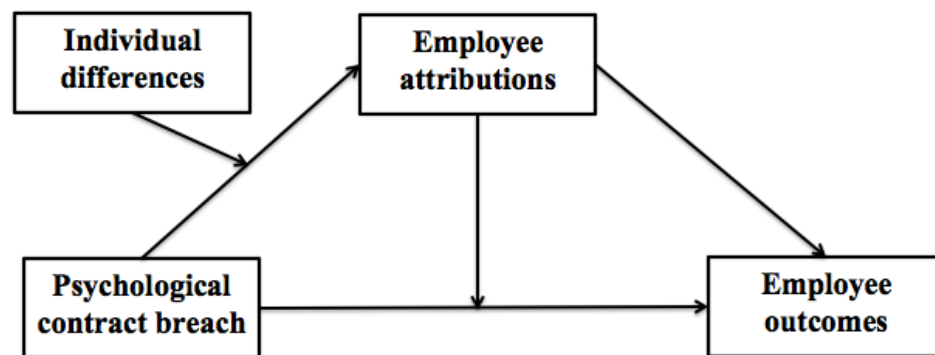


Figure 10.1 Overall Model

### 10.3 Theoretical Contributions

This research mainly has four theoretical contributions, which are developing and testing a model of psychological contract breach and employee attributions, extending the understanding of the relationship between psychological contract breach and employee attributions, extending the criterion space of psychological contract breach and employee attributions, and developing a more specific understanding of how employee attributions shape the effects of psychological contract breach. This section will discuss the four contributions in detail. In addition, the moderating role of individual differences in the relationship between psychological contract breach and employee attributions will be discussed in this section.

The thesis will focus on global psychological contract breach to discuss theoretical contributions. This is because results are more consistent if psychological contract breach is measured as a single entity than separate elements (i.e., work organisation, wage and payment system, security and flexibility, skills and development and engagement and representation). The research suggests that global psychological contract breach plays a more important role in understanding employees' responds to psychological contract breach. No matter from which dimension a breach comes, or even a minor breach, the employee is likely to perceive a global psychological contract breach.

### **10.3.1 Developing and Testing A Model of Psychological Contract Breach and Employee Attributions**

This research has created, developed and tested a model of psychological contract breach and employee attributions, which is shown in Figure 9.1. In this model, psychological contract breach is related to employee outcomes, and employee attributions moderate the relationship between psychological contract breach and employees outcomes. This model provides the first test of the role of employee attributions in the relationship between psychological contract breach and employee outcomes, which responds to a question regarding why employees react to psychological contract breach differently. This model brings to light the need to consider employee attributions in understanding the negative effects of psychological contract breach on employee outcomes. Integrating attribution theory into psychological contract breach theory in this way, which has been rarely attempted, extends existing knowledge on psychological contracts, expands the boundary conditions of psychological contract theory, and further contributes to the development of both the psychological contract literature and the attribution literature. This model also contributes to obtaining a better understanding of the criterion space of psychological contract breach.

### **10.3.2 Extending the Understanding of the Relationship between Psychological Contract Breach and Employee Attributions**

This study extends prior research on the employee attributions of psychological contract breach by examining the employee internal and external attributions of psychological contract breach. This study also contributes to the development of both the psychological contract literature and the attribution theory literature by suggesting that employees make causal explanations when experiencing psychological contract breach. The content and types of the employee attributions of psychological contract breach have been understood better by conducting this research.

Based on Heider's (1958) attribution theory, four dimensions of the employee attributions of psychological contract breach have been identified, which are employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of supervisor and organisation. Psychological contract breach has been found to be negatively related to employee internal attributions, which suggests that when psychological contract breach occurs, employees do not attribute the breach to themselves. A plausible reason is that how people make causal explanations to negative events is influenced by self-serving bias. Self-serving bias is defined as the tendency that the person may attribute success to his or her own characteristics or effort while attributing failure to other people or to external causes (Zuckerman, 1979). Empirical studies have demonstrated the existence of the self-serving bias (i.e., Islam & Hewstone, 1993; Taylor & Jaggi, 1974; Van Boven, Kamada & Gilovich, 1999). For instance, by conducting two experiments, Arkin, Appelman & Burger (1980) have shown that individuals perceive less personal responsibilities for failure than for success. As a negative event, employees attribute psychological contract breach less to themselves and more to other people's factors or external causes.

Results show that psychological contract breach is positively related to attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation. The findings support the ideas that unexpected

negative events tend to generate attributions (Hastie, 1984; Peeters & Czapinski, 1990). In addition, the findings also support the idea that when people suffer a loss, they usually seek the causal explanations for why the loss occurs (Frankl, 1969). When psychological contract breach occurs, employees may perceive that they have not received all the conditions to which they are entitled and may identify that there is a loss. As a result, employees make attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation for psychological contract breach except employee internal attributions because of the self-serving bias.

In general, this study extends the understanding of the relationship between psychological contract breach and employee attributions. Previous research has identified three attributions of psychological contract breach, which are reneging, disruption, and incongruence (Rousseau, 1995; Morrison & Robinson, 1997). But the three specific attributions proposed by Rousseau (1995) and Morrison and Robinson (1997) do not cover key dimensions of employee attributions. This study has found and investigated four key dimensions of the employee attributions of psychological contract breach. The research provides a more comprehensive understanding of the content and types of employee attributions, which extends prior research on the employee attributions of psychological contract breach. By identifying the employee attributions of psychological contract breach, this research also contributes to the development of both the psychological contract literature and the attribution theory literature.

### **10.3.3 Extending the Criterion Space of Psychological Contract Breach and Employee Attributions**

By exploring the influence of psychological contract breach on employee outcomes, this research has shown that psychological contract breach has multiple outcomes and a wide range of effects on employee outcomes. The introduction chapter identified a gap that little research has examined the effects of psychological contract breach on employee well-being and leadership perceptions. This study has addressed on this gap and examined the relationships between psychological contract breach and employee



well-being and leadership perceptions. The integration of well-being theory, leadership theory and psychological contract theory makes a contribution to filling the gap in the literature. This research shows the need in the field of psychological contract breach to address employee well-being and leadership perceptions because of the results that the breach has negative effects on employee well-being and favourable leadership perceptions. The research helps to get a more comprehensive understanding of the effects of psychological contract breach and extends the criterion space of psychological contract breach.

In the introduction chapter, the fact that little research has tested the effect of psychological contract breach on employee performance in a non-Western context has been identified. This current research has examined the relationship between psychological contract breach and employee performance in a Chinese context. The finding that psychological contract breach has a negative effect on employee performance supports previous empirical evidence on the performance outcome of psychological contract breach (e.g., Bal, et al., 2010; Coyle-Shapiro, et al., 2000; Lester, et al., 2002), and contributes to the generalisation of the effects of psychological contract breach on employee performance.

In addition, this research has examined the relationship between employee attributions and employee outcomes, which helps to extend the criterion space of employee attributions. The research also extends prior research on employee attributions and contributes to the development of attribution theory. The following sections will discuss the effects of psychological contract breach and employee attributions (i.e., employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation) on employee outcomes (i.e., employee well-being, leadership perceptions and performance) in detail.

### **Direct Effects of Psychological Contract Breach on Employee Outcomes**

Psychological contract breach has a negative effect on employee well-being, which is supported by the result that psychological contract breach is negatively related to employee well-being. The result is agreed with cognitive dissonance theory, which

argues that people experience a psychological state of discomfort and tension when holding two or more contradictory beliefs in their minds (Festinger, 1957; Shultz & Lepper, 1996). Prior research has shown that the experience of cognitive dissonance leads to the increase of people's negative feelings (Elliot & Devine, 1994; Harmon-Jones, 2000). In an organisational context, employees have the belief that their psychological contracts should be fulfilled. When psychological contract breach occurs, there are two contradictory beliefs in the employees' minds. The experience of cognitive dissonance then reduces the employees' well-being (Burroughs & Rindfleisch, 2002).

The study found that psychological contract breach is negatively related to employees' favourable leadership perceptions, which suggests that people have less favourable leadership perceptions when psychological contract breach occurs. Cognitive dissonance theory can help to explain the negative relationship between psychological contract breach and favourable leadership perceptions as well. When people have two contradictory beliefs in their minds, cognitive dissonance theory indicates that people engage in reducing the dissonance (Festinger, 1957; Shultz & Lepper, 1996). One way to reduce cognitive dissonance is to deny the former belief that conflicts with the existing belief (Festinger, 1957). Prior research has found that people reduce cognitive dissonance through changing their former beliefs to seek for consistency with the recent ones (Harmon-Jones, 2004). In an organisational context, employees believe that their psychological contracts should be fulfilled and have favourable leadership perceptions in terms of psychological contract fulfilment. When psychological contract breach occurs, the employees experience cognitive dissonance. In order to reduce the cognitive dissonance, the employees reduce the former favourable leadership perceptions. The result also supports upward feedback concept. According to Bernardin and Ekatty (1987), upward feedback refers to employees rating perceptions of their supervisors' behaviours. Atwater, Roush and Fischthal (1995) indicated that employees are the direct targets of supervisors' behaviours; thus, employees evaluate and perceive their supervisors' leadership and give feedback to their supervisors based on their experiences. When experiencing psychological contract breach, employees have less favourable leadership perceptions.

The study shows that psychological contract breach is negatively related to employee

performance, which supports previous empirical studies on the relationship between psychological contract breach and employee performance (e.g., Bal, et al., 2010; Coyle-Shapiro, et al., 2000; Lester, et al., 2002). Meanwhile, prior research has examined the relationship between psychological contract breach and employee performance in a Western context (e.g., Bal, et al., 2010; Coyle-Shapiro, et al., 2000; Lester, et al., 2002), the current research develops the generalisation of prior research's results. The result of the current research that employees reduce their performance when experiencing psychological contract breach supports social exchange theory. Social exchange theory indicates that one party expects something in return after doing a favour to another party (Blau, 1964). There is a motivation for the individual to seek a balanced exchange relationship with another party (Homans, 1961). When psychological contract breach occurs, employees may identify that there is an unbalanced exchange relationship between them and the supervisor. In order to restore the balance in the relationship, the employees may refuse to fulfil his or her obligations (Zhao, et al., 2007) and make fewer contributions to the organisation. As the employee's obligations and the resources of exchange with the organisation, the employees' in-role performance and extra-role performance are likely to decline.

In general, this research contributes to the development of psychological contract breach literature by exploring the influence of psychological contract breach on employee well-being, leadership perceptions and performance, and helps to get a more comprehensive understanding of the effects of psychological contract breach. This research highlights the importance of addressing employee well-being and leadership perceptions because psychological contract breach has negative effects on the two employee outcomes. The effects of psychological contract breach on employee performance in this research supports previous empirical studies (e.g., Bal, et al., 2010; Coyle-Shapiro, et al., 2000; Lester, et al., 2002) and contributes to the generalisation of the effect of psychological contract breach on employee performance. The research contributes to enriching existing knowledge on the employee outcomes of psychological contract breach and extending the criterion space of psychological contract breach.

### **Direct Effects of Employee Attributions on Employee Outcomes**

Employee internal attributions are found to be positively related to employee well-being. This may be because when the employees perceive that psychological contract breach is caused by their own fault, they may decide to try their best to handle their own factors in order to fulfil their psychological contracts in the future. The employees then may feel determined and inspired. Thus, employee internal attributions are positively related to employee well-being. Attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation are not significantly related to employee well-being. There may be other factors play a more important role than employee attributions in deciding employee well-being.

This research has found that attributions about the supervisor are negatively related to favourable leadership perceptions, and employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation are positively related to employees' favourable leadership perceptions. Implicit leadership theory can help to explain the effect of attributions about the supervisor on leadership perceptions. Implicit leadership theory indicates that the employee has implicit assumptions and expectations on the supervisor's traits, skills, characteristics, and qualities (Forsyth, 2009). The employee applies the assumptions and expectations to form a perception of the supervisor's leadership (Epitropaki & Martin, 2005). When a discrepancy between the employee's assumption and an actual observation is identified, the employee changes his or her leadership perception (Epitropaki & Martin, 2005).

In an organisational context, employees may expect and assume that the supervisor possesses effective leadership skills and that the supervisor will put forward enough effort to fulfil the employees' psychological contract. When psychological contract breach occurs, attributing the breach to the supervisor's fault can make the employees identify a discrepancy between their expectations and observations. As a result, the employees reduce their favourable leadership perceptions. In addition, employees generate favourable leadership perceptions when they attribute psychological contract breach to their own factors, the organisation's factors or the factors outside of the supervisor's and the organisation's control. A plausible reason is that in these situations, the employees do not blame the supervisor or perceive that the supervisor's ineffective

leadership caused the psychological contract breach.

The idea that employee attributions have an impact on in-role performance is supported by the results that attributions about the supervisor are negatively related to in-role performance and attributions about the organisation are positively related to in-role performance. Expectancy theory can help to explain the effects of attributions about the supervisor and attributions about the organisation on employee in-role performance. Expectancy theory refers to the explanations of people's behaviour in choice situations (Kukla, 1972; Tolman, 1932; Lewin, 1935; Rotter, 195). Expectancy theory indicates that the reason why people decide to behave in a certain way is because they are motivated by the expected outcome of this behaviour when choosing this behaviour from a set of behaviours (Oliver, 1974).

When psychological contract breach occurs, the employees are confronted with a set of alternative behaviours in terms of in-role performance, such as increasing, maintaining, or reducing in-role performance. Each of the above behaviours is predicated to lead to a possible outcome. When employees attribute psychological contract breach to the supervisor's fault, the employees may identify that the supervisor has not fulfil his or her obligations and there is an unbalanced exchange relationship between them and the supervisor. The employees then expect to restore the balance in the exchange relationship between them and the supervisor. Motivated by the expectation, the employees choose to reduce in-role performance to less fulfil their obligations. When employees attribute psychological contract breach to attributions about the organisation, the employees may expect the fulfilment of psychological contracts in the future. Thus, they may do what they can, like increasing in-role performance, to show their contributions in order to change the organisation's mind and minimise the organisation's factors in psychological contract breach. Employee internal attributions and attributions outside of the supervisor and the organisation are not significantly related to in-role performance.

In terms of extra-role performance, results show that none of the four employee attributions is significantly related to extra-role performance. A plausible reason is that employee attributions can influence the employees' leadership perceptions, but there may be other factors play a more important role than employee attributions in deciding

employee performance.

In general, by examining the relationship between employee attributions and employee outcomes, this research helps to extend the criterion space of employee attributions. This research also extends prior research on employee attributions and contributes to the development of attribution theory.

#### **10.3.4 Moderating and Mediating Roles of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Outcomes**

The introduction chapter identified a gap in the psychological contract breach literature that little research has examined the role of employee attributions in the relationship between psychological contract breach and employee outcomes. This study has addressed this gap and examined the role of employee attributions in the relationship between psychological contract breach and employee outcomes by testing two competing models (i.e. moderation model and mediation model). The research develops a more specific understanding of how employee attributions shape the effects of psychological contract breach. This study shows the need in the field of psychological contract breach to address the employee attributions of the breach. The results suggest that employee attributions do indeed help to explain why people react differently to the perceptions of psychological contract breach.

The central message that emerges from this study is that employee attributions are more likely to play a moderating role than a mediating role in the relationship between psychological contract breach and employee outcomes. To be more specific, employee attributions tend to play a moderating role in the relationships between psychological contract breach and employee well-being and performance, but are more likely to play a mediating role in the relationship between psychological contract breach and leadership perceptions. Thus, the research indicates that the role of employee attributions in the relationship between psychological contract breach and employee

outcomes is complex. The following sections will discuss the findings in detail.

### **Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Well-being**

By comparing the moderation model with the mediation model, the research found that employee attributions are more likely to play a moderating role than a mediating role in the relationship between psychological contract breach and employee well-being. The idea that employee attributions moderate the relationship between psychological contract breach and employee well-being is supported by the results that attributions about the supervisor and attributions about the organisation moderate the negative relationship between psychological contract breach and employee well-being. Attributions about the supervisor and attributions about the organisation weaken the negative relationship between psychological contract breach and employee well-being. Adding new cognitions that are consistent with the latter belief in two conflict beliefs can reduce cognitive dissonance (Pittman, 1975). From employees' perspectives, attributing psychological contract breach to the supervisor's factors or the organisation's factors may be new cognitions that are consistent with the perception of the breach. As a result, when psychological contract breach occurs, employees' experience of cognitive dissonance may be weaker when making attributions about the supervisor or attributions about the organisation, thereby reducing the strength of the negative relationship between psychological contract breach and employee well-being.

Another issue should be noticed is that when psychological contract breach is high, there is no big difference in employee well-being no matter whether the employees attribute to the organisation or not. This may be because the employees are influenced a lot by the latter belief that their psychological contracts are not fulfilled when the psychological contract breach is high. No matter whether their former belief that their psychological contracts should be realised is affected by the attributions about the organisation, the employees' experience of cognitive dissonance is strong. Thus, attributions about the organisation do not play an obvious moderating role in the relationship between psychological contract breach and employee well-being, and the employees reduce their well-being no matter whether they attribute psychological contract breach to the organisation or not.

The research did not find the expected moderating effects of employee internal attributions and attributions outside of the supervisor and the organisation in the negative relationship between psychological contract breach and employee well-being. A plausible reason is that employees do not regard their internal factors or the factors outside of the supervisor's and the organisation's control as factors that can influence their cognitive dissonance when psychological contract breach occurs. The employees may experience the same two conflictive beliefs no matter whether they blame the psychological contract breach to themselves or the factors beyond the supervisor's and the organisation's control. As a result, the negative relationship between psychological contract breach and employee well-being is not affected by employee internal attributions or attributions outside of the supervisor and the organisation.

In terms of the mediation model, the research found that employee attributions do not mediate the relationship between psychological contract breach and employee well-being, which suggests that employee attributions cannot help to identify or clarify the nature of the negative relationship between psychological contract breach and employee well-being. A plausible reason is that employee attributions can influence the negative relationship between psychological contract breach and employee well-being, but other factors rather than employee attributions help to govern the mechanism of the breach affecting employee well-being. In sum, the employee attributions tend to moderate rather than mediate the relationship between psychological contract breach and employee well-being.

### **Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Leadership Perceptions**

Results show that attributions about the supervisor, attributions about the organisation and employee internal attributions mediate the relationship between psychological contract breach and leadership perceptions. As discussed in above sections, unexpected negative events tend to generate attributions (Hastie, 1984; Peeters & Czapinski, 1990), and implicit leadership theory can help to explain the effect of attributions on leadership perceptions. When psychological contract breach occurs, attributing the breach to the supervisor's fault can make the employees identify a discrepancy between



their expectations and observations in terms of leadership. As a result, the employees reduce their favourable leadership perceptions. On the contrary, employees generate favourable leadership perceptions when they attribute psychological contract breach to their own fault or the organisation's fault, although the increase does not change the negative nature of the relationship between psychological contract breach and favourable leadership perceptions.

This study found that attributions outside of the supervisor and the organisation do not mediate the relationship between psychological contract breach and leadership perceptions. This result suggests that attributions beyond of the supervisor's and the organisation's control do not help to identify or clarify the nature of the relationship between psychological contract breach and leadership perceptions.

In terms of the moderating role of employee attributions in the relationship between psychological contract breach and leadership perceptions, the research highly expected that attributions about the supervisor and attributions about the organisation moderate the relationship between psychological contract breach and leadership perceptions. However, the research did not find the expected moderating effects of attributions about the supervisor and attributions about the organisation in that relationship. Attributions about the supervisor and attributions about the organisation do not bring new information for the employees to perceive a different cognitive dissonance level. A plausible reason is that attributions about the supervisor and attributions about the organisation play a mediating role rather than a moderating role in the relationship between psychological contract breach and leadership perceptions.

The research found that employee internal attributions and attributions outside of the supervisor and the organisation moderate the negative relationship between psychological contract breach and favourable leadership perceptions. When employees attribute psychological contract breach to themselves or the factors outside of the supervisor's and the organisation's control, the negative relationship between psychological contract breach and favourable leadership perceptions is weaker. The findings support the idea that cognitive dissonance is less when the employees attribute psychological contract breach to their own factors or the factors outside of the supervisor's and the organisation's control. Because of the less cognitive dissonance,

the employees deny their former favourable leadership perceptions less.

In sum, the results suggest that employee attributions play an important role in governing the relationship between psychological contract breach and leadership perceptions. Employee attributions are more likely to play a mediating role than a moderating in the relationship between psychological contract breach and leadership perceptions.

### **Role of Employee Attributions in the Relationship between Psychological Contract Breach and Employee Performance**

The research found that employee attributions are more likely to play a moderating role than a mediating role in the relationship between psychological contract breach and employee performance. The idea that employee attributions play a moderating role in the relationship between psychological contract breach and employee performance is supported by the results that employee internal attributions, attributions about the supervisor and attributions about the organisation moderate the negative relationship between psychological contract breach and employee performance. Employee internal attributions and attributions about the organisation weaken the negative relationship between psychological contract breach and in-role performance. While, attributions about the supervisor strengthen the negative relationship between psychological contract breach and in-role performance. As discussed in the above section, social exchange theory (Blau, 1964) can help to explain the direct relationship between psychological contract breach and employee performance. When employees attribute psychological contract breach to their own fault or the organisation's factors, the employees may recognise that the social exchange between them and the supervisor is more balanced because the employees may perceive that they also failed to realise their obligations or the supervisor owe them less. In these cases, the negative relationship between psychological contract breach and in-role performance is weaker.

On the contrary, when employees attribute psychological contract breach to the supervisor's fault, the employees may perceive a more unbalanced social exchange relationship with the supervisor because the employees believe that the supervisor did not provide promised input or fulfil promised obligations. As a result, the employees

reduce more their in-role performance in order to restore the balance in the exchange relationship with the supervisor. This result opposes the in-role performance finding in terms of the moderator role of attributions about the organisation (i.e., the negative relationship between psychological contract breach and in-role performance is weaker when employees attribute the breach to the organisation's factors). The results suggest that although the supervisor is the representative of the organisation, employees differentiate between attributions about the supervisor and attributions about the organisation.

In terms of extra-role performance, the study has found that high employee internal attributions strengthen the negative relationship between psychological contract breach and extra-role performance. This finding opposes the in-role performance finding in terms of the moderator role of employee internal attribution (i.e., high employee internal attributions weaken the negative relationship between psychological contract breach and in-role performance), which is different from the hypothesis. The differences between in-role performance and extra-role performance may help to explain this. In-role performance is the core task performance (Katz & Kahn, 1978) that is specified in the employee's job description and is recognised by the company's formal reward system. Unlike in-role performance, extra-role performance is related to the employee's behaviour that benefits the organisation and is not specified in the employee's job description or the company's formal reward system (Organ, 1988). When employees attribute psychological contract breach to themselves, they may perceive that they failed to realise their obligations. In order to reduce the further possible negative effects of their nonfulfillment (e.g., more psychological contract breach or even dismissal), the employees may put forward more effort to try to maintain their core task performance, which is linked with their rewards (i.e., in-role performance). As a result, the employees may make less effort to achieve extra-role performance that is outside of the employees' job descriptions. Thus, when employees attribute psychological contract breach to themselves, they put less effort into extra-role task activities.

This study also shows that although employees have lower extra-role performance when experiencing psychological contract breach no matter whether they blame the supervisor, the negative relationship between psychological contract breach and

extra-role performance is stronger when employees do not blame the supervisor. This may be because in this situation, the employees attribute the psychological contract breach to their own fault (i.e., employee internal attributions). As explained above, when employees attribute psychological contract breach to themselves, they may put forward more effort to try to keep their in-role performance and put less effort into extra-role task activities.

The research found that attributions outside of the supervisor and the organisation do not moderate the relationship between psychological contract breach and in-role performance or between psychological contract breach and extra-role performance. A plausible reason is that the employees do not perceive the attributions outside of the supervisor and the organisation as one of the factors that can influence the unbalanced exchange relationship between them and the supervisor when psychological contract breach occurs. No matter whether psychological contract breach is caused by the factors outside of the supervisor and the organisation, the employees are likely to perceive that in fact the supervisor failed to realise his or her obligations. As a result, the employees reduce their performance in response to the unbalanced social exchange relationship between them and the supervisor.

In terms of the mediation model, the study found that attributions about the supervisor and attributions about the organisation mediate the relationship between psychological contract breach and in-role performance. The results suggest that attributions about the supervisor and attributions about the organisation play a role in governing the relationship between psychological contract breach and in-role performance and help to explain why psychological contract breach leads to the reduction of in-role performance. When psychological contract breach occurs, employees tend to attribute the breach to the supervisor's or the organisation's fault, which then lead to the negative effect on the employees' in-role performance.

Results show that employee internal attributions and attributions outside of the supervisor and the organisation do not mediate the relationship between psychological contract breach and in-role performance. This is because as discussed in the above section, employee internal attributions and attributions outside of the supervisor and the organisation are not significantly related to in-role performance.

In terms of extra-role performance, results show that none of the four employee attributions mediates the relationship between psychological contract breach and extra-role performance. The result suggests that employee attributions cannot help to explain why psychological contract breach leads to the negative effect on extra-role performance. None of the four types of employee attributions is significantly related to extra-role performance. Therefore, comparing with a mediating role, employee attributions are likely to play a moderating role in the relationship between psychological contract breach and employee performance.

In sum, employee attributions partially mediate the relationship between psychological contract breach and leadership perceptions, but generally do not play a mediating role in the relationship between psychological and other employee outcomes (i.e., employee performance and employee well-being). Thus, the central message that emerges from this study is that employee attributions are more likely to play a moderating role than a mediating role in the relationship between psychological contract breach and employee outcomes. The introduction chapter identified a gap that little research has examined the role of employee attributions in the relationship between psychological contract breach and employee outcomes. This study has addressed this gap and examined the role of employee attributions in the relationship between psychological contract breach and employee outcomes by competing two models (i.e., moderation model and mediation model). This study provides the first test of the moderating and mediating roles of employee internal attributions and external attributions in the relationship between psychological contract breach and employee outcomes, which extends the prior research on psychological contract breach. The research develops a more specific understanding of how employee attributions shape the effects of psychological contract breach. The results suggest that employee attributions do indeed help to explain why people react differently to the perceptions of psychological contract breach, which highlights the importance of employee attributions in understanding the relationship between psychological contract breach and employee outcomes.

### **10.3.5 Moderating Role of Individual Differences in the Relationship between Psychological Contract Breach and Employee Attributions**

It was hypothesised that individual differences may explain why employees make different causal attributions in response to psychological contract breach. This research provides the first test of the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions to respond to the question regarding why employees attribute psychological contract breach differently.

This study found that individualism/collectivism moderates the relationships between psychological contract breach and attributions about organisation and attributions outside of the supervisor and the organisation, while individualism/collectivism does not moderate the relationships between psychological contract breach and employee internal attributions and attributions about the supervisor. To be more specific, the positive relationships between psychological contract breach and attributions about the organisation and attributions outside of the supervisor and the organisation for collectivistic employees are stronger than for individualistic employees. The results support the idea that people with individualistic background and people with collectivistic background emphasise different attributional explanations of the same event (Landrine & Klonoff, 1992). More specifically, collectivistic people tend to emphasise situational variables and contextual cues, and regard the team, organisational, and social factor rather than the individual factor as a fundamental issue (Selby, 1975). Thus, the collectivist employees make more attributions about the organisation and attributions outside of the supervisor and the organisation for psychological contract breach. While, individualistic people emphasise personal goals and seek for independence (Hui & Triandis, 1986; Triandis, 1989) and stress less on contextual factors. Thus, individualist employees make fewer attributions about the organisation and attributions outside of the supervisor and the organisation for psychological contract breach.

The research found that employee proactivity only moderates the relationship between

psychological contract breach and attributions about the supervisor. To be more specific, the research found that the positive relationship between psychological contract breach and attributions about the supervisor is stronger for employees who have high employee proactivity than employees who have low employee proactivity. This may be because proactive employees tend to believe that their proactive actions can help them to fulfil their obligations in exchange for the fulfilment of their psychological contracts. Thus, when psychological contract breach occurs, proactive employees are more likely to attribute the breach to the other party in the exchange relationship, which is the supervisor.

The study shows that individualism/collectivism do not moderate the relationships between psychological contract breach and employee internal attributions and attributions about the supervisor. Employee proactivity has not been found to moderate the relationships between psychological contract breach and employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation. Thus the support on the idea that individual differences play a moderating role in the relationship between psychological contract breach and employee attributions is weak. A plausible reason is that this study was conducted in China and all participants came from the same collectivistic culture. As a result, the variety between collectivism and individualism and between high proactivity and low proactivity might be weak among the participants. Individual differences have strong significant influence on the relationships between psychological contract breach employee attributions.

In general, this research provides the first test of the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions. Results show that the moderating effect of individual differences is weak in the current research.

To sum up, this research mainly has four theoretical contributions. The first contribution is developing and testing a model of psychological contract breach and employee attributions. The integration of attributions theory into psychological contract breach theory in this way, which has been rarely attempted, extends knowledge on

psychological contract breach and expands the boundary conditions of psychological contract breach theory. Second, this research extends the understanding of the relationship between psychological contract breach and employee attributions. Third, the research extends the criterion space of psychological contract breach and employee attributions. Fourth, by comparing moderation model and mediation model, the research develops a more specific understanding of how employee attributions shape the effects of psychological contract breach.

## **10.4 Methodological Contributions**

This research mainly has two methodological contributions, which are constructing a psychological contract breach measure and constructing a measure on the employee attributions of psychological contract breach. The following sections will discuss these two methodological contributions in detail.

### **10.4.1 Constructing A Measure of Psychological Contract Breach**

Although there are various established measures on testing a psychological contract breach (e.g., Chen, et al., 2008; Lester, Turnley, et al., 2002; Orvis, et al., 2008), the nature of a job is multi-faceted and the psychological contract has a wide range of variables (Kotter, 1973). Thus, the items in the established measures do not cover all key dimensions of a job and list only certain content items of psychological contract breach. To obtain a more comprehensive understanding of psychological contract breach, this research has constructed a new measure to test the breach. Holman and McClelland's (2011) five-dimension classification of job quality has been adopted to construct the measure on psychological contract breach, as it is both parsimonious in terms of the number of dimensions and comprehensive in terms of its coverage. The five key dimensions are work organisation, wages and payment system, security and flexibility, skills and development, engagement and representation (Holman & McClelland, 2011). Based on the five dimensions, this research has constructed a



five-factor model to measure psychological contract breach and helps to provide a measure that is sensitive to all different aspects of a job where psychological contract breach might occur, which contributes to the methodology of the psychological contract breach.

#### **10.4.2 Constructing A Measure of Employee Attributions of Psychological Contract Breach**

The introduction chapter has indicated that little research has explored the employee attributions of psychological contract breach. Rousseau (1995) and Morrison and Robinson (1997) indicated three attributions of psychological contract breach, which are reneging, disruption, and incongruence. But the three specific attributions proposed by Rousseau (1995) and Morrison and Robinson (1997) do not cover all key dimensions of employee attributions. One of the primary questions that individuals address in causal explanations is whether the event is resulted from internal factors or external factors (Heider, 1958). This research has constructed a four-factor measure on the employee attributions of psychological contract breach based on Heider's (1958) attribution theory. The four factors are employee internal attributions and three employee external attributions (i.e., attributions about the supervisor, attributions about the organisation, and attributions outside of the supervisor and the organisation). The new employee attribution measure contributes to better understanding how individuals attribute psychological contract breach differently, and further contributes to the integration of the attribution literature and the psychological contract literature in methodology.

In general, constructing a psychological contract breach measure and a measure on the employee attributions of the breach contributes to the methodology of psychological contract breach and employee attributions. The constructed measure also helps to better understand the multi-faceted nature of both psychological contract breach and employee attributions.

## **10.5 Practical Contributions**

Two practical contributions have been identified, which are identifying psychological contract breach in a non-Western context, and contributing to reducing the occurrence of psychological contract breach and its negative effects. The following sections will describe these two practical contributions in detail.

### **10.5.1 Identifying Psychological Contract Breach in A Non-Western Context**

Most research has explored psychological contract breach in Western contexts and achieved various results. For instance, by doing a survey in United States, Lester, et al. (2002) found that psychological contract breach is positively related to reneging and incongruence and is negatively related to employee commitment and in-role performance. Conway and Briner (2002) found that psychological contract breach has a negative effect on employees' daily moods and emotional reactions. Johnson and O'leary-kelly (2003) found that organisational cynicism mediates the relationships between psychological contract breach and the employee's organisational commitment and job satisfaction. Bal, et al. (2008) found that age moderates the relationships between psychological contract breach and the employee's trust, organisational commitment, and job satisfaction. The younger the employee, the stronger the negative relationship between psychological contract breach and trust and organisational commitment is. The older the employee, the stronger the negative relationship between psychological contract breach and the employee's job satisfaction is.

Few studies were conducted in non-Western contexts to explore psychological contract breach. For instance, Chao, Cheung and Wu (2011) explored the role of employee attributional styles in the relationship between psychological contract breach and counterproductive workplace behaviours. Chao, et al. (2011) developed their hypotheses based on Morrison and Robinson's (1997) three employee attributions of

psychological contract breach, which are reneging, disruption, and incongruence. By conducting a survey with a sample size of 131 in China, Chao, et al. (2011) indicated that psychological contract breach is positively associated with counterproductive workplace behaviours and disruption moderates the relationship between psychological contract breach and counterproductive workplace behaviours. Chen, Tsui and Zhong (2008) examined the moderating role of the employee's traditional value in the relationship between psychological contract breach and employee work-related outcomes (i.e., organisational commitment, organisational citizenship behaviour, and work performance). By doing a survey in China, Chen et al. (2008) found that the more tradition value the employee has, the weaker the negative relationship between psychological contract breach and employee work-related outcomes is. Although few studies explored psychological contract breach in a Chinese context, they did not examine the role of the four key dimensions of employee attributions in the relationship between psychological contract breach and employee outcomes. In addition, those studies did not identify the effects of psychological contract breach on employee well-being and leadership perceptions.

This study has explored psychological contract breach and tested a model of psychological contract breach and employee attributions in a Chinese context. Thus, this research contributes to explaining and confirming psychological contract breach and attribution theories in a non-Western context. This research makes a contribution to identifying psychological contract breach and understanding the role of the four key dimensions of employee attributions in the relationship between psychological contract breach and employee outcomes. In addition, by examining the relationships between psychological contract breach and employee well-being and leadership perceptions, the research helps to get a more comprehensive understanding of the effects of psychological contract breach. Examining the relationship between psychological contract breach and employee performance in a Chinese context can contribute to the generalisation of the effects of psychological contract breach.

The quantitative research and the collected data provide evidence from organisational practices, which can help to make explanations for the extension of existing knowledge on psychological contract breach and the integration of the psychological contract breach theory and the attribution theory. Thus, the practical contributions of this

research include describing, explaining and confirming the theories.

### **10.5.2 Contributing to the Reduction of the Occurrence of Psychological Contract Breach and Its Negative Effects**

This research found that psychological contract breach has negative effects on employee performance, well-being and leadership perceptions. There are practical implications for both the supervisor and the organisation to reduce the occurrence of psychological contract breach and its negative effects. In the supervisor's aspect, as psychological contract breach plays an important role in employee performance, well-being and leadership perceptions, the supervisor should highly value psychological contract breach. The supervisor should show concern for the breach of the employee's psychological contract and should try to improve his or her leadership skills and make enough effort to fulfil the employee's psychological contract. The supervisor can also guide the employee in fulfilling psychological contract and try to manage and handle contextual and environmental factors that may prevent the psychological contract fulfilment. When psychological contract breach occurs, the supervisor should take effort to understand and discuss reasons for psychological contract breach in order to fulfil the employee's psychological contract in the future.

In the organisation's aspect, psychological contract breach should be highly valued by the organisation. The organisation can conduct regular surveys in order to measure whether the employee's current psychological contract has been fulfilled. The organisation should try to fulfil the employee's psychological contract as much as possible in order to result in the positive effects on the employee outcomes. The organisation can improve the current working conditions to better meet the employee's expectations and highlight what has been fulfilled to shape the employee's new perception on psychological contract fulfilment.

In sum, this research contributes to identifying psychological contract breach in a non-Western context. By conducting this study, practical contributions have been suggested on the reduction of the occurrence of psychological contract breach and its

negative effects.

## **10.6 Limitations and Recommendations for Future Research**

The limitations of this study and recommendations for future research can be described from two aspects, which are theoretical and methodological aspects. The following sections will discuss these two aspects in detail.

### **10.6.1 Theoretical Limitations and Recommendations**

This research identifies three theoretical limitations, including the perspective of psychological contract breach, the classification of employee attributions and moderators in the relationship between psychological contract breach and employee attributions. The recommendations for future research have been indicated based on these three theoretical limitations.

#### **A Dual Perspective of Psychological Contract Breach**

This research has examined psychological contract breach from the employee's perspective, while psychological contract breach can be explored from both the supervisor's and the employee's perspectives. As the key issues regarding psychological contract breach include a set of reciprocal obligations (Rousseau, 1989), the supervisor may perceive that the employee has not fulfilled employee obligations. Therefore, both parties can have the belief that fewer expectations have been fulfilled than were promised by the other party. Thus, both the employee and the supervisor may experience a psychological contract breach made by the other party (Chen, et al., 2008). Millward and Brewerton (2000) argued that the wants and offers of both the employee and the supervisor should be taken into consideration when defining the term psychological contract. According to Shore, et al. (2004), examining psychological contract breach from a dual perspective is necessary. In general, most research on

psychological contract breach focused on the employee's perspective (Morrison & Robinson, 1997; Robinson, 1996; Rousseau, 1989). The future research is suggested to highlight a dual perspective and to explore psychological contract breach from both the employee's perspective and the supervisor's perspectives.

### **Classification of Employee Attributions**

This research based on Heider's (1958) attribution theory to classify the employee attributions of psychological contract breach. This is because one of the primary questions that individuals address in causal explanations is whether an event is resulted from internal factors or external factors (Heider, 1958). Heider's contributions on the attribution theory opened the door for subsequent research. There are other core theories in attribution literature, such as Kelley's (1971) covariation and configuration theory, Weiner's (1985a) attribution theory and the combination of Kelley's and Weiner's attribution theories. The future research is suggested to classify and explore the employee attributions of psychological contract breach based on the other core attribution theories. For instance, the combination of Kelley's and Weiner's attribution theories could be applied to classify employee attributions from consensus, distinctiveness and consistency aspects. Then the future research could examine whether the employee attributions are internal or external, stable or unstable, and specific or global.

To be more specific, an eight-factor model could be constructed to measure the employee attributions of psychological contract breach. The first factor is external, stable and specific attributions, such as a specific law of trade. The second factor is external, stable and global attributions, like physical laws. External, unstable and specific attributions are the third factor, which can be the market demand of the organisation's products. The fourth factor is external, unstable and global attributions, for instance, a global economic crisis. Internal, stable and specific attributions are the fifth factor, which can be the employee's specific ability. The sixth factor is internal, stable and global attributions (e.g., the employee's intelligence). Internal, unstable and specific is the seventh factor, which can be the employee's effort. The last factor is internal, unstable and global attributions, such as the employee's mood.

## **Other Individual Differences Moderators in the Relationship between Psychological Contract Breach and Employee Attributions**

This research has explored the moderating roles of individualism/collectivism and employee proactivity in the relationship between psychological contract breach and employee attributions. The results suggest that individualism/collectivism and employee proactivity play a weak moderating role in this relationship. Thus, there may be other individual differences playing a stronger moderating role in the relationship between psychological contract breach and employee attributions. For instance, the individuals' different attributional styles may have an impact on the relationship between psychological contract breach and employee attributions. According to Abramson, Seligman and Teasdale (1978), the person with optimistic attributional style tends to attribute success to internal stable factors, like ability and skills, and attribute failure to external unstable factors, such as luck, chance, and the difficulty of task. On the contrary, the person with pessimistic attributional style tends to attribute success to external unstable causes, and attribute failure to internal stable factors. In addition, Silver, Mitchell and Gist (1995) have indicated that the employee with high self-efficacy tends to attribute success to internal stable factors and attribute failure to external causes. Stake (1990) indicated that the employee with internal locus of control is more likely to attribute events to internal factors, like effort and ability. Future research can examine the role of these individual differences in the relationship between psychological contract breach and employee attributions to better understand why people make different attributions in response to psychological contract breach.

In sum, the theoretical limitations of this research mainly include the above three aspects. Future research has been recommended to identify psychological contract breach and explore the attributions and effects of the breach from the above three aspects.

### **10.6.2 Methodological Limitations and Recommendations**

The following sections will describe the methodological limitations from three aspects.

The two aspects are common method bias, sampling bias and other methods that can be applied in exploring psychological contract breach.

### **Common Method Bias**

Common method bias refers to variance that results from the same method of measurement rather than from the construct underlying the measurement (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Common method bias can cause two problems. First, common method bias can affect the reliability and validity of measures (Podsakoff, MacKenzie & Podsakoff, 2012). The inadequacy of reliability and validity may be hidden by common method bias. Second, the relationship between two variables can be inflated or deflated by common method bias (Podsakoff, et al., 2012).

In the current research, the employee questionnaire was used to measure psychological contract, employee attributions, employee well-being, employee leadership perceptions, individualism/collectivism and employee proactivity. The employee's performance was evaluated by the supervisor and measured in the supervisor question. Thus, the perceptions of the psychological contract breach, employee attributions, individual differences and employee outcomes except performance were measured from the same source. Thus, although the possibility of common method bias accounting for this research was reduced by revising scale items to eliminate ambiguity and by item wording to minimise social desirability bias, common method bias may still have an impact on the collected data in this research. By applying unmeasured latent method factor technique, the results suggest a small amount of common method bias but it can also indicate variance in the data due to an unmeasured variable. However, the presence of moderating effects of employee attributions indicates that common method bias did not unduly influence the findings. This is because moderation effects cannot occur if all participants score all items highly or in the same direction (which would occur if common bias was prevalent). In general, there was small common method bias, but did not inflate the relationships between variables much or impair the hypotheses testing.

### **Sampling Bias**



Sampling bias occurs when a sample focuses on part of intended population or does not cover the whole intended population (Hansen, Hurwitz & Madow, 1953). Three aspects of the sample of the current research can cause sampling bias. First, the current study collected data and tested the psychological contract breach model in a Chinese context, which limits the generalisability of the model. Future research can collect data and test the psychological contract breach model in other cultural contexts to contribute to the generalisability. Second, the research was conducted in manufacturing organisations, which makes the sample focuses on employees who work in manufacturing organisations. Future research is recommended to test the attributions and effects of psychological contract breach in organisations from other industries (i.e., service industry and communication industry). Third, the demographic information of the participants in the current research shows that the majority of the participants are male and there is an unbalance between the number male and female in this research. Future research is recommended to collect a more gender-balanced sample.

Another limitation related to the sample is when conducting factor analysis on the constructed psychological contract breach and employee attributions measures; the same dataset was applied for both EFA and CFA. Although EFA and CFA provide different pieces of information, using the same dataset may over fit the constructed measures to the single dataset (Poole, Bramwell & Murphy, 2006) and reduce the generalisation of the constructed measures. Moreover, doing EFA and CFA in different samples can help to test whether the factor structure that derived from one sample is still consistent with other samples (Cox, Martens & Russell, 2003). This can further help to avoid chance relationships in the factor structure that emerged from one particular dataset. Thus, conducting EFA and CFA on different datasets can ensure the robustness and validity of the constructed measures. Further research is recommended to conduct EFA and CFA in different samples.

### **Other Research Methods**

This study has applied a cross-sectional survey to test psychological contract breach and the hypotheses of the study. Because the cross-sectional method cannot allow dynamic changes influencing consequences (Wunsch, Russo & Mouchart, 2010), neither causal relationships between variables nor short-term fluctuations within-person

processes can be drawn from the cross-sectional survey. Besides, all variables are examined at the same time in the cross-sectional survey, which makes testing the temporal order of the variables difficult. Other methods could be applied to conduct the study. For instance, a longitudinal study could be applied to measure psychological contract breach. A longitudinal study can help to track changes for the same people at different points in time and to obtain a more accurate perception of the psychological contract breach. Moreover, there may be a lag between psychological contract breach and employee attributions, which means that the employee might make causal explanations later rather than at the point of the time of conducting the surveys. However, the cross-sectional survey adopted by the current research can only measure variables at the certain point of time and may pose problems for testing the mediating role of employee attributions in the relationship between psychological contract breach and employee outcomes. Thus, future research is recommended to adopt a longitudinal study to measure psychological contract breach and employee attributions at different points of time. For instance, psychological contract breach can be tested at Time 1, attributions at time 2 and employee outcomes at Time 3. Then the mediating role of employee attributions and their effects on employee outcomes could be examined accurately. In addition, a daily diary study could be applied to measure employee well-being. A diary study is aimed to capture short-term fluctuations within-person processes. Employee well-being relates to the person's short-term fluctuations. Thus, a daily diary study is suggested for future research to measure employee well-being more accurately. In addition, qualitative interviewing can be applied to identify the employee attributions of psychological contract breach. Qualitative interviewing can provide a picture of the employee's attributional responses to psychological contract breach. More details and extra information could be obtained by tailoring interview questions. Thus, future research can apply qualitative interviewing to identify the employee attributions of psychological contract breach.

In sum, the methodological limitations include three aspects, which are common method bias aspect, sampling bias and other methods aspect. Other methods have been recommended to identify and explore the attributions and effects of psychological contract breach.

## **10.7 Summary of the Thesis**

This research explored the role of employee attributions in the relationship between psychological contract breach and employee outcomes. By comparing moderation and mediation models, a central message that emerges from this research is that employee attributions are more likely to moderate than mediate the relationship between psychological contract breach and employee outcomes. This research has made theoretical, methodological and practical contributions to research on the psychological contract.

In particular, four theoretical contributions can be identified. First, this research has created, developed and tested a new model of psychological contract breach and employee attributions. By integrating attribution theory into psychological contract breach theory, which has been rarely attempted, this research has extended theoretical understanding of psychological contracts and the boundary conditions of psychological contract theory.

Second, this research has extended the understanding of the relationship between psychological contract breach and employee attributions by demonstrating that employees make causal explanations when experiencing psychological contract breach. Psychological contract breach has been found to be significantly related to employee internal attributions, attributions about the supervisor, attributions about the organisation and attributions outside of the supervisor and the organisation.

Third, this research has developed a more specific theoretical understanding of how employee attributions shape the effects of psychological contract breach. The role of employee attributions in the relationship between psychological contract breach and employee outcomes has been examined by testing two competing models (i.e. moderation model and mediation model). Results show that employee attributions tend to play a moderating role in the relationships between psychological contract breach and employee well-being and performance, but are more likely to play a mediating role in the relationship between psychological contract breach and leadership perceptions.

Thus, the research indicates that the role of employee attributions in the relationship between psychological contract breach and employee outcomes is complex.

The idea that employee attributions moderate the relationship between psychological contract breach and employee well-being is supported by the results that attributions about the supervisor and attributions about the organisation moderate the negative relationship between psychological contract breach and employee well-being. In terms of the mediating role of employee attributions in the relationship between psychological contract breach and employee leadership perceptions, results show that attributions about the supervisor, attributions about the organisation and employee internal attributions mediate the relationship between psychological contract breach and leadership perceptions. The idea that employee attributions play a moderating role in the relationship between psychological contract breach and employee performance is supported by the results that employee internal attributions, attributions about the supervisor and attributions about the organisation moderate the negative relationship between psychological contract breach and employee performance. In general, this study provides the first test of the moderating and mediating roles of employee internal attributions and external attributions in the relationship between psychological contract breach and employee outcomes, which extends the prior research on psychological contract breach.

In addition, this research provides the first test of the moderating role of individual differences (i.e., individualism/collectivism and employee proactivity) in the relationship between psychological contract breach and employee attributions. This study found that individualism/collectivism moderates the relationships between psychological contract breach and attributions and organisation and attributions outside of the supervisor and the organisation. Employee proactivity only moderates the relationship between psychological contract breach and attributions about the supervisor. Thus, the results show that the moderating effect of individual differences in the relationship between psychological contract breach and employee attributions is weak in the current research.

Fourth, this research has extended the theoretical understanding of the criterion space of psychological contract breach and employee attributions. With regard to

psychological contract breach, this theoretical understanding was supported by the evidence showing that psychological contract breach simultaneously affects a wide range of effects on employee outcomes, specifically well-being, leadership, and in-role and extra-role performance. As such, this thesis offers a more comprehensive understanding of the negative effects of psychological contract breach on employee outcomes. With regard to employee attributions, the thesis showed that employee internal attributions are positively related to employee well-being, that all four employee attributions are significantly associated with employee leadership perceptions, while attributions about the supervisor and attributions about the organisation are significantly related to in-role performance.

This research has made two methodological contributions. First, this study has constructed a new psychological contract breach measure, which helps to provide a measure that is sensitive to all different aspects of a job where psychological contract breach might occur. Second, a new measure on the employee attributions of psychological contract breach has been constructed. The new employee attribution measure contributes to better understanding how individuals attribute psychological contract breach differently.

In terms of the practical contributions, this research helps to identify psychological contract breach in a non-Western context. The quantitative research and the collected data provide evidence from organisational practices, which can help to make explanations for the integration of the psychological contract breach theory and the attribution theory. In addition, this research offers practical implications for both the supervisor and the organisation to reduce the occurrence of psychological contract breach and its negative effects.

Future research can be described from theoretical and methodological aspects. In the theoretical aspect, future research is recommended to adopt a dual perspective and to explore psychological contract breach from both the employee's perspective and the supervisor's perspectives. It is also recommended that future research seeks to classify and explore the employee attributions of psychological contract breach based using the other core attribution dimensions, e.g., general vs. specific. In addition, because of the weak moderating role of individualism/collectivism and employee proactivity in the

relationship between psychological contract breach and employee attribution, future research is suggested to examine the role of other individual differences in the relationship between psychological contract breach and employee attributions to better understand why people make different attributions in response to psychological contract breach. Methodologically, it is recommended that research in the future needs to collect data and test the psychological contract breach model in a Western context and in organisations from other industries to contribute to the generalisation of the model. In addition, because of the shortcomings of the cross-sectional method, other methods could be applied in future research. For instance, a longitudinal study could be applied to track changes for the same people at different points in time and to obtain a more accurate perception of the psychological contract breach and employee attributions. Overall, as the topic of psychological contract breach is of contemporary academic and practical interest, this research has helped to advance understanding of a key aspect of the employment relationship, the psychological contract, and its effects on key employee outcomes.

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# **Appendix I Moderation Model Analysis Using Five Psychological Contract Breach Dimensions**

## **Moderating Role of Employee Attributions in the Relationship between Work Organisation Breach and Employee Outcomes**

The moderating role of employee attributions in the relationship between work organisation breach and employee outcomes was tested in Mplus. Table 1 shows the overview of the interaction effects of employee attributions. The relationship between work organisation breach and employee well-being is moderated by attributions about the supervisor and attributions about the organisation. The relationship between work organisation breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationship between work organisation breach and in-role performance is moderated by attributions about the supervisor. The relationship between work organisation breach and extra-role performance is moderated by employee internal attributions and attributions about the supervisor. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between work organisation dimension and employee outcomes. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 1 Moderating Role Employee Attributions in the Relationship between Work Organisation Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X		X
Attributions about the supervisor	X		X	X
Attributions about the organisation	X			
Attributions outside of the supervisor and the organisation		X		

### Employee Internal Attributions

In this section, the interaction effects of employee internal attributions on the relationship between work organisation breach and employee outcomes will be reported. Figure 1 and Table 2 show the moderation results. Employee internal attributions moderate the relationship between work organisation breach and leadership perceptions and extra-role performance, but do not moderate the relationships between work organisation breach and employee well-being and in-role performance.

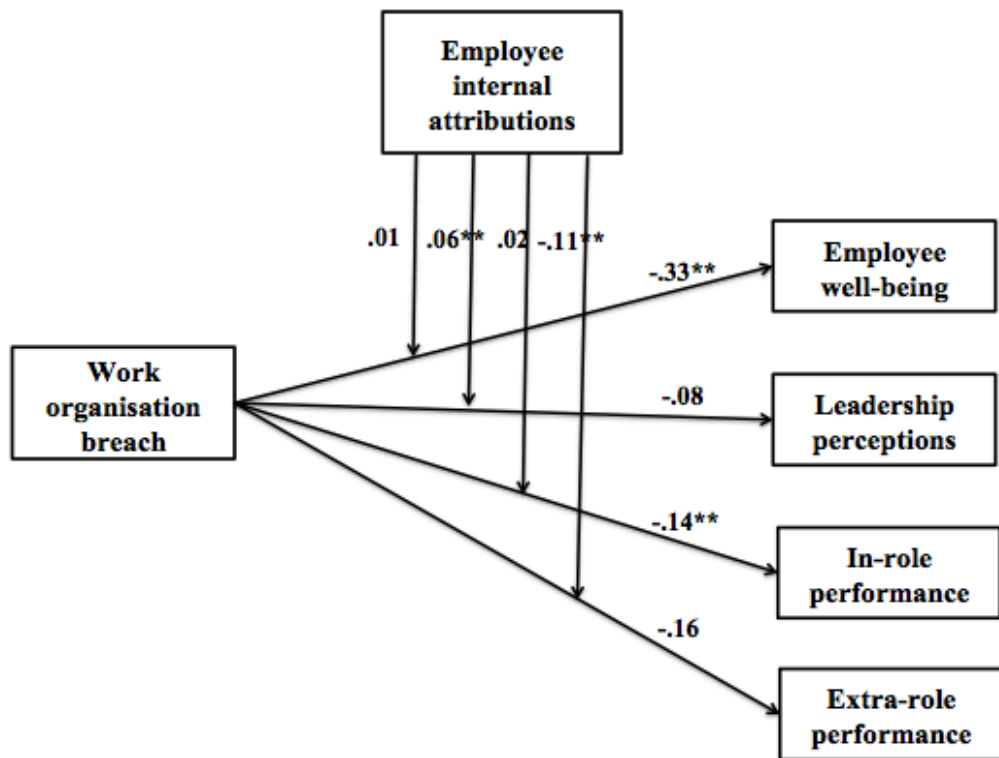


Figure 1 Specific Moderation Model (Work organisation breach & employee internal attributions)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 2 Moderating Role of Employee Internal Attributions in the Relationship between Work Organisation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Work organisation breach	$b = -.29^{**}$	$b = -.33^{**}$	$b = -.07$	$b = -.08$	$b = -.13^*$	$b = -.14^*$	$b = -.15$	$b = -.16$
Employee internal attributions	$b = .13^*$	$b = .15^*$	$b = .25^*$	$b = .27^{**}$	$b = .08$	$b = .10$	$b = .01$	$b = -.03$
Interaction term		$b = .01$		$b = .06^{**}$		$b = .02$		$b = -.11^{**}$
$R^2$		0.12		0.08		0.02		0.14
$\Delta R^2$		0.00		0.01		0.00		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Leadership perceptions.** Employee internal attributions moderate the relationships between work organisation breach and leadership perceptions ( $b = .06$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .08$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of leadership perceptions. Plotting the interaction (Figure 2) shows that when employees tend to make employee internal attributions (i.e., employees do blame themselves for work organisation breach), the negative relationship between work organisation breach and favourable leadership perceptions is weaker than when employees are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for low employee internal attributions ( $-1$  SD,  $t = -2.22$ ,  $p < .05$ ) is significant, but the slope for high employee internal attributions ( $+1$  SD,  $t = -.32$ , *ns.*) is not. Thus, when employees are less likely to make employee internal attributions for work organisation breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are more likely to make employee internal attributions for psychological contract breach, there is no significant relationship between the breach and favourable leadership perceptions.

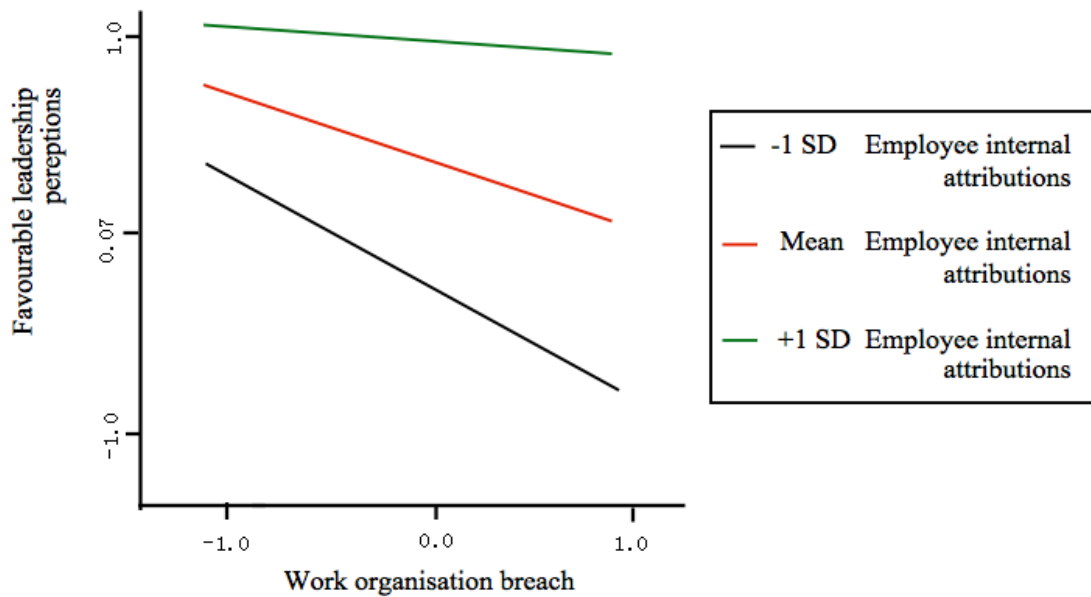


Figure 2 Interaction between Work Organisation Breach and Employee Internal Attributions on Favourable Leadership Perceptions

**Extra-role performance.** Employee internal attributions moderate the relationships between work organisation breach and extra-role performance ( $b = -.11$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .14$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of extra-role performance. Plotting the interaction (Figure 3) shows that when employees tend to make employee internal attributions (i.e., employees do blame themselves for work organisation breach), the negative relationship between work organisation breach and extra-role performance is stronger than when employees are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for high employee internal attributions (+1 SD,  $t = -2.84$ ,  $p < .05$ ) is significant, but the slope for low employee internal attributions (-1 SD,  $t = -.53$ , *ns.*) is not. Thus, when employees are more likely to make employee internal attributions for work organisation breach, the negative relationship between the breach and extra-role performance is significant. When employees are less likely to make employee internal attributions for psychological contract breach, there is no significant relationship between the breach and extra-role performance.

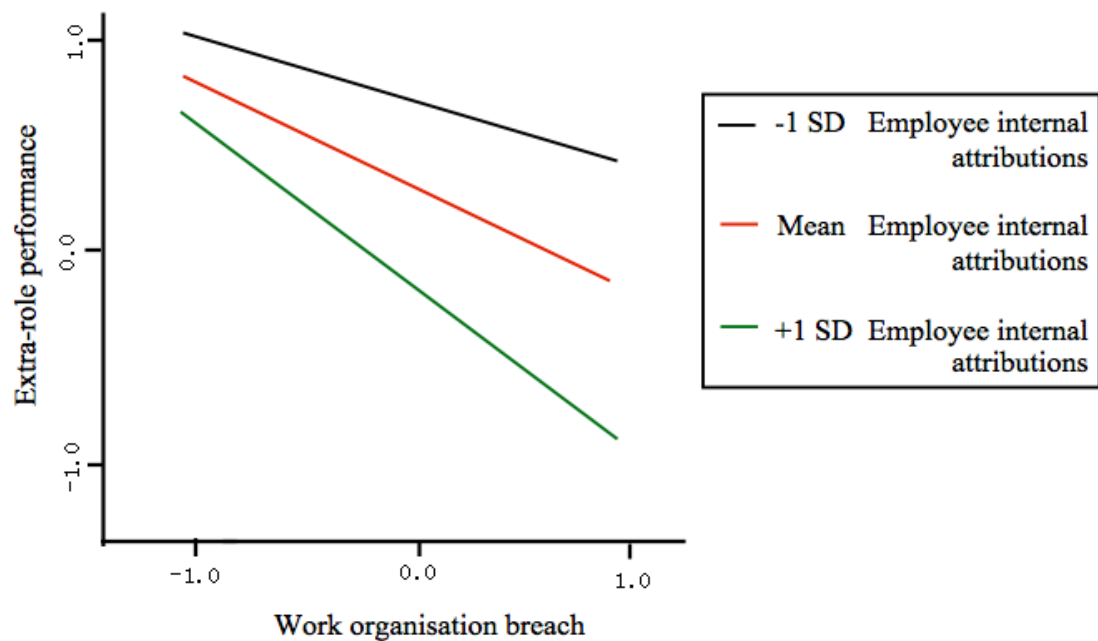


Figure 3 Interaction between Work Organisation Breach and Employee Internal Attributions on Extra-role Performance

### Attributions about the Supervisor

In this section, the interaction effects of attributions about the supervisor on the relationship between work organisation breach and employee outcomes will be reported. Figure 8.25 and Table 8.9 show the moderation results. Attributions about the supervisor moderate the relationships between work organisation breach and employee well-being, in-role performance and extra-role performance, but do not moderate the relationships between work organisation breach and leadership perceptions.



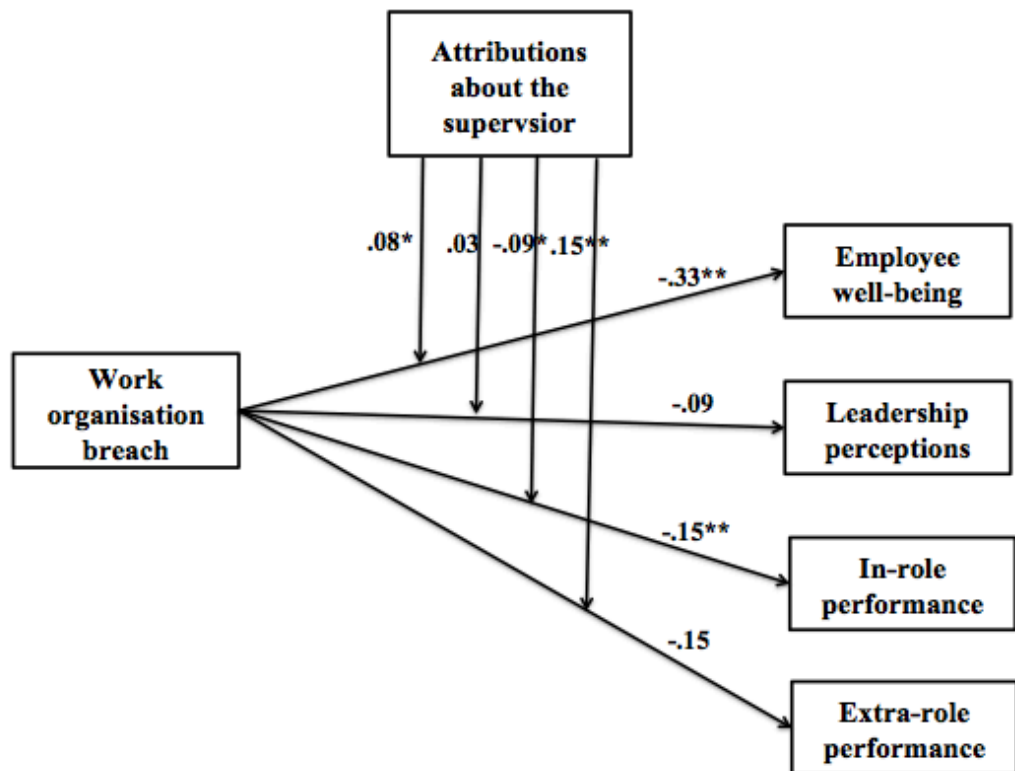


Figure 4 Specific Moderation Model (Work organisation breach & attributions about the supervisor)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 3 Moderating Role of Attributions about the Supervisor in the Relationship between Work Organisation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Work organisation breach	$b = -.29^{**}$	$b = -.33^{**}$	$b = -.07$	$b = -.09$	$b = -.13^*$	$b = -.15^*$	$b = -.15$	$b = -.15$
Attributions about the supervisor	$b = -.01$	$b = -.01$	$b = -.47^{**}$	$b = -.46^{**}$	$b = -.34^{**}$	$b = -.36^{**}$	$b = -.05$	$b = -.03$
Interaction term		$b = .08^*$		$b = .03$		$b = -.09^*$		$b = .15^{**}$
$R^2$		0.2		0.24		0.23		0.13
$\Delta R^2$		0.02		0.00		0.02		0.06

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the supervisor moderate the relationships between work organisation breach and employee well-being ( $b = .08$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .20$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 85) shows that when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for work organisation breach), the negative relationship between work organisation breach and employee well-being is weaker than when employees are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor ( $-1$  SD,  $t = -6.50$ ,  $p < .01$ ) and the slope for high attributions about the supervisor ( $+1$  SD,  $t = -3.94$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for work organisation breach, the negative relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the supervisor for psychological contract breach, the negative relationship between the breach and employee well-being is significant as well.

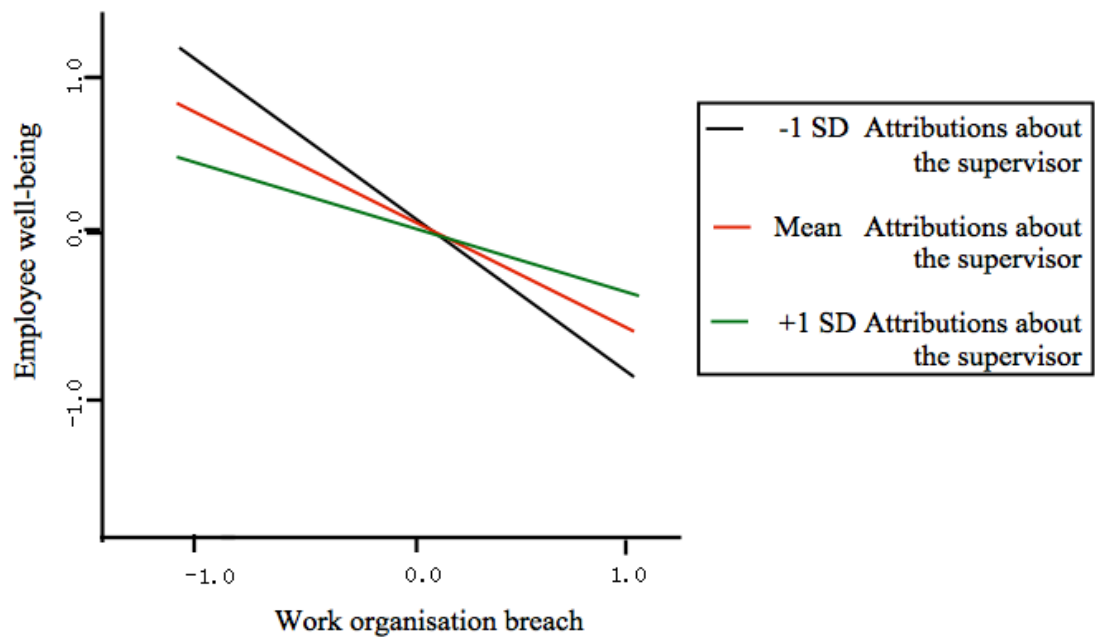


Figure 5 Interaction between Work Organisation Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between work organisation breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .23$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 6) shows that when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for work organisation breach), the negative relationship between work organisation breach and in-role performance is stronger than when employees are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for high attributions about the supervisor (+1 SD,  $t = -3.39$ ,  $p < .01$ ) is significant, but the slope for low attributions about the supervisor (-1 SD,  $t = -.85$ ,  $ns.$ ) is not. Thus, when employees are more likely to make attributions about the supervisor for work organisation breach, the negative relationship between the breach and in-role performance is significant. But when employees are less likely to make attributions about the supervisor for psychological contract breach, there is no significant relationship between the breach and in-role performance.

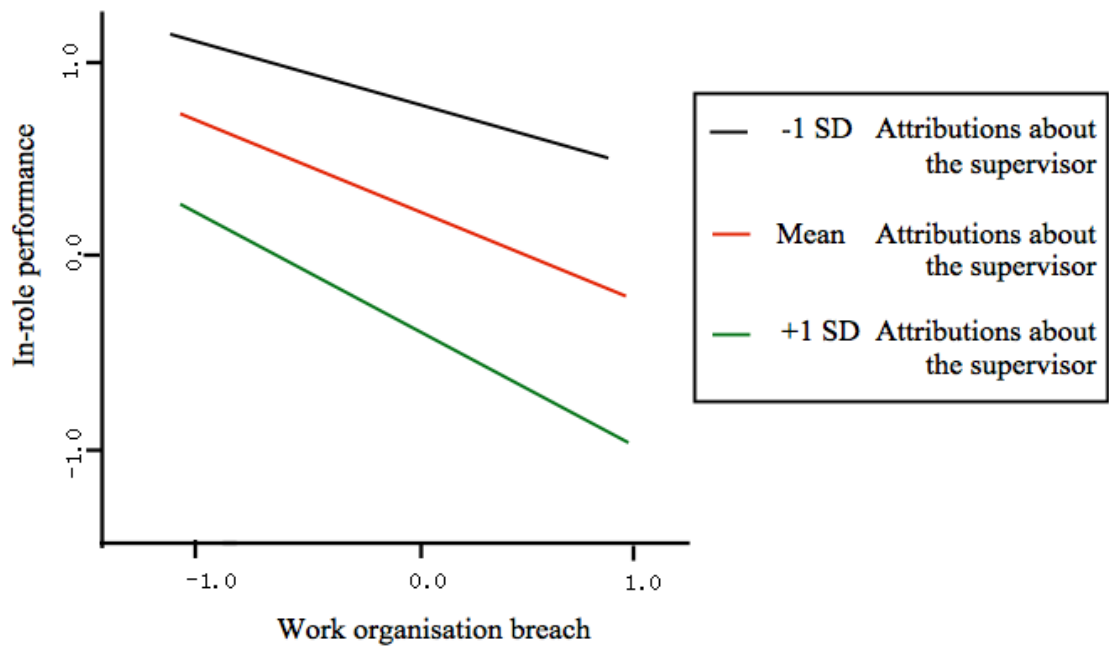


Figure 6 Interaction between Work Organisation Breach and Attributions about the Supervisor on In-role Performance

**Extra-role performance.** Attributions about the supervisor moderate the relationships between work organisation breach and extra-role performance ( $b = .15$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .13$ ,  $\Delta R^2 = .06$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 7) shows that when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for work organisation breach), the negative relationship between work organisation breach and extra-role performance is weaker than when employees are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for low attributions about the supervisor (-1 SD,  $t = -3.36$ ,  $p < .01$ ) is significant, but the slope for high attributions about the supervisor (+1 SD,  $t = 0.00$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for work organisation breach, the negative relationship between the breach and extra-role performance is significant. But when employees are more likely to make attributions about the supervisor for psychological contract breach, there is no significant relationship between the breach and extra-role performance.

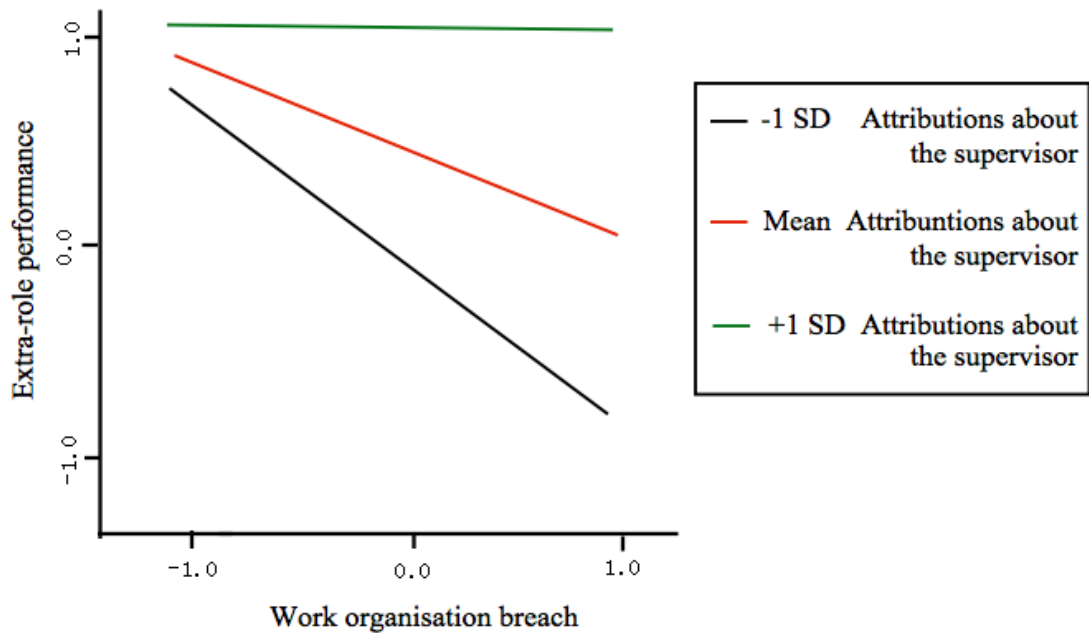


Figure 7 Interaction between Work Organisation Breach and Attributions about the Supervisor on Extra-role Performance

### Attributions about the Organisation

In this section, the interaction effects of attributions about the organisation on the relationship between work organisation breach and employee outcomes will be reported. Figure 8 and Table 4 show the moderation results. Attributions about the organisation moderate the relationship between work organisation breach and employee well-being, but do not moderate the relationships between work organisation breach and leadership perceptions, in-role performance and extra-role performance.

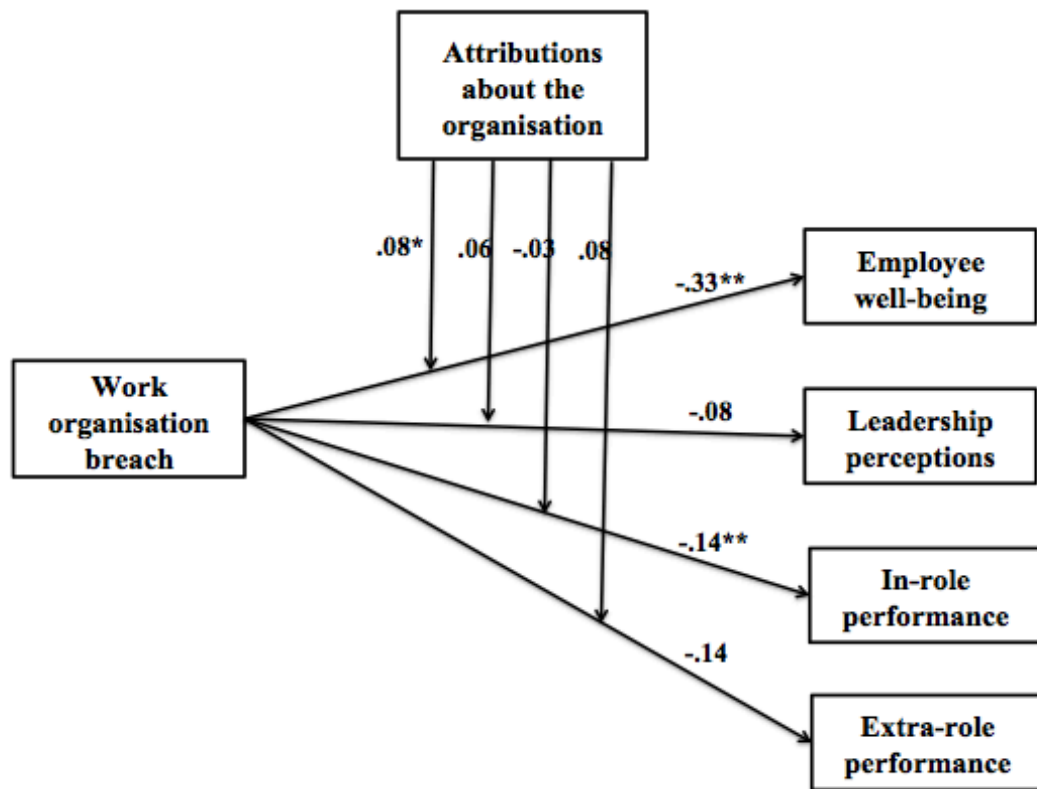


Figure 8 Specific Moderation Model (Work organisation breach & attributions about the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 4 Moderating Role of Attributions about the Organisation in the Relationship between Work Organisation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Work organisation breach	$b = -.29^{**}$	$b = -.33^{**}$	$b = -.07$	$b = -.08$	$b = -.13^*$	$b = -.14^*$	$b = -.15$	$b = -.14$
Attributions about the organisation	$b = -.11$	$b = -.10$	$b = .28^{**}$	$b = .28^{**}$	$b = -.39^{**}$	$b = -.39^{**}$	$b = .14$	$b = .14$
Interaction term		$b = .08^*$		$b = .06$		$b = -.03$		$b = .08$
$R^2$		0.24		0.02		0.23		0.02
$\Delta R^2$		0.01		0.01		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the organisation moderate the relationships between work organisation breach and employee well-being ( $b = .08$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .24$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of employee well-being. Plotting the interaction (Figure 9) shows that when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for work organisation breach), the negative relationship between work organisation breach and employee well-being is weaker than when employees are less likely to make attributions about the organisation. However, the plotting also shows that when work organisation breach is high, there is no big difference in employee well-being no matter whether employees attribute to the organisation or not. Thus, when work organisation breach occurs, there is no obvious moderating effect of attributions about the organisation on the relationship between the breach and employee well-being.

Simple slope analysis shows that the slopes for both low attributions about the organisation ( $-1$  SD,  $t = -6.50$ ,  $p < .01$ ) and the slope for high attributions about the organisation ( $+1$  SD,  $t = -3.94$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the organisation for work organisation breach, the negative relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the organisation for

psychological contract breach, the negative relationship between the breach and employee well-being is significant as well.



Figure 9 Interaction between Work Organisation Breach and Attributions about the Organisation on Employee Well-being

### Attributions outside of the Supervisor and the Organisation

In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between work organisation breach and employee outcomes will be reported. Figure 10 and Table 5 show the moderation results. Attributions outside of the supervisor and the organisation moderate the relationship between work organisation breach and leadership perceptions, but do not moderate the relationships between work organisation breach and employee well-being, in-role performance, and extra-role performance.



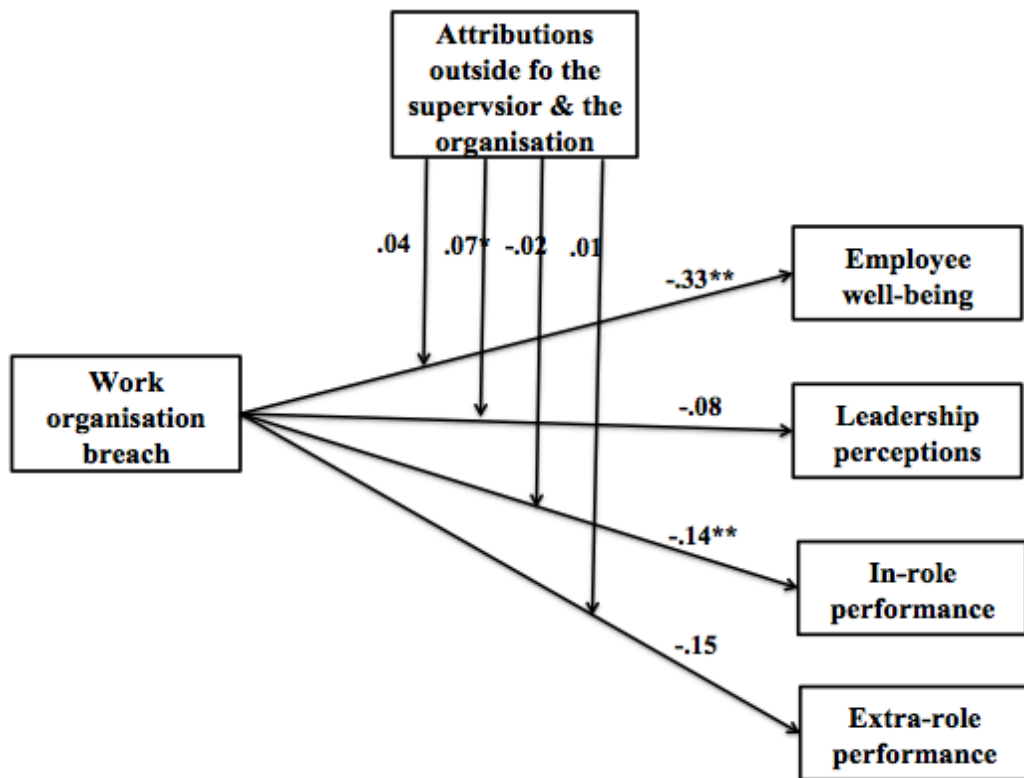


Figure 10 Specific Moderation Model (Work organisation breach & attributions outside of the supervisor and the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 5 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Work Organisation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Work organisation breach	$b = -.29^{**}$	$b = -.33^{**}$	$b = -.07$	$b = -.08$	$b = -.13^*$	$b = -.14^*$	$b = -.15$	$b = -.15$
Attributions about the organisation	$b = -.11$	$b = .01$	$b = .28^{**}$	$b = .21^{**}$	$b = -.39^{**}$	$b = .12$	$b = .14$	$b = .03$
Interaction term		$b = .04$		$b = .07^*$		$b = -.02$		$b = .01$
$R^2$		0.18		0.04		0.02		0.04
$\Delta R^2$		0.00		0.01		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between work organisation breach and leadership perceptions ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .04$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of leadership perceptions. Plotting the interaction (Figure 11) shows that when employees tend to make attributions outside of the supervisor and the organisation (i.e., employees do attribute work organisation breach to factors beyond the supervisor's and the organisation's control), the negative relationship between work organisation breach and favourable leadership perceptions is weaker than when employees are less likely to make attributions outside of the supervisor and the organisation.

Simple slope analysis shows that the slope for low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = -2.38$ ,  $p < .01$ ) is significant, but the slope for high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = -.16$ , *ns.*) is not. Thus, when employees are less likely to make attributions outside of the supervisor and the organisation for work organisation breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are more likely to make attributions outside of the supervisor and the organisation for psychological contract breach, there is no significant relationship between the breach

and favourable leadership perceptions.

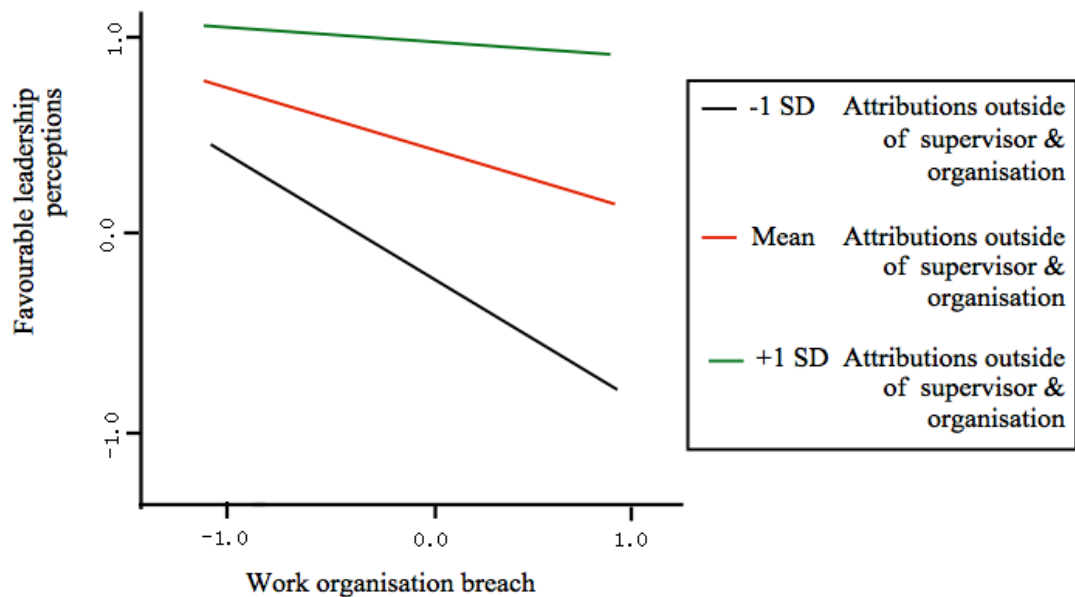


Figure 11 Interaction between Work Organisation Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

In general, employee attributions partially moderate the relationship between work organisation breach and employee outcomes. Among the four employee attributions, attributions about the supervisor moderated almost all the relationships between work organisation breach and employee outcomes. Thus, the attribution about the supervisor is an important moderator in the relationship between work organisation breach and employee outcomes. Compared with the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes, the moderating role of employee attributions do not change much in the relationship between the work organisation dimension of psychological contract breach and employee outcomes.

## **Moderating Role of Employee Attributions in the Relationship between Wage and Payment System Breach and Employee Outcomes**

The moderating role of employee attributions in the relationship between wage and payment system breach and employee outcomes was tested in Mplus. Table 6 shows the overview of the interaction effects of employee attributions. The relationship between wage and payment system breach and employee well-being is moderated by attributions about the supervisor. The relationship between wage and payment system breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationship between wage and payment system breach and in-role performance is moderated by employee internal attributions, attributions about the supervisor and attributions about the organisation. The relationship between wage and payment system breach and extra-role performance is moderated by employee internal attributions and attributions about the supervisor. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between wage and payment system breach and employee outcomes. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 6 Moderating Role of Employee Attributions in the Relationship between Wage and Payment System Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	X
Attributions about the organisation			X	
Attributions outside of the supervisor and the organisation		X		

## Employee Internal Attributions

In this section, the interaction effects of employee internal attributions on the relationship between wage and payment system breach and employee outcomes will be reported. Figure12 and Table 7 show the moderation results. Employee internal attributions moderate the relationship between wage and payment system breach and leadership perceptions, in-role performance and extra-role performance, but do not moderate the relationships between wage and payment system breach and employee well-being.

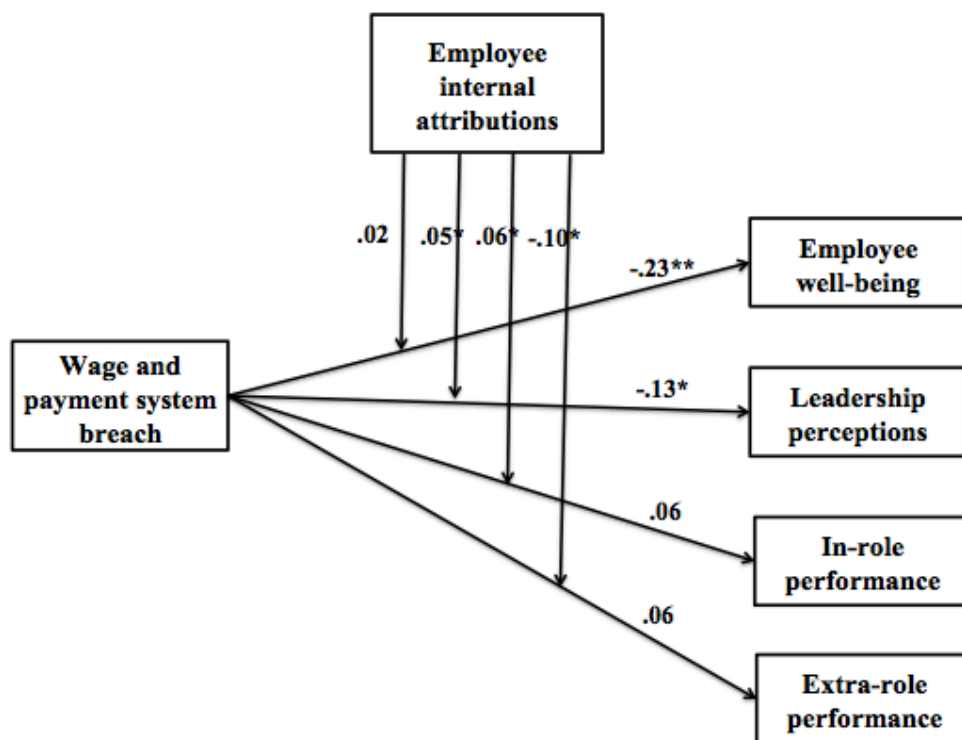


Figure 12 Specific Moderation Model (Wage and payment system breach & employee internal attributions)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 7 Moderating Role of Employee Internal Attributions in the Relationship between Wage and Payment System Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Wage and payment system breach	$b = -.19^{**}$	$b = -.23^{**}$	$b = -.10^*$	$b = -.13^*$	$b = .06$	$b = .06$	$b = .05$	$b = .06$
Employee internal attributions	$b = .13^*$	$b = .23^{**}$	$b = .25^{**}$	$b = .26^{**}$	$b = .08$	$b = .10^*$	$b = .01$	$b = .03$
Interaction term		$b = .02$		$b = .05^*$		$b = .06^*$		$b = -.10^*$
$R^2$		0.05		0.07		0.02		0.09
$\Delta R^2$		0.00		0.01		0.01		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Leadership perceptions.** Employee internal attributions moderate the relationships between wage and payment system breach and leadership perceptions ( $b = .05$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .07$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of leadership perceptions. Plotting the interaction (Figure 13) shows that the negative relationship between wage and payment system breach and favourable leadership perceptions is weaker when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach) than when employees are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for low employee internal attributions ( $-1$  SD,  $t = -2.85$ ,  $p < .01$ ) is significant, but the slope for high employee internal attributions ( $+1$  SD,  $t = -1.26$ , ns.) is not. Thus, when employees are less likely to make employee internal attributions for wage and payment system breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are more likely to make employee internal attributions for wage and payment system breach, there is no significant relationship between the breach and favourable leadership perceptions.

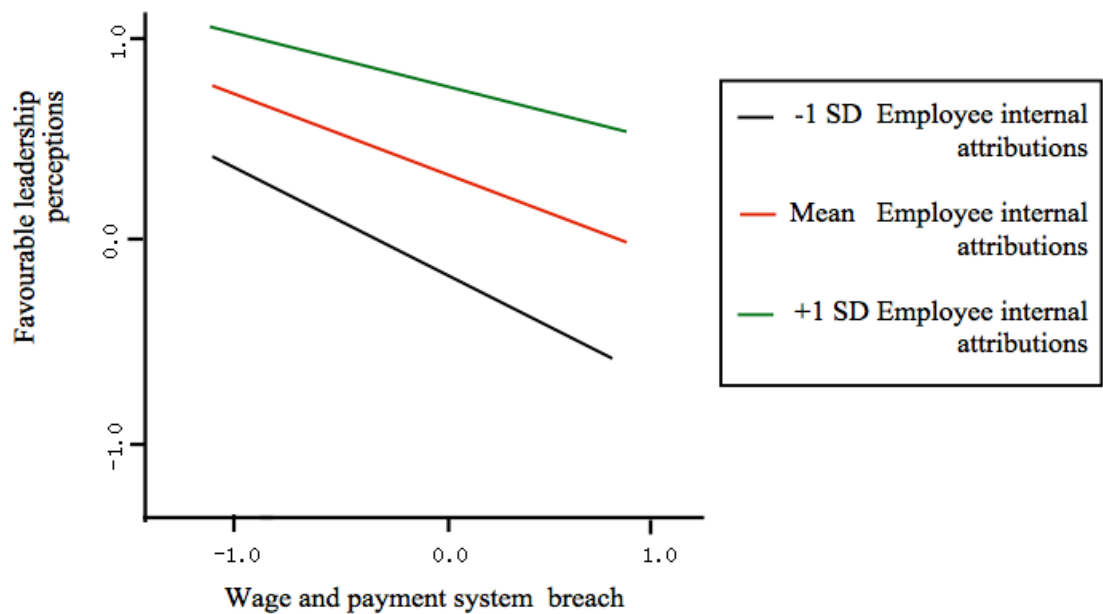


Figure 13 Interaction between Wage and Payment System Breach and Employee Internal Attributions on Favourable Leadership Perceptions

***In-role performance.*** Employee internal attributions moderate the relationships between work organisation breach and in-role performance ( $b = .06$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .02$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 14) shows that the positive relationship between wage and payment system breach and in-role performance is stronger when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach) than when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = 0.00$ , *ns.*) and high employee internal attributions (+1 SD,  $t = 1.69$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is above 1.76 and below 26.85. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of +2 SD is located in the region of significance. However, the mean score of the moderator is 3.52, and the standard deviation is .92. The mean value plus two standard deviations equals 5.36, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant

relationship between wage and payment system breach and in-role performance regardless of when employees are more or less likely to make internal attributions for the breach.

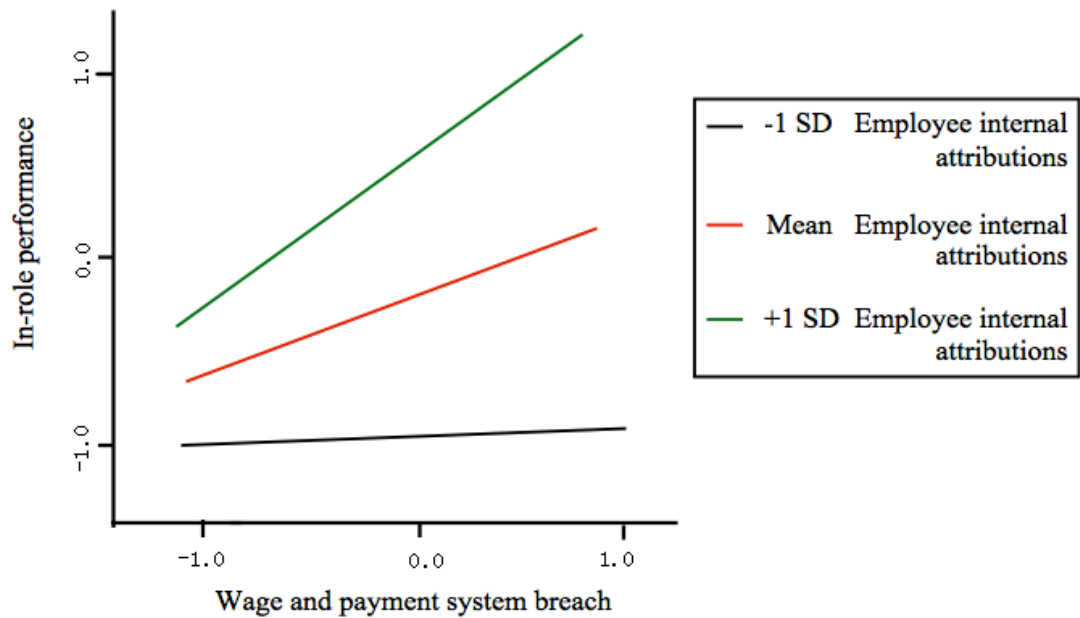


Figure 14 Interaction between Wage and Payment System Breach and Employee Internal Attributions on In-role Performance

**Extra-role performance.** Employee internal attributions moderate the relationships between work organisation breach and extra-role performance ( $b = -.10$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .09$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of in-role performance. Plotting the interaction (Figure 15) shows that the relationship between wage and payment system breach and extra-role performance is negative when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is positive when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = 1.79$ , *ns.*) and high employee internal attributions (+1 SD,  $t = -.04$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below 1.29 or above 6.54. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional



values of the moderator because the value of +2 SD is located in the region of significance. However, the mean score of the moderator is 3.52, and the standard deviation is .92. The mean value plus two standard deviations equals 5.36, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between wage and payment system breach and extra-role performance regardless of when employees are more or less likely to make internal attributions for the breach.

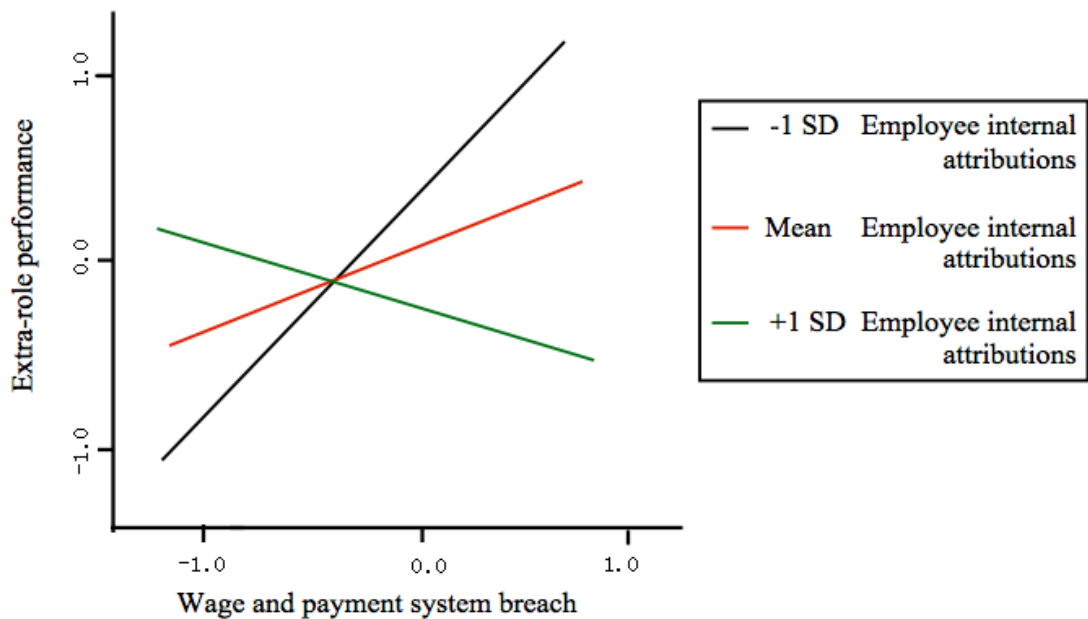


Figure 15 Interaction between Wage and Payment System Breach and Employee Internal Attributions on Extra-role Performance

### Attributions about the Supervisor

In this section, the interaction effects of attributions about the supervisor on the relationship between wage and payment system breach and employee outcomes will be reported. Figure 16 and Table 8 show the moderation results. Attributions about the supervisor moderate the relationships between wage and payment systems breach and employee well-being, in-role performance and extra-role performance, but do not moderate the relationships between wage and payment system breach and leadership perceptions.

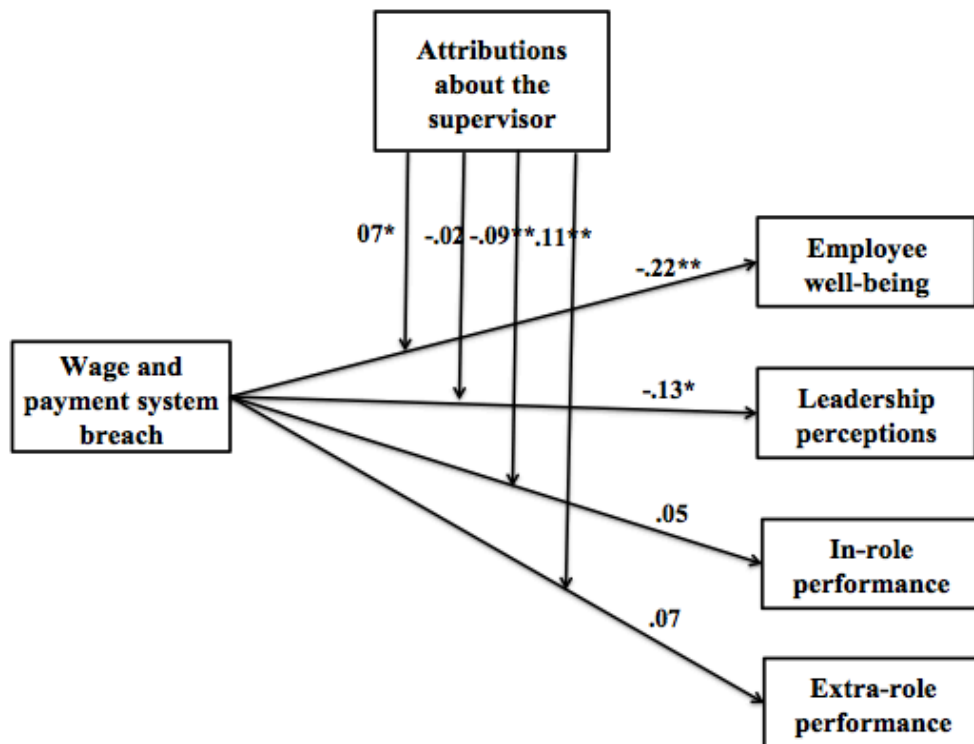


Figure 16 Specific Moderation Model (Wage and payment system breach & attributions about the supervisor)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 8 Moderating Role of Attributions about the Supervisor in the Relationship between Wage and Payment System Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Wage and payment system breach	$b = -.19^{**}$	$b = -.22^{**}$	$b = -.10^*$	$b = -.13^*$	$b = .06$	$b = .05$	$b = .05$	$b = .07$
Attributions about the supervisor	$b = -.01$	$b = .23^{**}$	$b = -.36^{**}$	$b = -.47^{**}$	$b = -.34^{**}$	$b = -.36^{**}$	$b = -.05$	$b = -.04$
Interaction term		$b = .07^*$		$b = -.02$		$b = -.09^{**}$		$b = .11^{**}$
$R^2$		0.1		0.24		0.11		0.05
$\Delta R^2$		0.01		0.00		0.02		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the supervisor moderate the relationships between work organisation breach and employee well-being ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .10$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of employee well-being. Plotting the interaction (Figure 17) shows that the negative relationship between wage and payment system breach and employee well-being is weaker when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach) than when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor ( $-1$  SD,  $t = -4.60$ ,  $p < .01$ ) and high attributions about the supervisor ( $+1$  SD,  $t = -2.37$ ,  $p < .05$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for wage and payment system breach, the negative relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the supervisor for wage and payment system breach, the negative relationship between the breach and employee well-being is significant as well.

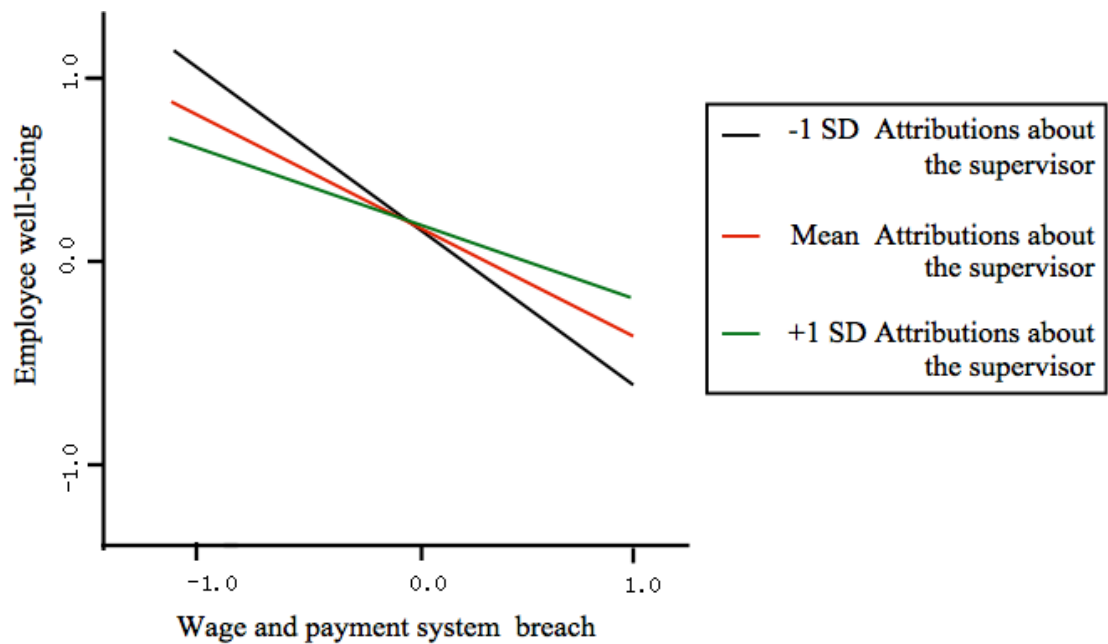


Figure 17 Interaction between Wage and Payment System Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between work organisation breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .11$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 18) shows that the relationship between wage and payment system breach and in-role performance is negative when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach), but is positive when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for low attributions about the supervisor (-1 SD,  $t = 1.98$ ,  $p < .05$ ) is significant, but the slope for high attributions about the supervisor (+1 SD,  $t = -.56$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for wage and payment system breach, the positive relationship between the breach and in-role performance is significant. When employees are more likely to make attributions about the supervisor for wage and payment system breach, there is no significant relationship between the breach and in-role performance.

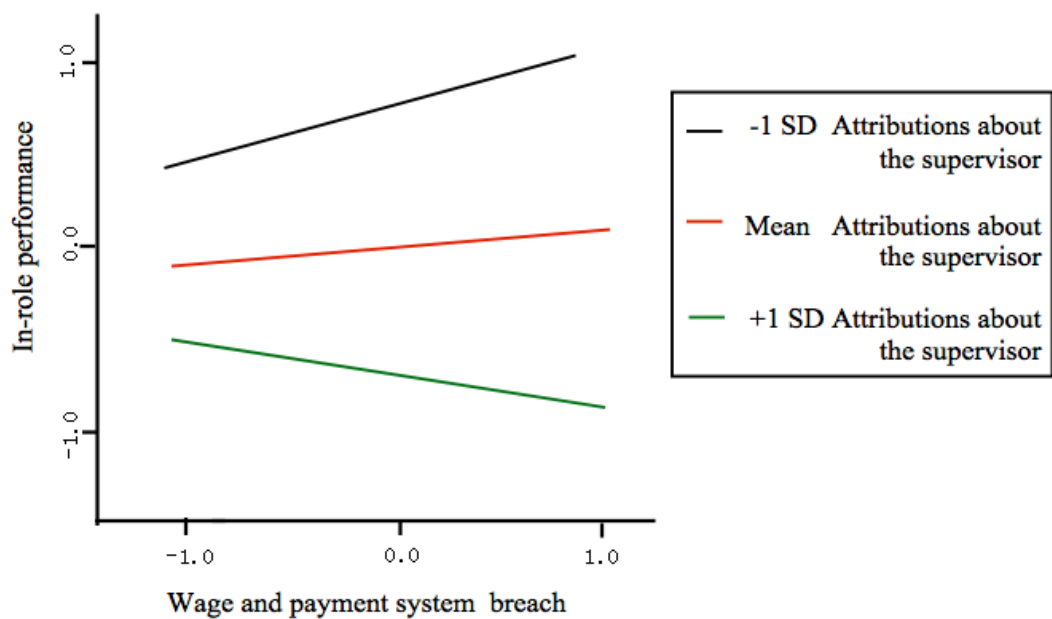


Figure 18 Interaction between Wage and Payment System Breach and Attributions about the Supervisor on In-role Performance

**Extra-role performance.** Attributions about the supervisor moderate the relationships between work organisation breach and extra-role performance ( $b = .11$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .05$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of in-role performance. Plotting the interaction (Figure 19) shows that the relationship between wage and payment system breach and extra-role performance is positive when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach), but is negative when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for high attributions about the supervisor (+1 SD,  $t = 2.01$ ,  $p < .05$ ) is significant, but the slope for low attributions about the supervisor (-1 SD,  $t = -.45$ ,  $ns$ ) is not. Thus, when employees are more likely to make attributions about the supervisor for wage and payment system breach, the positive relationship between the breach and extra-role performance is significant. When employees are less likely to make attributions about the supervisor for wage and payment system breach, there is no significant relationship between the breach and extra-role performance.

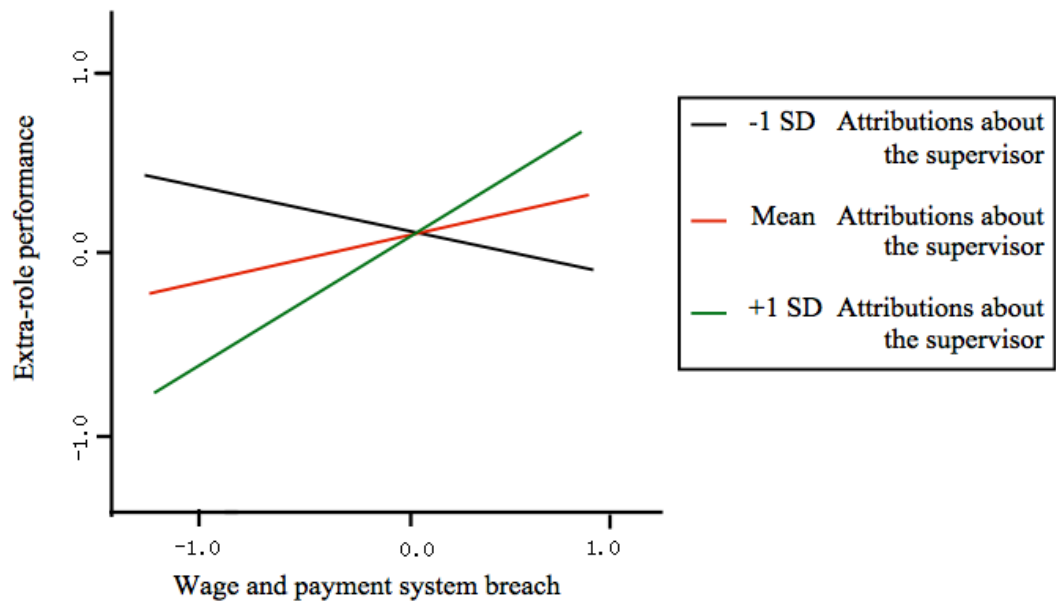


Figure 19 Interaction between Wage and Payment System Breach and Attributions about the Supervisor on Extra-role Performance

### Attributions about the Organisation

In this section, the interaction effects of attributions about the organisation on the relationship between wage and payment system breach and employee outcomes will be reported. Figure 20 and Table 9 shows the moderation results. Attributions about the organisation moderate the relationship between psychological contract breach and in-role performance, but do not moderate the relationship between wage and payment system breach and employee well-being, leadership perceptions and extra-role performance.

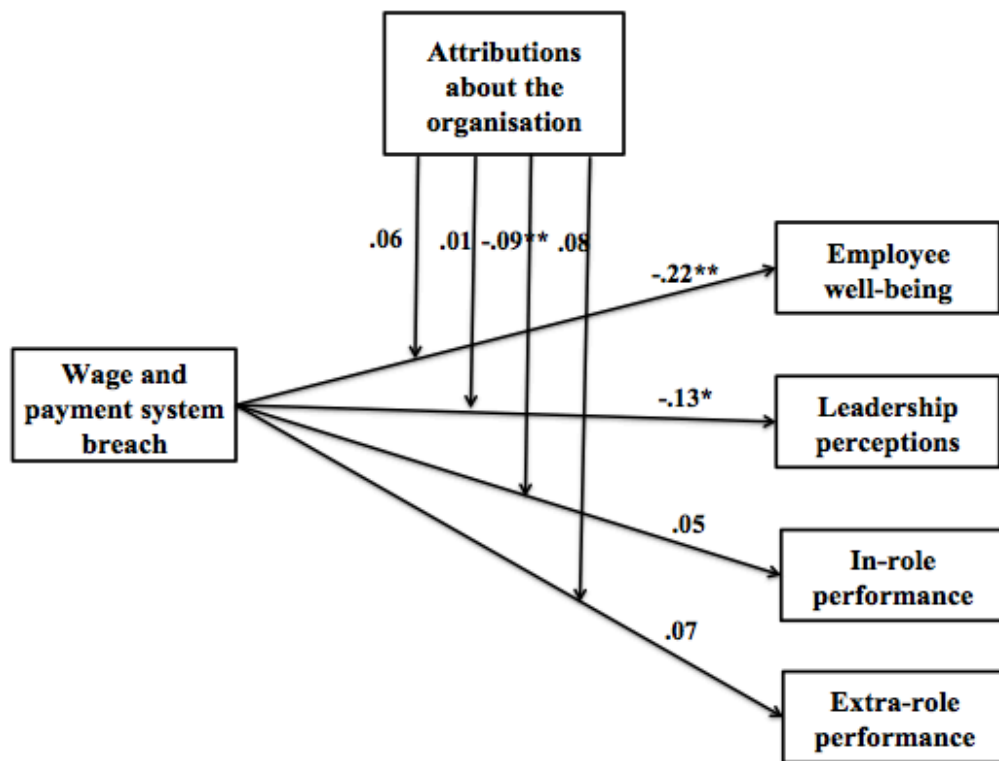


Figure 20 Specific Moderation Model (Wage and payment system breach & attributions about the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 9 Moderating Role of Attributions about the Organisation in the Relationship between Wage and Payment System Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Wage and payment system breach	$b = -.19^{**}$	$b = -.22^{**}$	$b = -.10^*$	$b = -.13^*$	$b = .06$	$b = .05$	$b = .05$	$b = .07$
Attributions about the organisation	$b = -.11$	$b = -.10$	$b = .28^{**}$	$b = .28^{**}$	$b = .39^{**}$	$b = .39^{**}$	$b = .14$	$b = .14$
Interaction term		$b = .06$		$b = .01$		$b = -.09^{**}$		$b = .08$
$R^2$		0.14		0.04		0.12		0.06
$\Delta R^2$		0.01		0.00		0.02		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**In-role performance.** Attributions about the organisation moderate the relationships between work organisation breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .12$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 21) shows that the relationship between wage and payment system breach and in-role performance is negative when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for the breach), but is positive when employee are less likely to make attributions about the organisation.

Simple slope analysis shows that the slope for low attributions about the organisation ( $-1$  SD,  $t = 1.98$ ,  $p < .05$ ) is significant, but the slope for high attributions about the organisation ( $+1$  SD,  $t = -.56$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the organisation for wage and payment system breach, the positive relationship between the breach and in-role performance is significant. When employees are more likely to make attributions about the organisation for wage and payment system breach, there is no significant relationship between the breach and in-role performance.



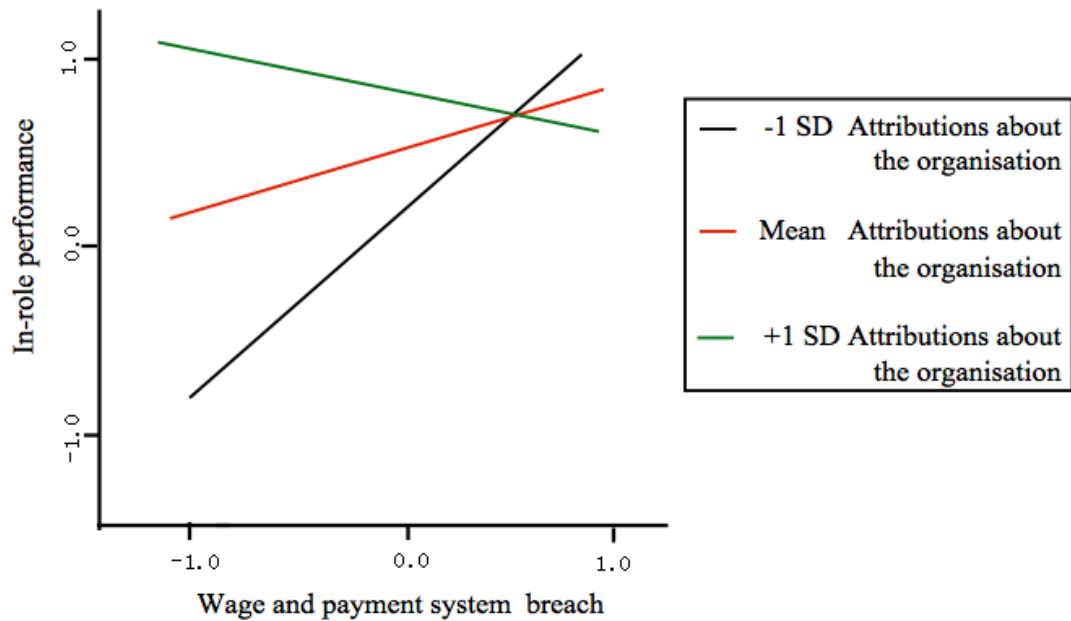


Figure 21 Interaction between Wage and Payment System Breach and Attributions about the Organisation on In-role Performance

#### 8.6.4 Attributions outside of the Supervisor and the Organisation

In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between wage and payment system breach and employee outcomes will be reported. Figure 22 and Table 10 show the moderation results. Attributions outside of the supervisor and the organisation moderated the relationship between wage and payment system breach and leadership perceptions, but do not moderate the relationships between wage and payment system breach and employee well-being, in-role performance and extra-role performance.

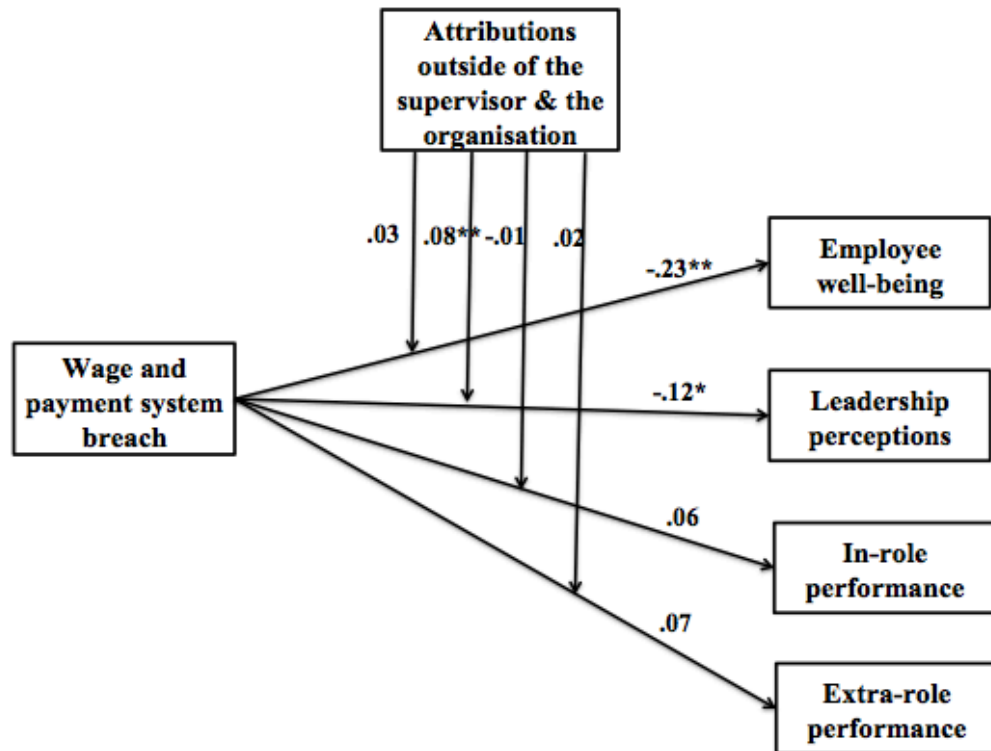


Figure 22 Specific Moderation Model (Wage and payment system breach & attributions outside of the supervisor and the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 10 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Wage and Payment System Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Wage and payment system breach	$b = -.19^{**}$	$b = -.23^{**}$	$b = -.10^*$	$b = -.12^*$	$b = .06$	$b = .07$	$b = .05$	$b = .06$
Attributions outside of the supervisor and the organisation	$b = .02$	$b = -.01$	$b = .03$	$b = .20^{**}$	$b = .13$	$b = .12$	$b = .03$	$b = .03$
Interaction term		$b = .03$		$b = .08^{**}$		$b = -.01$		$b = .02$
$R^2$		0.11		0.04		0.04		0.02
$\Delta R^2$		0.00		0.02		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Favourable leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between work organisation breach and favourable leadership perceptions ( $b = .08$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .04$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of favourable leadership perceptions. Plotting the interaction (Figure 23) shows that the negative relationship between wage and payment system breach and favourable leadership perceptions is weaker when employees tend to make attributions outside of the supervisor and the organisation (i.e., employees do attribute the breach to the factors beyond the supervisor's and the organisation's control) than when employee are less likely to make attributions outside of the supervisor and the organisation.

Simple slope analysis shows that the slope for low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = -3.17$ ,  $p < .01$ ) is significant, but the slope for high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = -.63$ , ns.) is not. Thus, when employees are less likely to make attributions outside of the supervisor and the organisation for wage and payment system breach, the negative relationship between the breach and favourable leadership perceptions is significant. But when employees are more likely to make attributions outside of the supervisor and the

organisation for wage and payment system breach, there is no significant relationship between the breach and favourable leadership perceptions.

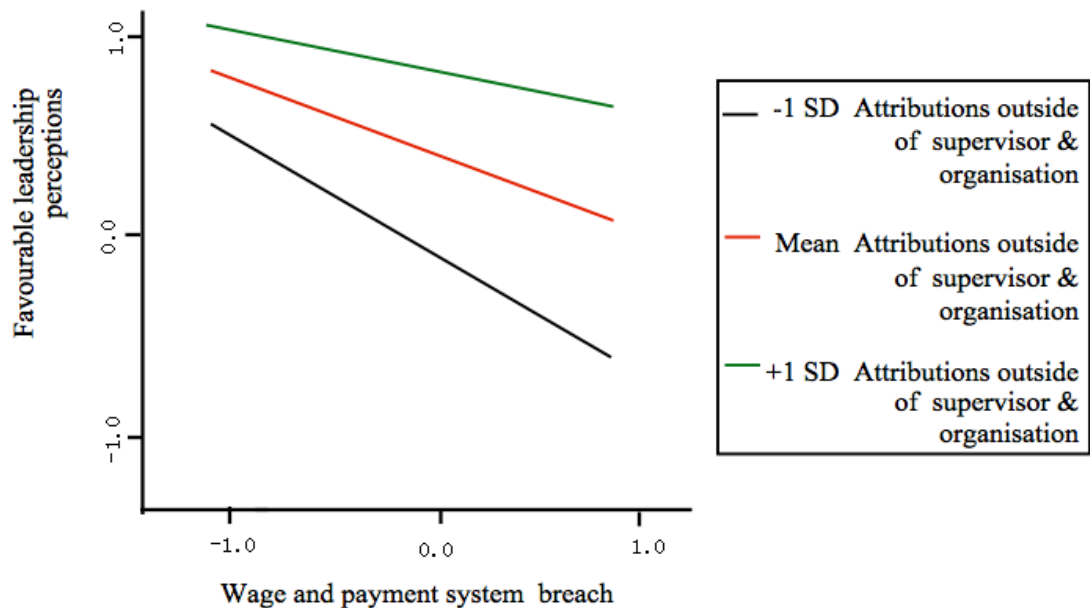


Figure 23 Interaction between Wage and Payment System Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

In general, employee attributions partially moderate the relationship between wage and payment system breach and employee outcomes. Among the four employee attributions, employee internal attributions and attributions about the supervisor moderate almost all the relationships between wage and payment system breach and employee outcomes. Thus, the employee internal attributions and attributions about the supervisor are two important moderator in the relationship between wage and payment system breach and employee outcomes. Compared with the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes, the moderating role of employee attributions do not change much in the relationship between the wage and payment system dimension of psychological contract breach and employee outcomes.

## **Moderating Role of Employee Attributions in the Relationship between Security and Flexibility Breach and**

## Employee Outcomes

The moderating role of employee attributions in the relationship between security and flexibility breach and employee outcomes was tested in Mplus. Table 11 show the overview of the interaction effects of employee attributions. The relationship between security and flexibility breach and employee well-being is moderated by attributions about the supervisor and attributions about the organisation. The relationship between security and flexibility breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationships between security and flexibility breach and in-role performance and extra-role performance are moderated by employee internal attributions, attributions about the supervisor and attributions about the organisation. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between security and flexibility breach and employee outcomes. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 11 Moderating Role of Employee Attributions in the Relationship between Security and Flexibility Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	X
Attributions about the organisation	X		X	X
Attributions outside of the supervisor and the organisation		X		

## Employee Internal Attributions

In this section, the interaction effects of employee internal attributions on the relationship between security and flexibility breach and employee outcomes will be reported. Figure 24 and Table 12 show the moderation results. Employee internal attributions moderate the relationships between security and flexibility breach and leadership perceptions, in-role performance and extra-role performance, but do not moderate the relationship between security and flexibility breach and employee well-being.

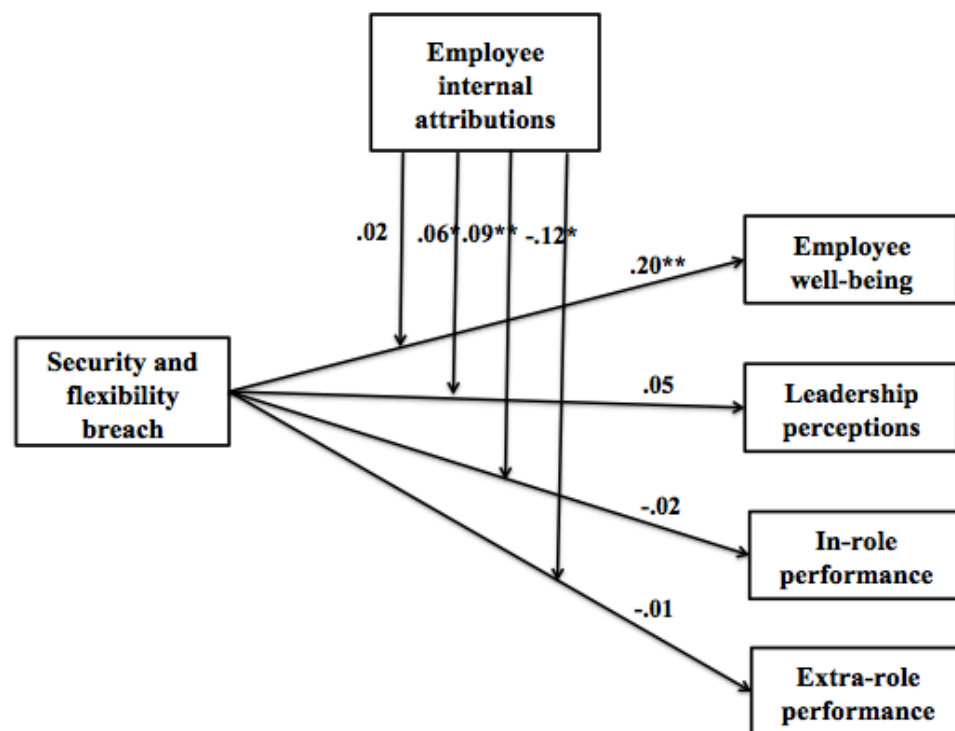


Figure 24 Specific Moderation Model (Security and flexibility breach & employee internal attributions)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 12 Moderating Role of Employee Internal Attributions in the Relationship between Security and Flexibility Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Security and flexibility breach	$b = .19^{**}$	$b = .20^{**}$	$b = .05$	$b = .05$	$b = -.02$	$b = -.02$	$b = -.02$	$b = -.01$
Employee internal attributions	$b = .13^*$	$b = .15^{**}$	$b = .25^{**}$	$b = .26^{**}$	$b = .08$	$b = .10^*$	$b = .01$	$b = -.02$
Interaction term		$b = .02$		$b = .06^*$		$b = .09^{**}$		$b = -.12^*$
$R^2$		0.05		0.1		0.03		0.04
$\Delta R^2$		0.00		0.01		0.02		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Favourable leadership perceptions.** Employee internal attributions moderate the relationships between security and flexibility breach and favourable leadership perceptions ( $b = .06$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .10$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of favourable leadership perceptions. Plotting the interaction (Figure 25) shows that the relationship between security and flexibility breach and favourable leadership perceptions is positive when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is negative when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions ( $-1$  SD,  $t = -.14$ ,  $ns.$ ) and high employee internal attributions ( $+1$  SD,  $t = 1.55$ ,  $ns.$ ) are not significant. The region of significance shows that simple slopes are significant when the moderator is above 2.42 and below 21.37. Thus, the mean value of the moderator plus and minus three standard deviations could be used as the conditional values of the moderator because the values of both  $-3$  SD and  $+3$  SD are located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value minus three standard deviations equals .76, which is over the minimum value of the moderator (i.e., 1), and the mean value plus three standard deviations equals to 6.28, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between security and flexibility

breach and leadership perceptions regardless of when employees are more or less likely to make internal attributions for the breach.

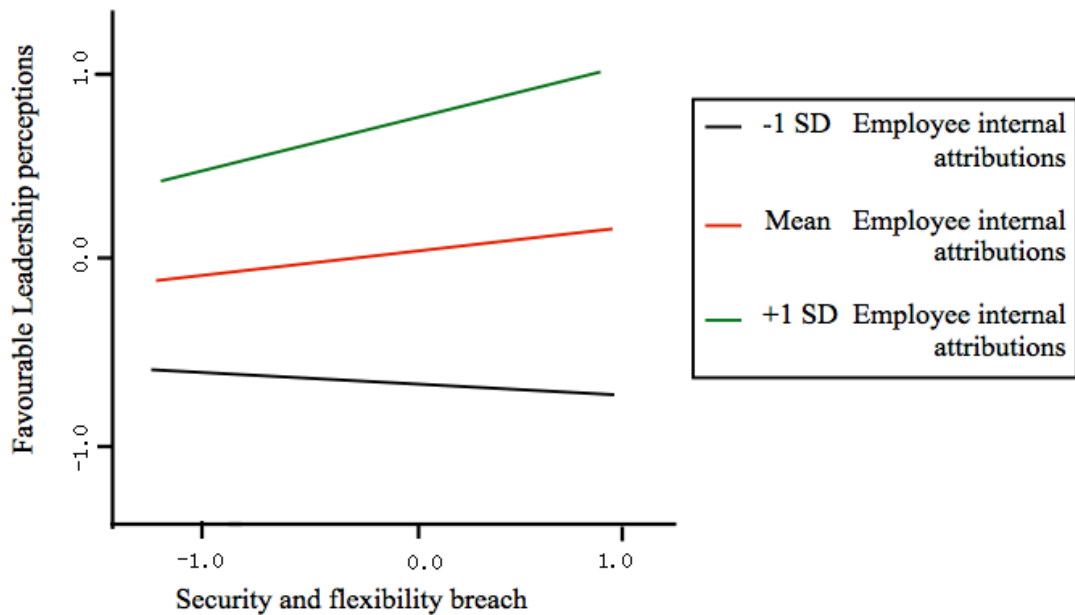


Figure 25 Interaction between Security and Flexibility Breach and Employee Internal Attributions on Favourable Leadership Perceptions

***In-role performance.*** Employee internal attributions moderate the relationships between security and flexibility breach and in-role performance ( $b = .09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .03$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 26) shows that the relationship between security and flexibility breach and in-role performance is positive when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is negative when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions (-SD,  $t = -1.42$ , *ns.*) and high employee internal attributions (+SD,  $t = .90$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -1.72 or above 2.58. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean



score of the moderator is 3.52 and the standard deviation is .92. The mean value minus two standard deviations equals 1.68, which is not over the minimum value of the moderator (i.e., 1). This study then used the mean value of the moderator plus and minus two standard deviations as the conditional values of the moderator to test the significant of low and high slopes. Then the slope for low employee internal attributions (-2 SD,  $t = -2.11$ ,  $p < .05$ ) is significant, but the slope for high employee internal attributions (+2 SD,  $t = 1.68$ ,  $ns.$ ) is not. Thus, when employees are less likely to make employee internal attributions for security and flexibility breach, the negative relationship between the breach and in-role performance is significant. But when employees are more likely to make employee internal attributions for security and flexibility breach, there is no significant relationship between the breach and in-role performance.

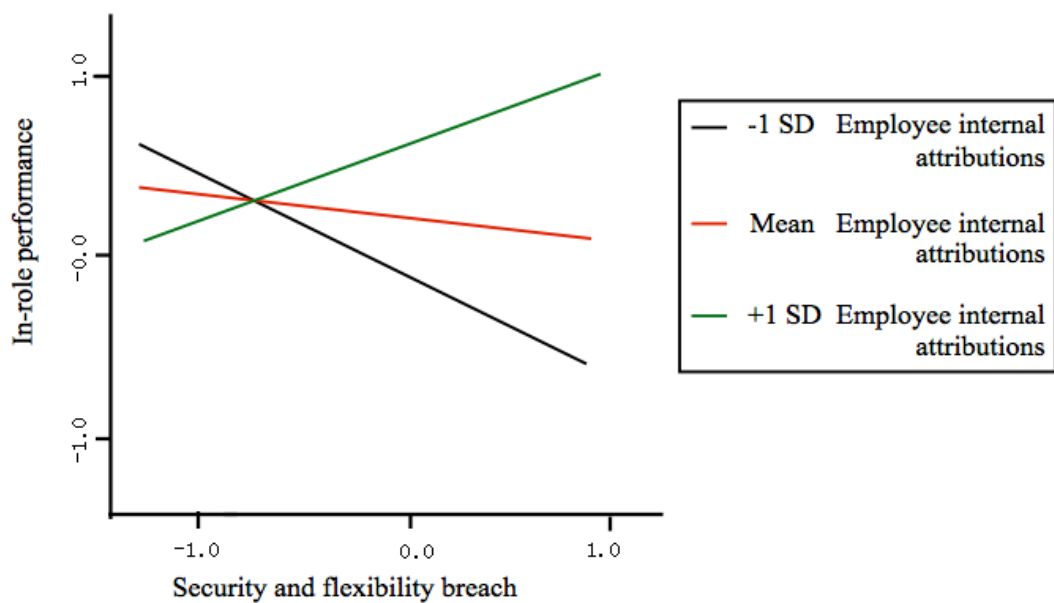


Figure 26 Interaction between Security and Flexibility Breach and Employee Internal Attributions on In-role Performance

**Extra-role performance.** Employee internal attributions moderate the relationships between security and flexibility breach and extra-role performance ( $b = -.12$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .04$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of extra-role performance. Plotting the interaction (Figure 27) shows that the relationship between security and flexibility breach and extra-role performance is

negative when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is positive when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = 1.05$ , *ns.*) and high employee internal attributions (+1 SD,  $t = -1.24$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -2.45 or above 2.10. Thus, the mean value of the moderator plus and minus three standard deviations could be used as the conditional values of the moderator because the values of both -3 SD and +3 SD are located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value minus three standard deviations equals .76, which is over the minimum value of the moderator (i.e., 1), and the mean value plus three standard deviations equals to 6.28, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between security and flexibility breach and in-role performance no matter when employees are more or less likely to make internal attributions for the breach.

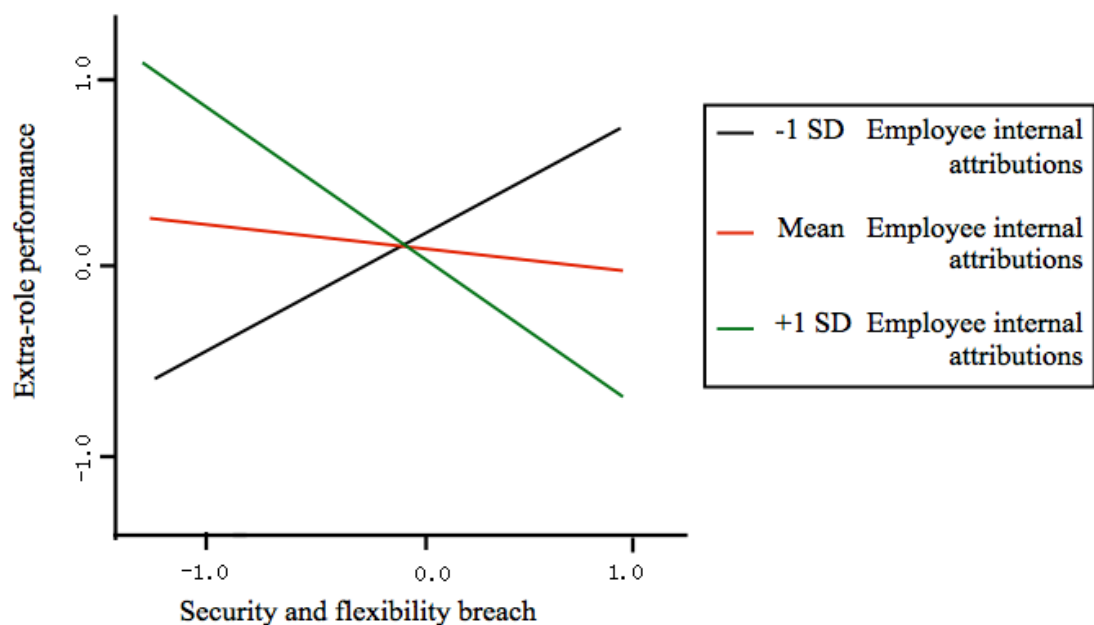


Figure 27 Interaction between Security and Flexibility Breach and Employee i  
Internal Attributions on Extra-role Performance

## Attributions about the Supervisor

In this section, the interaction effects of attributions about the supervisor on the relationship between security and flexibility breach and employee outcomes will be reported. Figure 28 and Table 8.18 show the moderation results. Attributions about the supervisor moderate the relationships between security and flexibility and employee well-being, in-role performance and extra-role performance, but do not moderate the relationships between security and flexibility breach and leadership perceptions.

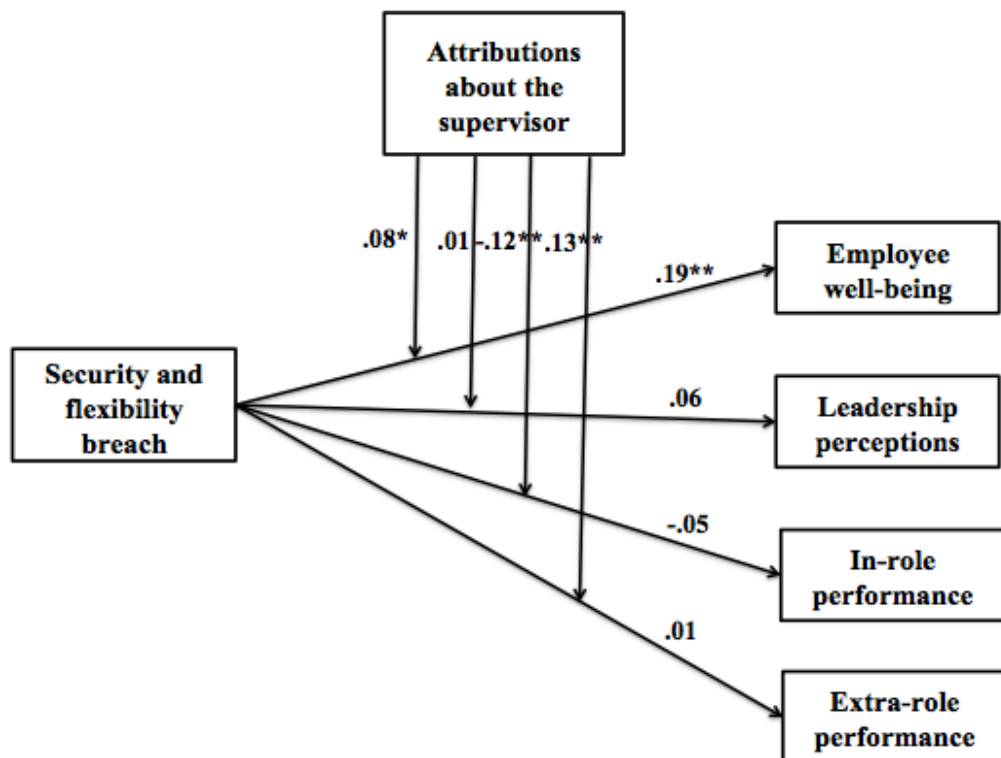


Figure 28 Specific Moderation Model (Security and flexibility breach & attributions about the supervisor)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 13 Moderating Role of Attributions about the Supervisor in the Relationship between Security and Flexibility Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Security and flexibility breach	$b = .19^{**}$	$b = .19^{**}$	$b = .05$	$b = .06$	$b = -.02$	$b = .01$	$b = -.02$	$b = -.05$
Attributions about the supervisor	$b = -.01$	$b = .01$	$b = -.47^{**}$	$b = -.47^{**}$	$b = -.34^{**}$	$b = -.36^{**}$	$b = -.05$	$b = -.04$
Interaction term		$b = .08^*$		$b = .01$		$b = -.12^{**}$		$b = .13^{**}$
$R^2$		0.14		0.15		0.14		0.06
$\Delta R^2$		0.02		0.00		0.04		0.05

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the supervisor moderate the relationships between security and flexibility breach and employee well-being ( $b = .08$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .14$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 29) shows that the positive relationship between security and flexibility breach and employee well-being is stronger when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach) than when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor ( $-1$  SD,  $t = 1.56$ ,  $ns.$ ) and high attributions about the supervisor ( $+1$  SD,  $t = 3.81$ ,  $p < .01$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for security and flexibility breach, the positive relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the supervisor for security and flexibility breach, the positive relationship between the breach and employee well-being is significant as well.

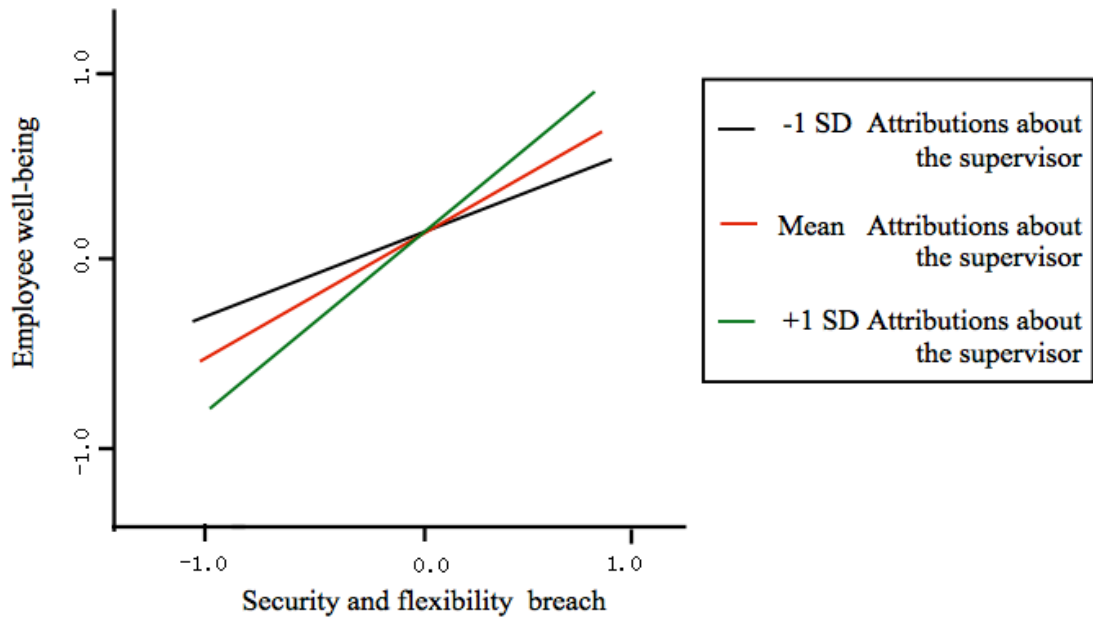


Figure 29 Interaction between Security and Flexibility Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between security and flexibility breach and in-role performance ( $b = -.12$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .14$ ,  $\Delta R^2 = .04$ ). The interaction term explains additional 4% of variance of in-role performance. Plotting the interaction (Figure 30) shows that the relationship between security and flexibility breach and in-role performance is negative when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach), but is positive when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor (-1 SD,  $t = 1.68$ , *ns.*) and high attributions about the supervisor (+1 SD,  $t = -1.42$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below -1.23 or above 1.47. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the values of both -2 SD and +2 SD are located in the region of significance. The mean score of the moderator is 2.52, and the standard deviation is .74. The mean value minus two standard deviations equals 1.01, which is not over the minimum value of the moderator (i.e., 1). The mean value plus

two standard deviations equals 4, which is not over the maximum value of the moderator (i.e., 5). The slopes for both low attributions about the supervisor (-2 SD,  $t = 2.64$ ,  $p < .01$ ) and high attributions about the supervisor (+2 SD,  $t = -2.42$ ,  $p < .05$ ) are significant. Thus, when employees are less likely to make attributions about the supervisor for security and flexibility breach, the positive relationship between the breach and in-role performance is significant. When employees are more likely to make attributions about the supervisor for security and flexibility breach, the negative relationship between the breach and in-role performance is significant as well.

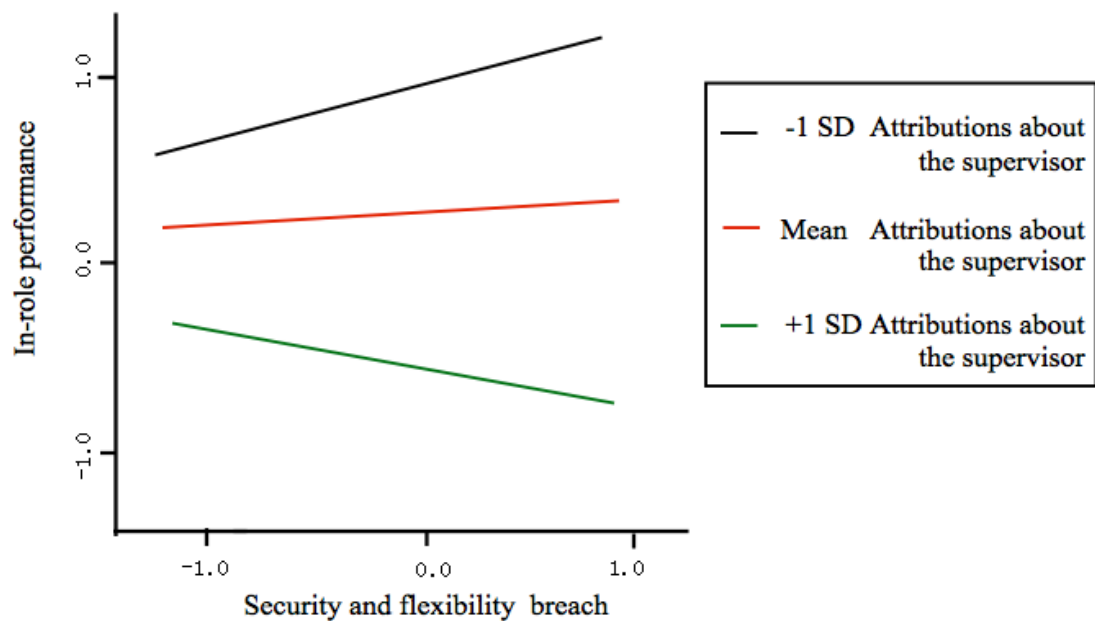


Figure 30 Interaction between Security and Flexibility Breach and Attributions about the Supervisor on In-role Performance

**Extra-role performance.** Attributions about the supervisor moderate the relationships between security and flexibility breach and extra-role performance ( $b = .13$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .06$ ,  $\Delta R^2 = .05$ ). The interaction term explains additional 5% of variance of extra-role performance. Plotting the interaction (Figure 31) shows that the relationship between security and flexibility breach and extra-role performance is positive when employees tend to make attributions about the supervisor (i.e., employees do blame the supervisor for the breach), but is negative when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor (-1 SD,  $t = -1.80$ , *ns.*) and high attributions about the supervisor (+1 SD,  $t = .80$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below -1.15 or above 2.15. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 2.52, and the standard deviation is .74. The mean value minus two standard deviations equals 1.01, which is not over the minimum value of the moderator (i.e., 1). The slope for low attributions about the supervisor (-2 SD,  $t = -2.72$ ,  $p < .01$ ) is significant, but for high attributions about the supervisor (+2 SD,  $t = 1.84$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for security and flexibility breach, the negative relationship between the breach and extra-role performance is significant. When employees are more likely to make attributions about the supervisor for security and flexibility breach, there is no significant relationship between the breach and extra-role performance.

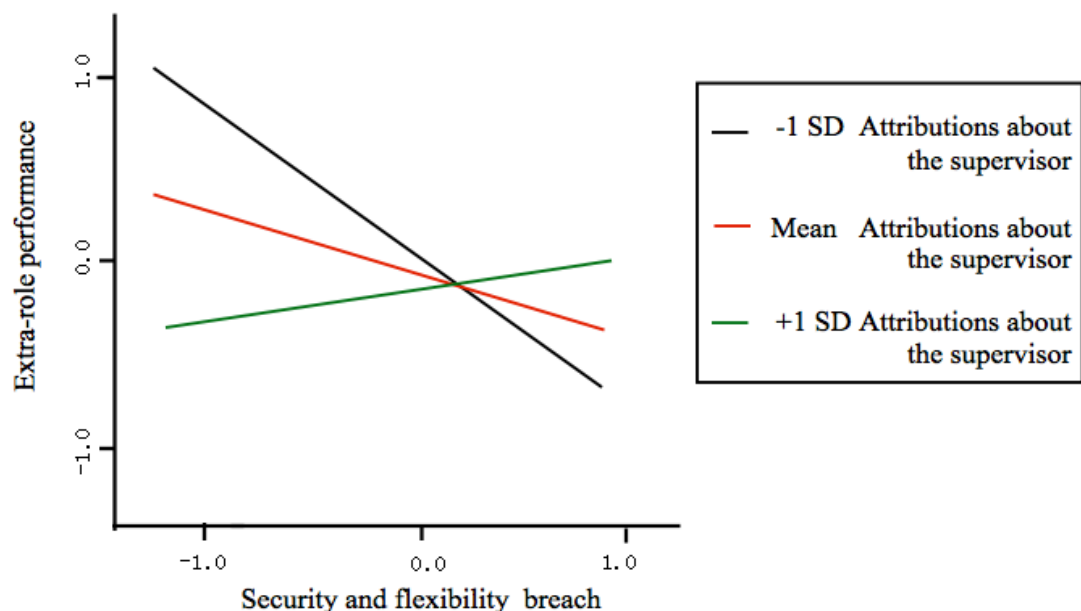


Figure 31 Interaction between Security and Flexibility Breach and Attributions about the Supervisor on Extra-role Performance

### 8.7.3 Attributions about the Organisation

In this section, the interaction effects of attributions about the organisation on the relationship between security and flexibility breach and employee outcomes will be reported. Figure 32 and Table 14 show the moderation results. Attributions about the organisation moderate the relationships between security and flexibility breach and employee well-being, in-role performance and extra-role performance, but do not moderate the relationship between security and flexibility breach and leadership perceptions. Attributions about the organisation moderate the relationships between security and flexibility breach and employee well-being, in-role performance and extra-role performance, but do not moderate the relationship between security and flexibility breach and leadership perceptions.

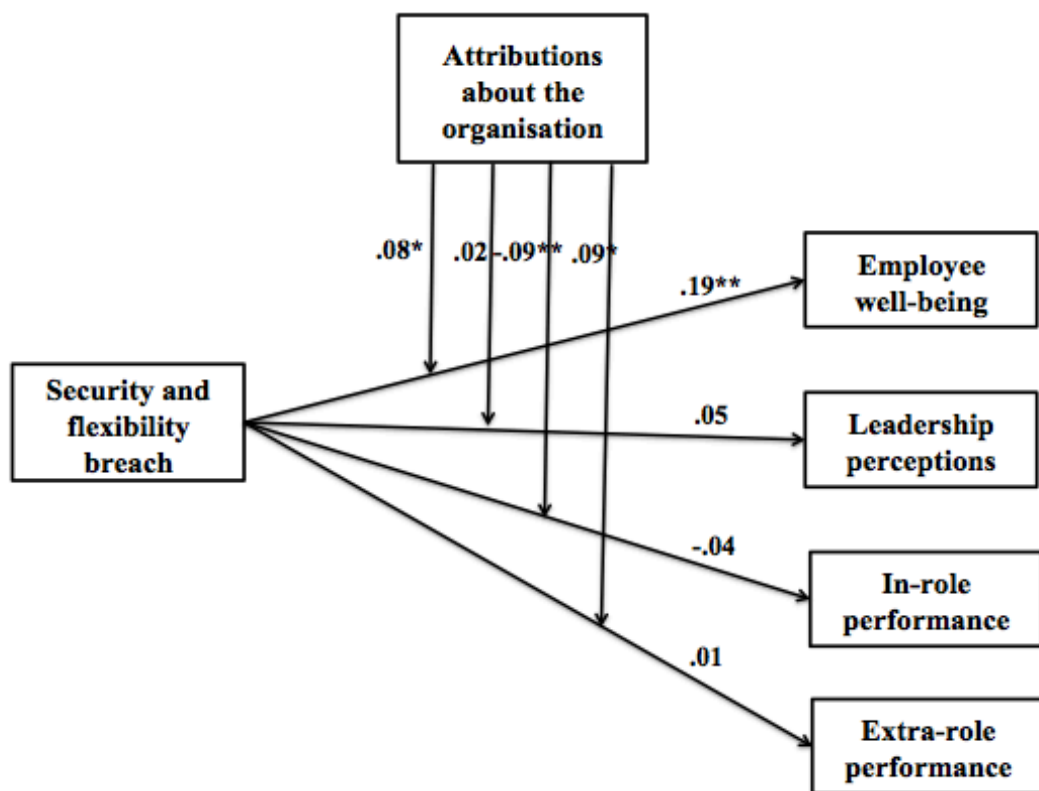


Figure 32 Specific Moderation Model (Security and flexibility breach & attributions about the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.



Table 14 Moderating Role of Attributions about the Organisation in the Relationship between Security and Flexibility Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Security and flexibility breach	$b = .19^{**}$	$b = .19^{**}$	$b = .05$	$b = .05$	$b = -.02$	$b = .01$	$b = -.02$	$b = -.04$
Attributions about the organisation	$b = -.11$	$b = -.09$	$b = .28^{**}$	$b = .28^{**}$	$b = .39^{**}$	$b = .38^{**}$	$b = .14$	$b = .14$
Interaction term		$b = .08^*$		$b = .02$		$b = -.09^{**}$		$b = .09^*$
$R^2$		0.06		0.1		0.14		0.03
$\Delta R^2$		0.02		0.00		0.02		0.02

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the organisation moderate the relationships between security and flexibility breach and employee well-being ( $b = .08$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .06$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 33) shows that the positive relationship between security and flexibility breach and employee well-being is stronger when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for the breach) than when employees are less likely to make attributions about the organisation.

Simple slope analysis shows that the slope for low attributions about the organisation ( $-1$  SD,  $t = 1.56$ , *ns.*) is not significant, but for high attributions about the organisation ( $+1$  SD,  $t = 3.81$ ,  $p < .01$ ) is significant. Thus, when employees are less likely to make attributions about the organisation for security and flexibility breach, there is no relationship between the breach and employee well-being. When employees are more likely to make attributions about the organisation for security and flexibility breach, the positive relationship between the breach and employee well-being is significant.

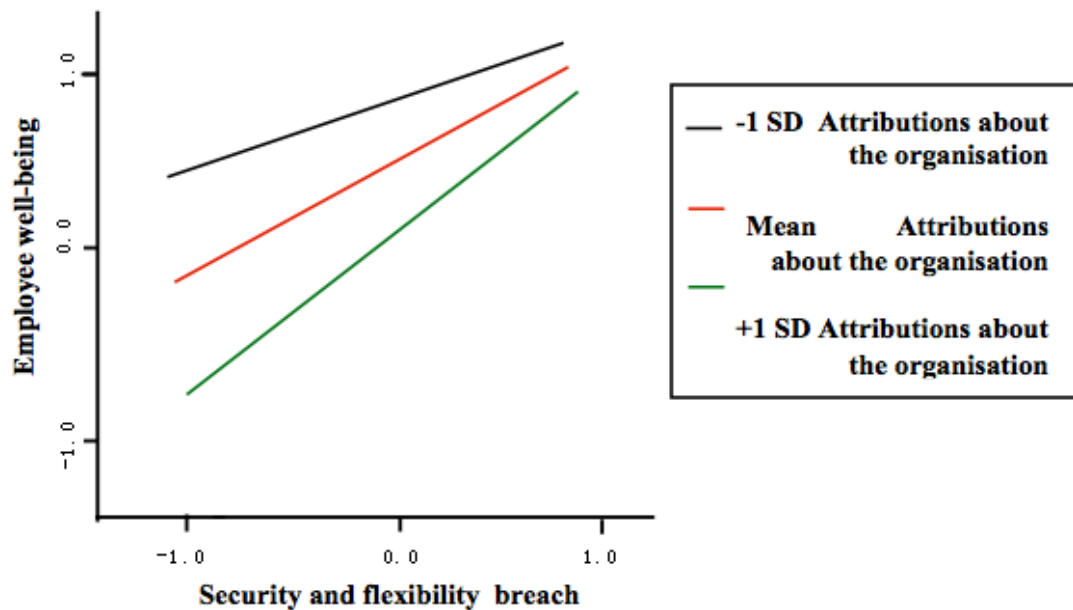


Figure 33 Interaction between Security and Flexibility Breach and Attributions about the Organisation on Employee Well-being

***In-role performance.*** Attributions about the organisation moderate the relationships between security and flexibility breach and in-role performance ( $b = -.09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .14$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of in-role performance. Plotting the interaction (Figure 34) shows that the relationship between security and flexibility breach and in-role performance is negative when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for the breach), but is positive when employee are less likely to make attributions about the organisation.

Simple slope analysis shows that the slopes for both low attributions about the organisation (-1 SD,  $t = 1.29$ ,  $ns.$ ) and high attributions about the organisation (+1 SD,  $t = -1.03$ ,  $ns.$ ) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below -1.91 or above 2.35. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value minus two standard deviations equals 1.68, which is not over the minimum value of the moderator (i.e., 1). The slope for low attributions about the

organisation ( $-2$  SD,  $t = 2.01$ ,  $p < .05$ ) is significant, but for high attributions about the organisation ( $+2$  SD,  $t = -1.79$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the organisation for security and flexibility breach, the positive relationship between the breach and in-role performance is significant. When employees are more likely to make attributions about the organisation for security and flexibility breach, there is no significant relationship between the breach and in-role performance.

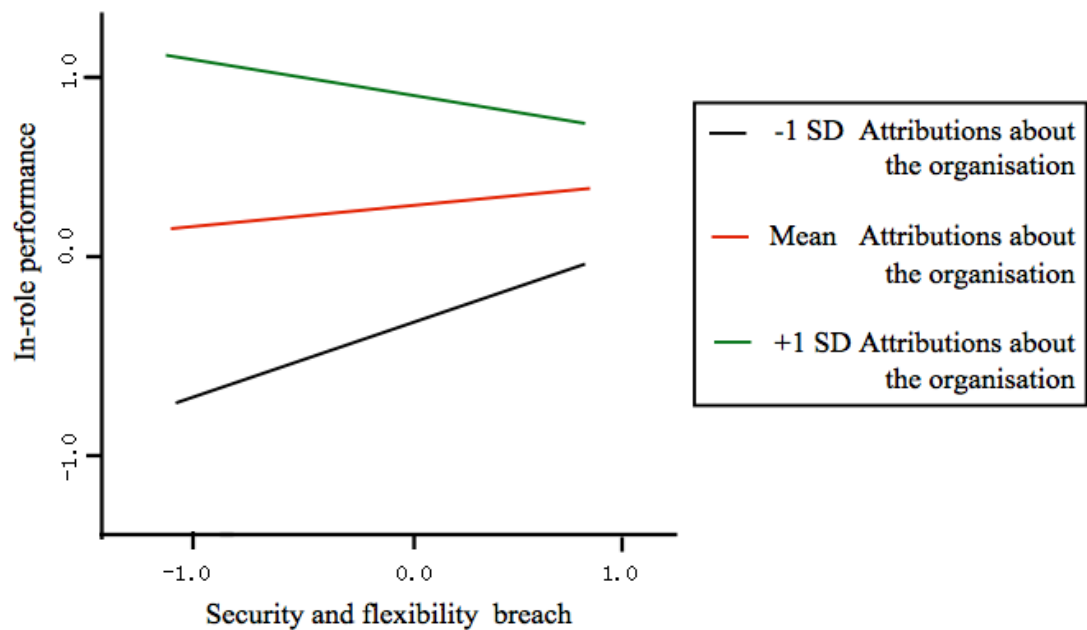


Figure 34 Interaction between Security and Flexibility Breach and Attributions about the Organisation on In-role Performance

**Extra-role performance.** Attributions about the organisation moderate the relationships between security and flexibility breach and extra-role performance ( $b = .09$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .03$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of extra-role performance. Plotting the interaction (Figure 35) shows that the relationship between security and flexibility breach and extra-role performance is positive when employees tend to make attributions about the organisation (i.e., employees do blame the supervisor for the breach), but is negative when employee are less likely to make attributions about the organisation.

Simple slope analysis shows that the slopes for both low attributions about the organisation (-1 SD,  $t = -1.30$ , *ns.*) and high attributions about the organisation (+1 SD,  $t = .50$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant only when the moderator is below -2.06 or above 3.78. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 2.52 and the standard deviation is .82. The mean value minus two standard deviations equals .88, which is over the minimum value of the moderator (i.e., 1). Therefore, there is no significant relationship between security and flexibility breach and extra-role performance regardless of when employees are more or less likely to make attributions about the organization.

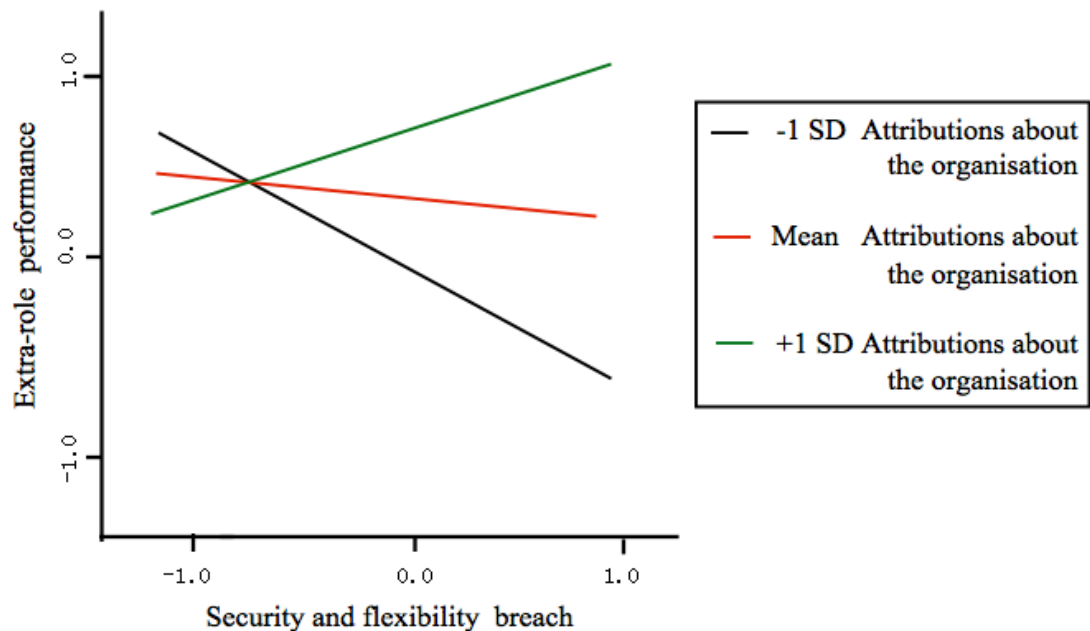


Figure 35 Interaction between Security and Flexibility Breach and Attributions about the Organisation on Extra-role Performance

### Attributions outside of the Supervisor and the Organisation

In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between security and flexibility breach and employee outcomes will be reported. Figure 36 and Table 16 show the moderation results.

Attributions outside of the supervisor and the organisation moderate the security and flexibility breach and leadership perceptions, but do not moderate the relationships between security and flexibility breach and employee well-being, in-role performance, and extra-role performance.

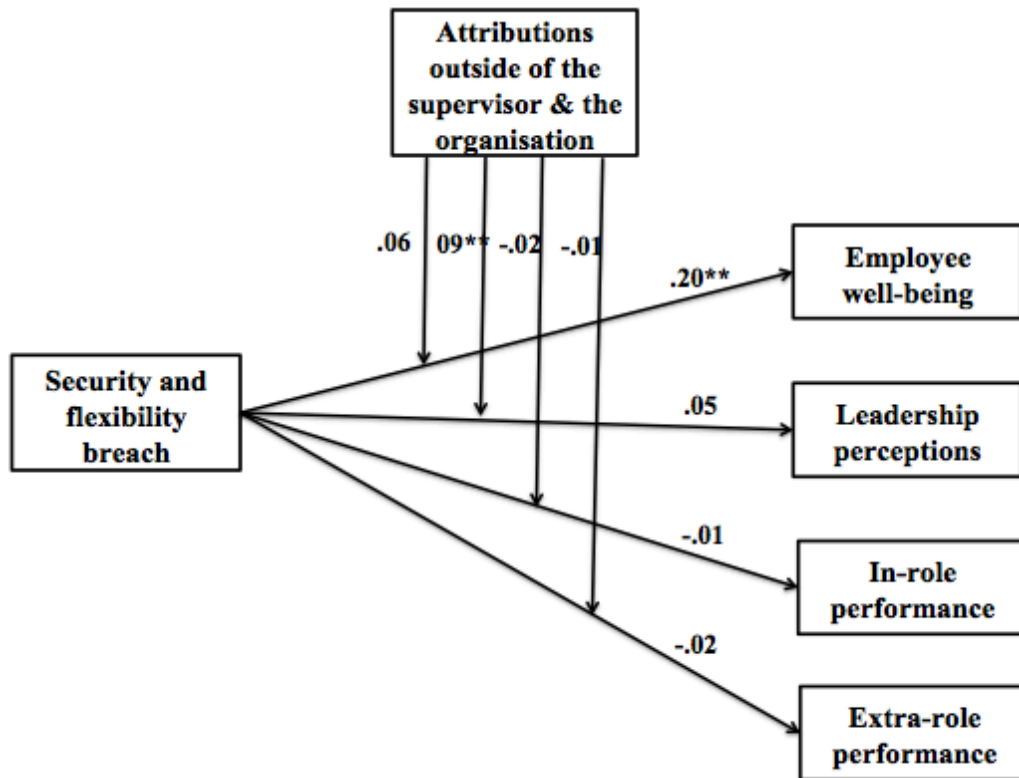


Figure 36 Specific Moderation Model (Security and flexibility breach & attributions outside of the supervisor and the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 16 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Security and Flexibility Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Security and flexibility breach	$b = .19^{**}$	$b = .20^{**}$	$b = .05$	$b = .05$	$b = -.02$	$b = -.01$	$b = -.02$	$b = -.02$
Attributions outside of the supervisor and the organisation	$b = -.11$	$b = .01$	$b = .28^{**}$	$b = .21^{**}$	$b = .39^{**}$	$b = .12$	$b = .14$	$b = .03$
Interaction term		$b = .06$		$b = .09^{**}$		$b = -.02$		$b = -.01$
$R^2$		0.12		0.13		0.01		0.01
$\Delta R^2$		0.01		0.07		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Favourable leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between security and flexibility breach and favourable leadership perceptions ( $b = .09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .13$ ,  $\Delta R^2 = .07$ ). The interaction term explains additional 7% of variance of favourable leadership perceptions. Plotting the interaction (Figure 37) shows that the relationship between security and flexibility breach and favourable leadership perceptions is positive when employees tend to make attributions outside of the supervisor and the organisation (i.e., employees do attribute the breach to factors beyond the supervisor's and the organisation's control), but is negative when employee are less likely to make attributions outside of the supervisor and the organisation.

Simple slope analysis shows that the slope for low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = -.57$ ,  $ns.$ ) is not significant, but for high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = 1.98$ ,  $p < .05$ ) is significant. Thus, when employees are less likely to make attributions outside of the supervisor and the organisation for security and flexibility breach, there is no relationship between the breach and favourable leadership perceptions. When employees are more likely to make attributions outside of the supervisor and the organisation for security and

flexibility breach, the positive relationship between the breach and favourable leadership perceptions is significant.

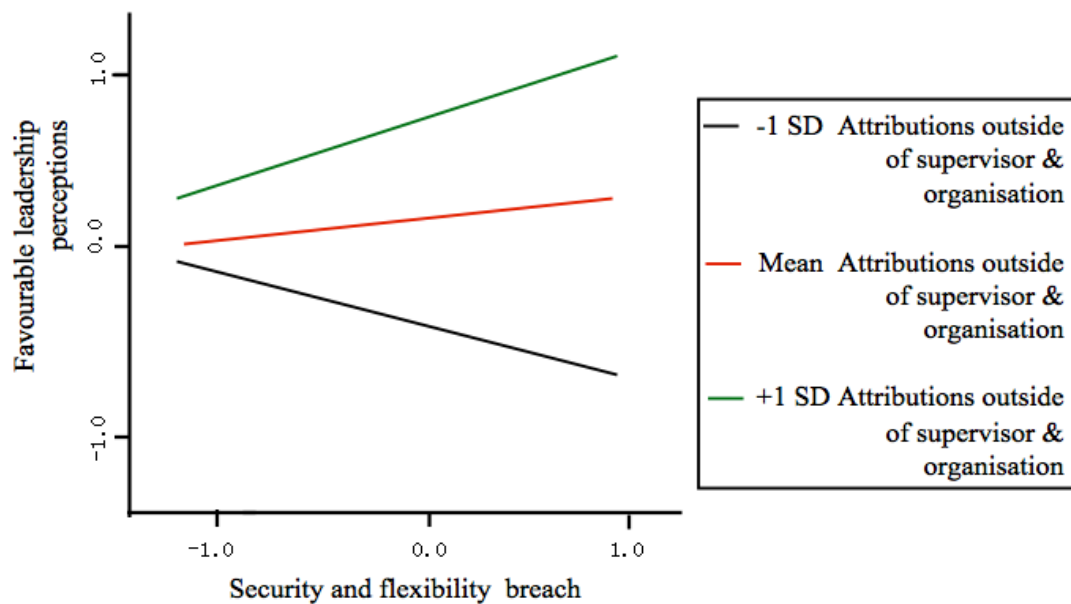


Figure 31 Interaction between Security and Flexibility Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

In general, employee attributions partially moderate the relationship between security and flexibility breach and employee outcomes. Among the four employee attributions, employee internal attributions, attributions about the supervisor and attributions about the organisation moderated almost all the relationships between security and flexibility breach and employee outcomes. Compared with the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes, the moderating role of employee attributions do not change much in the relationship between the security and flexibility dimension of psychological contract breach and employee outcomes.

## **Moderating Role of Employee Attributions in the Relationship between Skills and Development Breach and Employee Outcomes**

The moderating role of employee attributions in the relationship between skills and development breach and employee outcomes was tested in Mplus. Table 17 shows the overview of the interaction effects of employee attributions. The relationship between skills and development breach and employee well-being is moderated by attributions about the supervisor and attributions about the organisation. The relationship between skills and development breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationship between skills and development breach and in-role performance is moderated by employee internal attributions, attributions about the supervisor and attributions about the organisation. The relationship between skills and development breach and extra-role performance is moderated by employee internal attributions and attributions about the supervisor. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between skills and development breach and employee outcomes. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 17 Moderating Role of Employee Attributions in the Relationship between Skills and Development Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	X
Attributions about the organisation	X		X	
Attributions outside of the supervisor and the organisation		X		



## Employee Internal Attributions

In this section, the interaction effects of employee internal attributions on the relationship between skills and development breach and employee outcomes will be reported. Figure 38 and Table 18 show the moderation results. Employee internal attributions moderate the relationships between skills and development breach and leadership perceptions, in-role performance, extra-role performance, but do not moderate the relationship between skills and development breach and employee well-being.

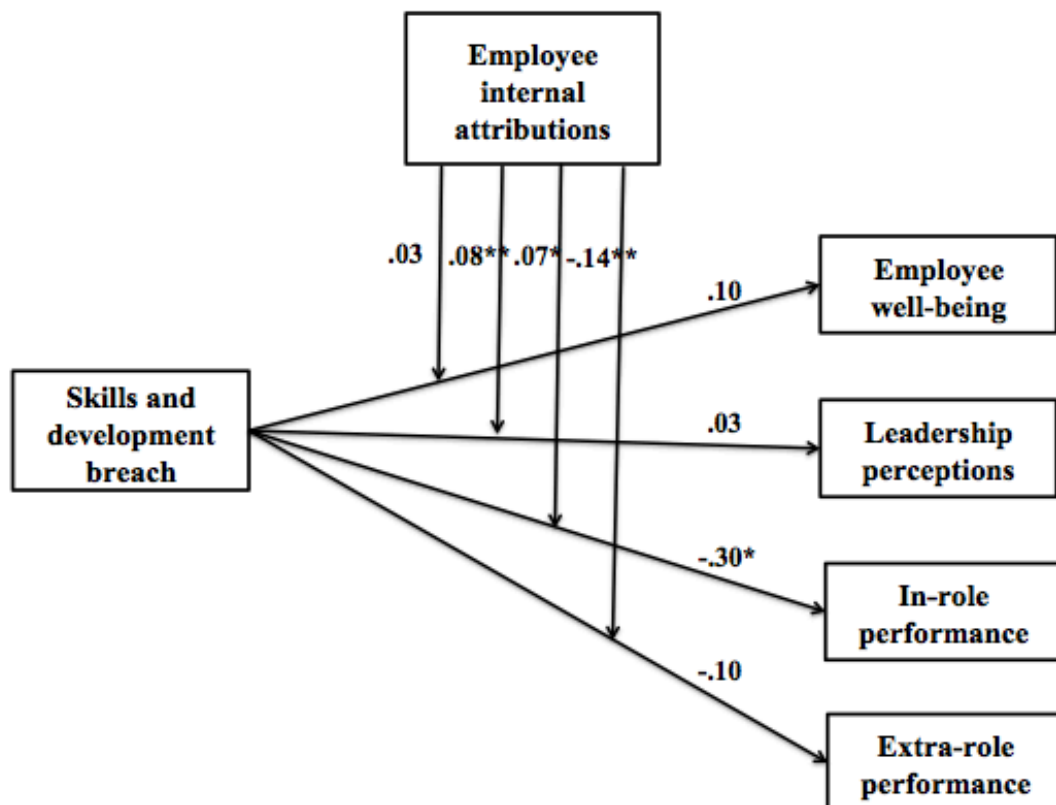


Figure 38 Specific Moderation Model (Skills and development breach & employee internal attributions)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 18 Moderating Role of Employee Internal Attributions in the Relationship between Skills and Development Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Skills and development breach	$b = .10$	$b = .13^*$	$b = .03$	$b = .03$	$b = -.26^*$	$b = -.30^*$	$b = -.10$	$b = -.09$
Employee internal attributions	$b = .13^*$	$b = .15^{**}$	$b = .25^{**}$	$b = .29^{**}$	$b = .08$	$b = .11^*$	$b = .01$	$b = -.05$
Interaction term		$b = .03$		$b = .08^{**}$		$b = .07^*$		$b = -.14^{**}$
$R^2$		0.09		0.18		0.12		0.08
$\Delta R^2$		0.00		0.02		0.01		0.05

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Favourable leadership perceptions.** Employee internal attributions moderate the relationships between skills and development breach and favourable leadership perceptions ( $b = .08$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .18$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of favourable leadership perceptions. Plotting the interaction (Figure 39) shows that the relationship between skills and development breach and favourable leadership perceptions is positive when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is negative when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions ( $-1$  SD,  $t = -.48$ , *ns.*) and high employee internal attributions ( $+1$  SD,  $t = 1.05$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below  $-4.87$  or above  $3.02$ . Thus, the mean value of the moderator plus and minus four standard deviations could be used as the conditional values of the moderator because the value of  $+4$  SD is located in the region of significance. The mean score of the moderator is  $3.52$  and the standard deviation is  $.92$ . The mean value plus four standard deviations equals  $7.20$ , which is over the maximum value of the moderator (i.e.,  $5$ ). Therefore, there is no significant relationship between skills and development breach and leadership perceptions regardless of when employees are more or less likely to make internal attributions for the breach.

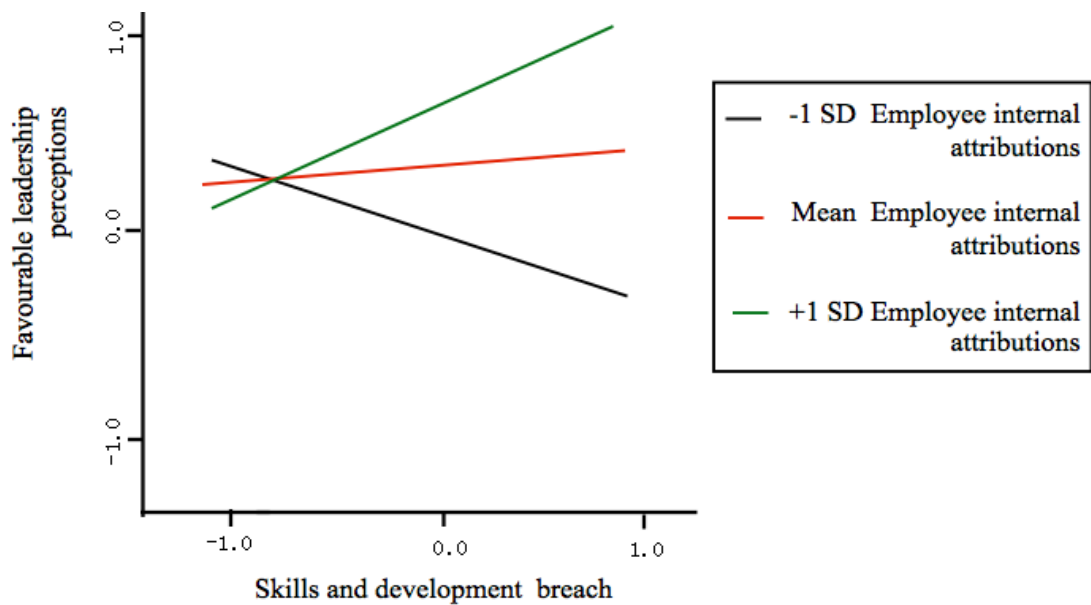


Figure 39 Interaction between Skills and Development Breach and Employee Internal Attributions on Favourable Leadership Perceptions

***In-role performance.*** Employee internal attributions moderate the relationships between skills and development breach and in-role performance ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .12$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 40) shows that the negative relationship between skills and development breach and in-role performance is weaker when employees tend to make employee internal attributions (i.e., employees blame themselves for the breach) than when employees are less likely to make employee internal attributions.

Simple slope analysis shows that the slope for low employee internal attributions (-1 SD,  $t = -3.02$ ,  $p < .01$ ) is significant, but for high employee internal attributions (+1 SD,  $t = -1.88$ , ns.) is not. Thus, when employees are less likely to make employee internal attributions for skills and development breach, the negative relationship between the breach and in-role performance is significant. When employees are more likely to make employee internal attributions for skills and development breach, there is no relationship between the breach and in-role performance.

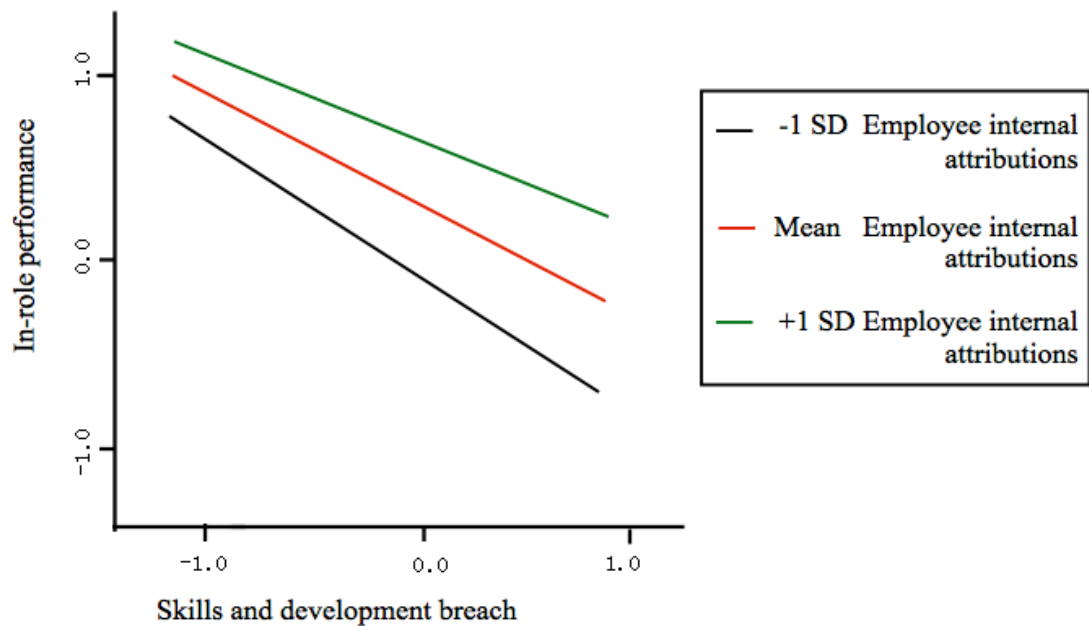


Figure 40 Interaction between Skills and Development Breach and Employee Internal Attributions on In-role Performance

**Extra-role performance.** Employee internal attributions moderate the relationships between skills and development breach and extra-role performance ( $b = -.14$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .08$ ,  $\Delta R^2 = .05$ ). The interaction term explains additional 5% of variance of extra-role performance. Plotting the interaction (Figure 41) shows that the relationship between skills and development breach and extra-role performance is negative when employees tend to make employee internal attributions (i.e., employees do blame themselves for the breach), but is positive when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = .30$ , *ns.*) and high employee internal attributions (+1 SD,  $t = -1.40$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -3.97 or above 1.86. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of +2 SD is located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value plus two standard deviations equals 5.36, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between

skills and development breach and extra-role performance regardless of when employees are more or less likely to make internal attributions for the breach.

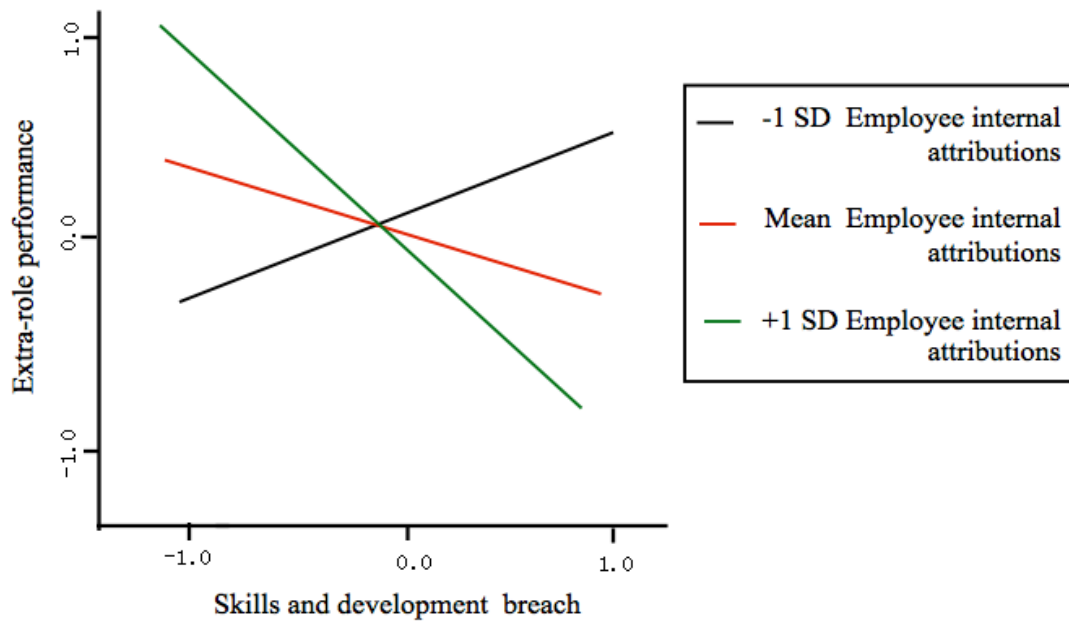


Figure 41 Interaction between Skills and Development Breach and Employee Internal Attributions on Extra-role Performance

### Attributions about the Supervisor

In this section, the interaction effects of attributions about the supervisor on the relationship between skills and development breach and employee outcomes will be reported. Figure 42 and Table 19 show the moderation results. Attributions about the supervisor moderate the relationships between skills and development breach and employee well-being in-role performance, extra-role performance, but do not moderate the relationship between skills and development breach and leadership perceptions.

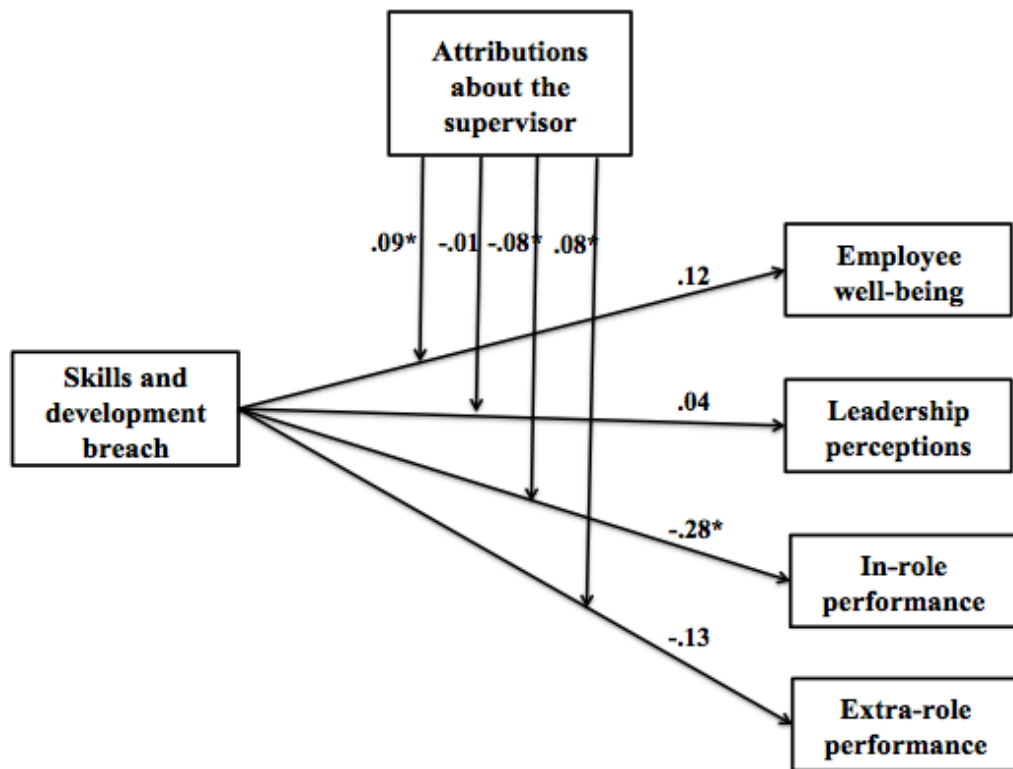


Figure 42 Specific Moderation Model (Skills and development breach & attributions about the supervisor)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 19 Moderating Role of Attributions about the Supervisor in the Relationship between Skills and Development Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Skills and development breach	$b = .10$	$b = .12$	$b = .03$	$b = .04$	$b = -.26^*$	$b = -.28^*$	$b = -.10$	$b = -.13$
Attributions about the supervisor	$b = -.01$	$b = .01$	$b = -.47^{**}$	$b = -.47^{**}$	$b = -.34^{**}$	$b = -.35^{**}$	$b = -.05$	$b = -.04$
Interaction term		$b = .09^*$		$b = -.01$		$b = -.08^*$		$b = .08^*$
$R^2$		0.05		0.18		0.33		0.06
$\Delta R^2$		0.02		0.00		0.01		0.02

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the supervisor moderate the relationships between skills and development breach and employee well-being ( $b = .09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .05$ ,  $\Delta R^2 = .02$ ). The interaction term explains an additional 1% of variance of employee well-being. Plotting the interaction (Figure 43) shows that the positive relationship between skills and development breach and well-being is stronger when employees tend to make attributions about the supervisor (i.e., employees blame the supervisor for the breach) than when employee are less likely to make employee internal attributions.

Simple slope analysis shows that the slopes for both low employee internal attributions ( $-1$  SD,  $t = .23$ ,  $ns.$ ) and high employee internal attributions ( $+1$  SD,  $t = 1.61$ ,  $ns.$ ) are not significant. The region of significance is imaginary. Thus, there is no significant relationship between skills and development breach and employee well-being regardless of when employees are more or less likely to make attributions about the supervisor for the breach.

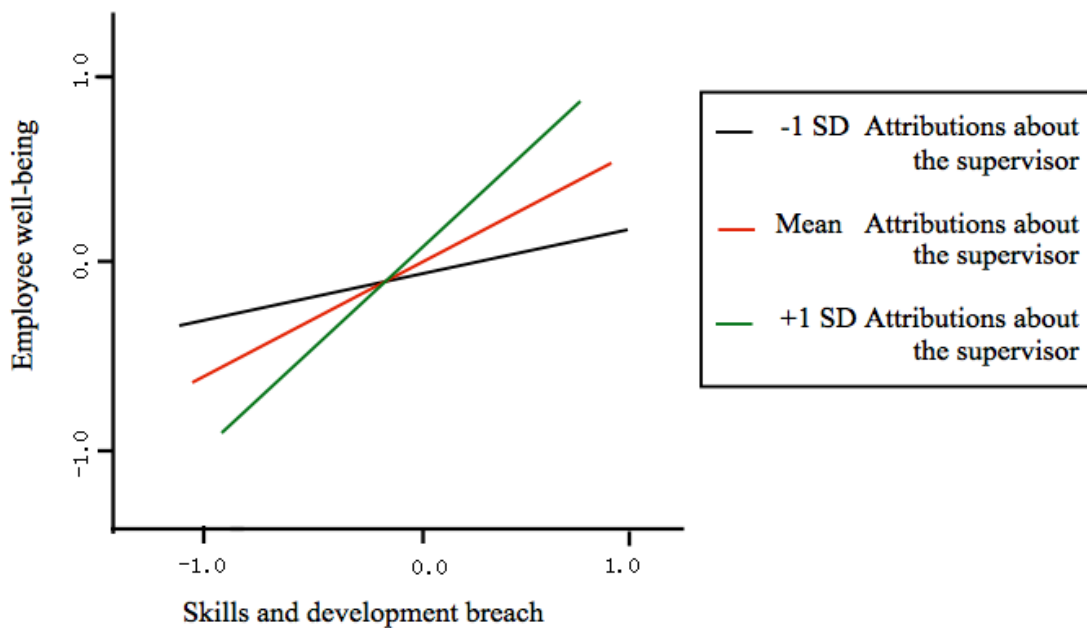


Figure 43 Interaction between Skills and Development Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between skills and development breach and in-role performance ( $b = -.08$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .33$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 44) shows that the negative relationship between skills and development breach and in-role performance is stronger when employees tend to make attributions about the supervisor (i.e., employees blame themselves for the breach) than when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slope for low attributions about the supervisor ( $-1$  SD,  $t = -1.63$ , ns.) is not significant, but for high attributions about the supervisor ( $+1$  SD,  $t = -2.94$ ,  $p < .01$ ) is significant. Thus, when employees are less likely to make attributions about the supervisor for skills and development breach, there is no relationship between the breach and in-role performance. When employees are more likely to make attributions about the supervisor for skills and development breach, the negative relationship between the breach and in-role performance is significant.



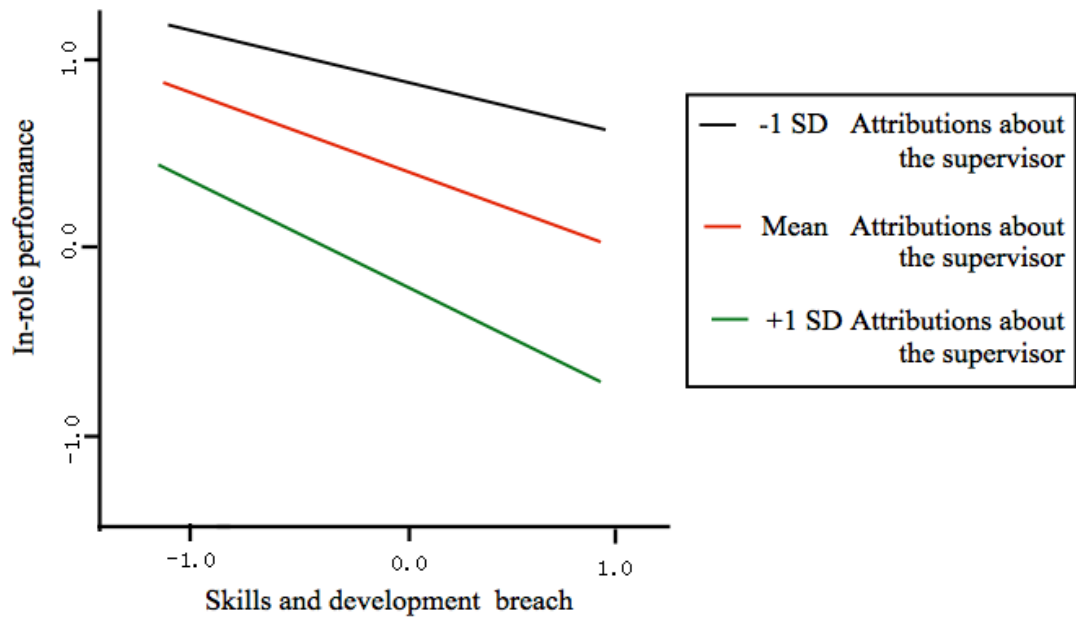


Figure 44 Interaction between Skills and Development Breach and Attributions about the Supervisor on In-role Performance

**Extra-role performance.** Attributions about the supervisor moderate the relationships between skills and development breach and extra-role performance ( $b = .08$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .06$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of extra-role performance. Plotting the interaction (Figure 45) shows that the relationship between skills and development breach and extra-role performance is positive when employees tend to make attributions about the supervisor (i.e., employees blame the supervisor for the breach), but is negative when employee are less likely to make attributions about the supervisor.

Simple slope analysis shows that the slopes for both low attributions about the supervisor (-1 SD,  $t = -1.26$ , *ns.*) and high attributions about the supervisor (+1 SD,  $t = -.30$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is above -8.82 and below -7.26. Thus, the mean value of the moderator plus and minus eight standard deviations could be used as the conditional values of the moderator because the value of -8 SD is located in the region of significance. The mean score of the moderator is 2.52 and the standard deviation is .74. The mean value minus eight standard deviations equals -3.40, which is over the minimum value of the moderator (i.e., 1). Therefore, there is no significant relationship

between skills and development breach and extra-role performance regardless of when employees are more or less likely to make attributions about the supervisor for the breach.

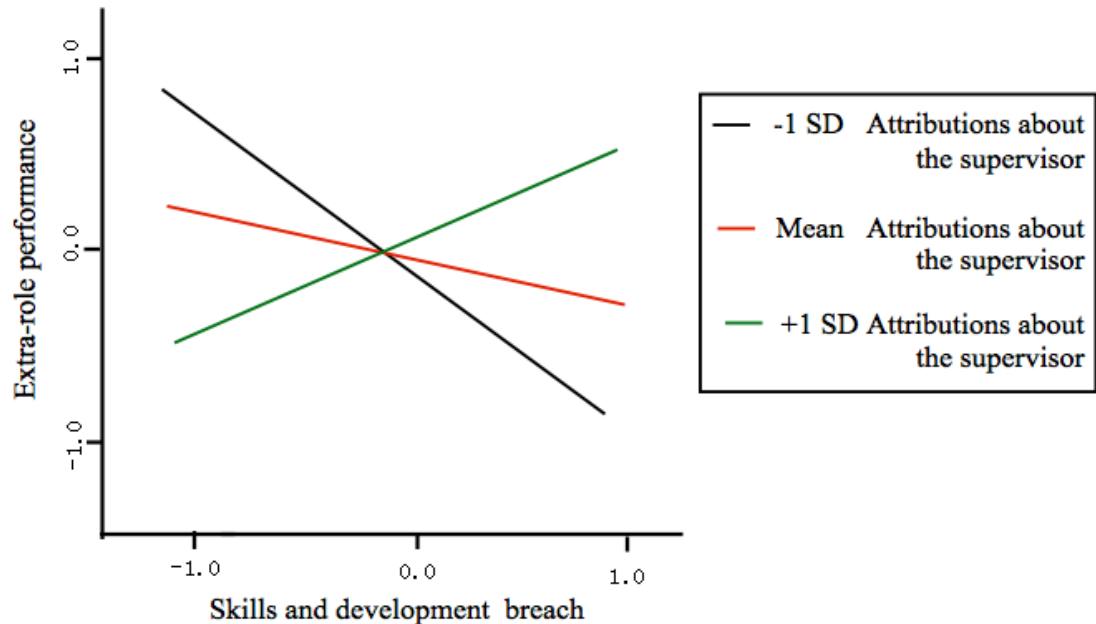


Figure 45 Interaction between Skills and Development Breach and Attributions about the Supervisor on Extra-role Performance

### Attributions about the Organisation

In this section, the interaction effects of attributions about the organisation on the relationship between skills and development breach and employee outcomes will be reported. Figure 46 and Table 20 shows the moderation results. Attributions about the organisation moderate the relationships between skills and development breach and employee well-being and in-role performance, but do not moderate the relationship between skills and development breach and leadership perceptions and extra-role performance.

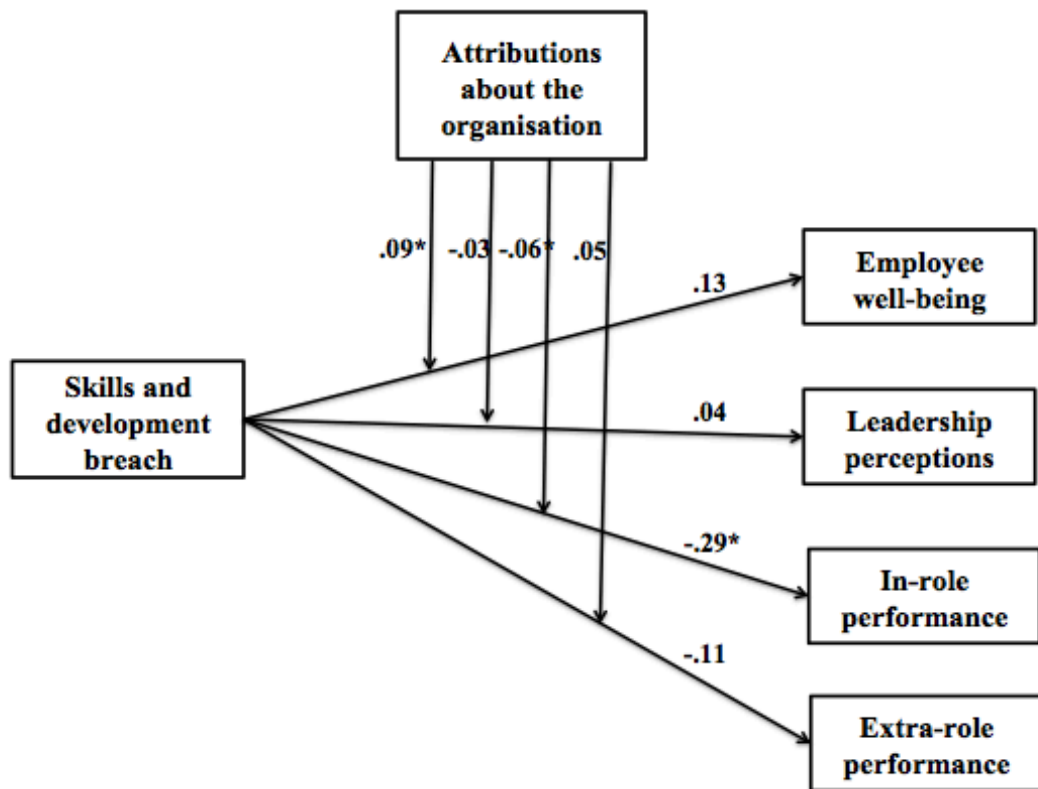


Figure 46 Specific Moderation Model (Skills and development breach & attributions about the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 20 Moderating Role of Attributions about the Organisation in the Relationship between Skills and Development Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Skills and development breach	$b = .10$	$b = .13$	$b = .03$	$b = .04$	$b = -.26^*$	$b = -.29^*$	$b = -.10$	$b = -.11$
Attributions about the organisation	$b = -.11$	$b = -.09$	$b = .28^{**}$	$b = .28^{**}$	$b = .39^{**}$	$b = .38^{**}$	$b = .14$	$b = .14$
Interaction term		$b = .09^*$		$b = .03$		$b = -.06^*$		$b = .05$
$R^2$		0.04		0.1		0.08		0.02
$\Delta R^2$		0.02		0.00		0.01		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the organisation moderate the relationships between skills and development breach and employee well-being ( $b = .09$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .04$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 47) shows that the relationship between skills and development breach and employee well-being is positive when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for the breach), but is negative when employee are less likely to make attributions about the organisation.

Simple slope analysis shows that the slope for blow attributions about the organisation ( $-1$  SD,  $t = .37$ ,  $ns.$ ) is not significant, and for high attributions about the organisation ( $+1$  SD,  $t = 2.01$ ,  $p < .05$ ) is significant. Thus, when employees are less likely to make attributions about the organisation for skills and development breach, there is no relationship between the breach and employee well-being. When employees are more likely to make attributions about the organisation for skills and development breach, the positive relationship between the breach and in-role performance is significant.

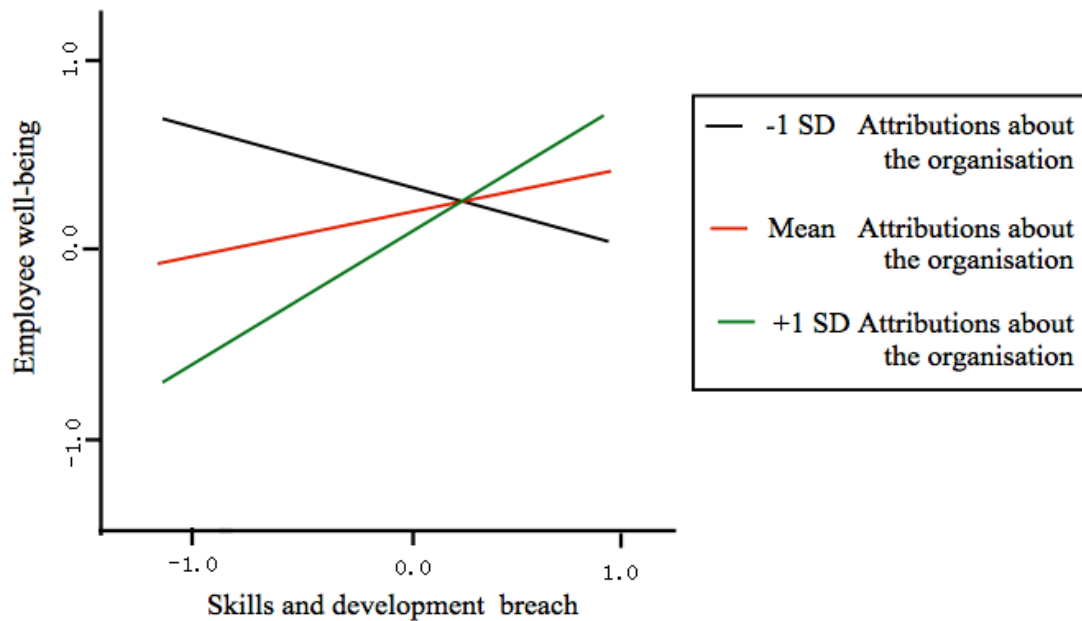


Figure 47 Interaction between Skills and Development Breach and Attributions about the Organisation on Employee Well-being

***In-role performance.*** Attributions about the organisation moderate the relationships between skills and development breach and in-role performance ( $b = -.06$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .08$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 48) shows that the negative relationship between skills and development breach and in-role performance is stronger when employees tend to make attributions about the organisation (i.e., employees do blame the organisation for the breach) than when employee are less likely to make attributions about the organisation.

Simple slope analysis shows that the slope for low attributions about the organisation (-1 SD,  $t = -1.88$ , *ns.*) is not significant, and for high attributions about the organisation (+1 SD,  $t = -2.86$ ,  $p < .01$ ) is significant. Thus, when employees are less likely to make attributions about the organisation for skills and development breach, there is no relationship between the breach and in-role performance. When employees are more likely to make attributions about the organisation for skills and development breach, the negative relationship between the breach and in-role performance is significant.

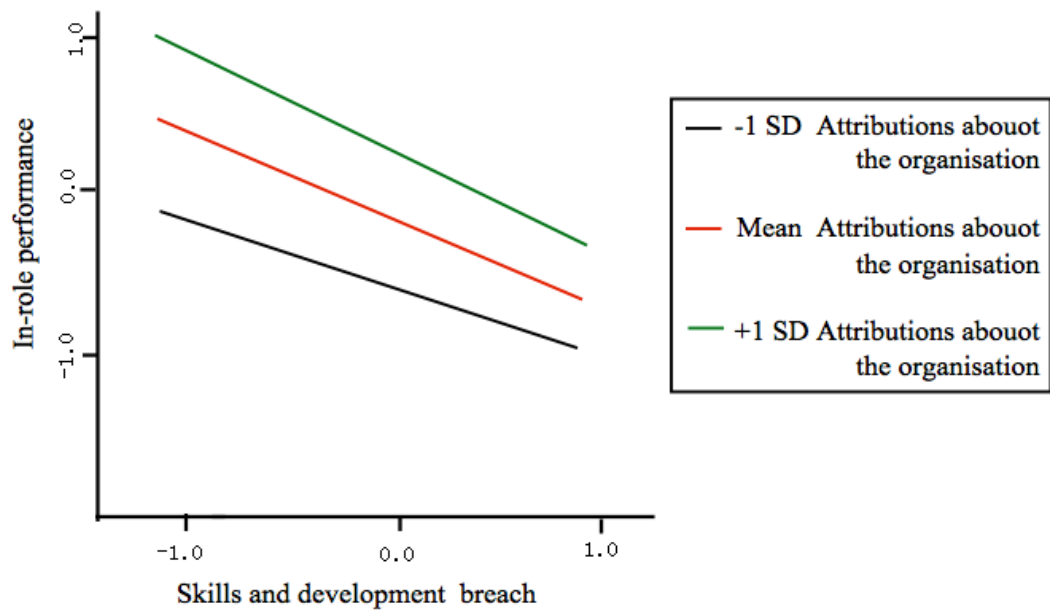


Figure 48 Interaction between Skills and Development Breach and Attributions about the Organisation on In-role Performance

#### 8.8.4 Attributions outside of the Supervisor and the Organisation

In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between skills and development breach and employee outcomes will be reported. Figure 49 and Table 21 show the moderation results. Attributions outside of the supervisor and the organisation moderate the relationship between skills and development breach and leadership perceptions, but do not moderate the relationships between skills and development breach and in-role performance, extra-role performance, and employee well-being.

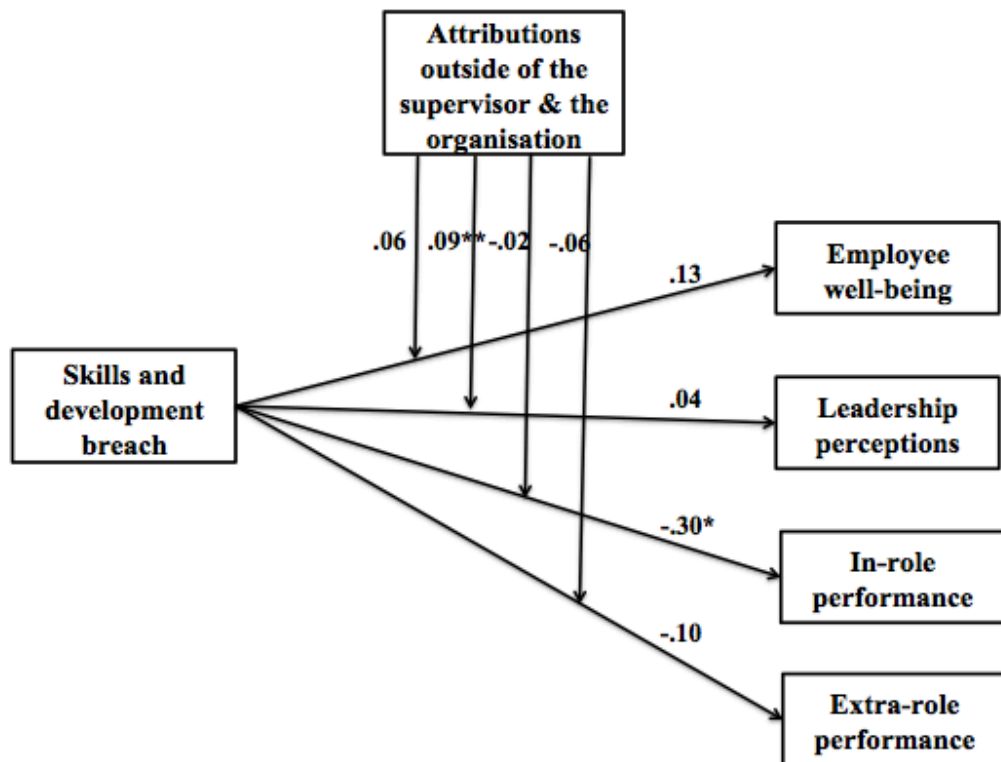


Figure 49 Specific Moderation Model (Skills and development breach & attributions outside of the supervisor and the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 21 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Skills and Development Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Skills and development breach	$b = .10$	$b = .13$	$b = .03$	$b = .04$	$b = -.26^*$	$b = -.30^*$	$b = -.10$	$b = -.10$
Attributions outside of the supervisor and the organisation	$b = .02$	$b = .02$	$b = .17^{**}$	$b = .22^{**}$	$b = .13$	$b = .12$	$b = .03$	$b = .01$
Interaction term		$b = .06$		$b = .09^{**}$		$b = -.02$		$b = -.06$
$R^2$		0.05		0.06		0.11		0.03
$\Delta R^2$		0.01		0.02		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Favourable leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between skills and development breach and favourable leadership perceptions ( $b = -.09$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .06$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of favourable leadership perceptions. Plotting the interaction (Figure 50) shows that the relationship between skills and development breach and favourable leadership perceptions is negative when employees tend to make attributions outside of the supervisor and the organisation (i.e., employees attribute the breach to factors outside of the supervisor's and the organisation's control), but is positive when employee are less likely to make attributions outside of the supervisor and the organisation.

Simple slope analysis shows that the slopes for both low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = .48$ , *ns.*) and high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = -1.24$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below  $-3.90$  or above  $2.22$ . Thus, the mean value of the moderator plus and minus three standard deviations could be used as the conditional values of the moderator because the value of  $+3$  SD is located in the region of significance. The mean score of the moderator is



2.87 and the standard deviation is .87. The mean value plus three standard deviations equals 5.48, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between skills and development breach and leadership perceptions regardless of when employees are more or less likely to make attributions outside of the supervisor and the organisation.

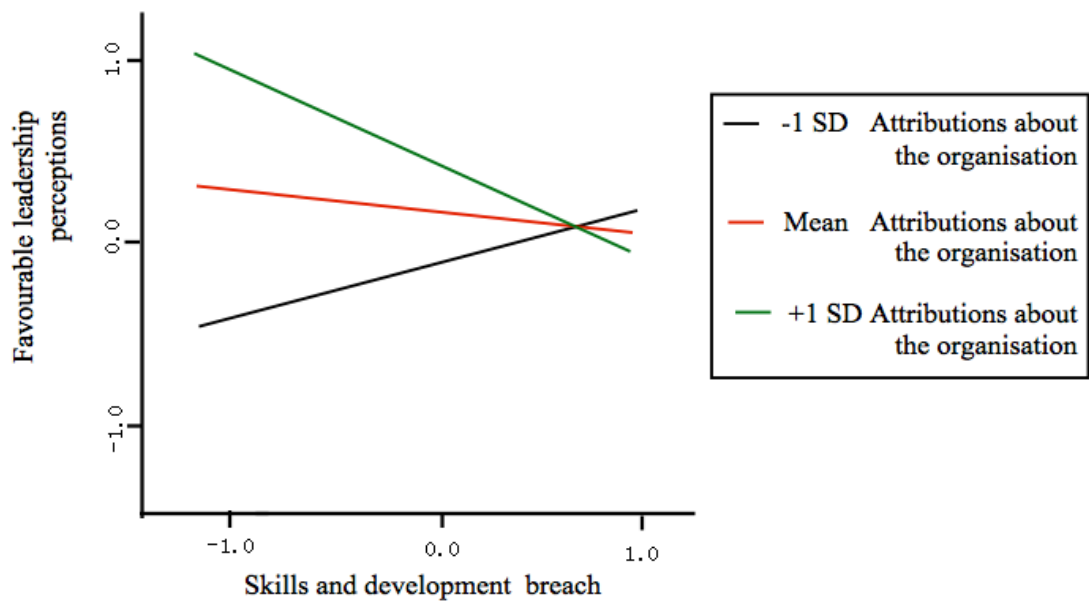


Figure 50 Interaction between Skills and Development Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

In general, employee attributions partially moderate the relationship between skills and development breach and employee outcomes. Among the four employee attributions, employee internal attributions and attributions about the supervisor moderate almost all the relationships between skills and development breach and employee outcomes. Thus, employee internal attributions and attributions about the supervisor are two important moderators in the relationship between skills and development breach and employee outcomes. Compared with the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes, the moderating role of employee attributions do not change much in the relationship between the skills and development dimension of psychological contract breach and employee outcomes.

## **Moderating Role of Employee Attributions in the Relationship between Engagement and Representation Breach and Employee Outcomes**

The moderating role of employee attributions in the relationship between engagement and representation breach and employee outcomes was tested in Mplus. Table 22 shows the overview of the interaction effects of employee attributions. The relationship between engagement and representation breach and employee well-being is moderated by attributions about the supervisor and attributions about the organisation. The relationship between engagement and representation breach and leadership perceptions is moderated by employee internal attributions and attributions outside of the supervisor and the organisation. The relationship between engagement and representation and in-role performance is moderated by employee internal attributions and attributions about the supervisor. The relationship between engagement and representation breach and extra-role performance is moderated by employee internal attributions. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between engagement and representation breach and employee outcomes. In the following sections, the interaction effects of each employee attribution moderator will be reported.

Table 22 Moderating Role of Employee Attributions in the Relationship between Engagement and Representation Breach and Employee Outcomes

	<b>Employee well-being</b>	<b>Leadership Perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions		X	X	X
Attributions about the supervisor	X		X	
Attributions about the organisation	X			
Attributions outside of the supervisor and the organisation		X		

### **Employee Internal Attributions**

In this section, the interaction effects of employee internal attributions on the relationship between engagement and representation breach and employee outcomes will be reported. Figure 51 and Table 23 show the moderation results. Employee internal attributions moderate the relationship between engagement and representation breach and leadership perceptions, in-role performance and extra-role performance, but do not moderate the relationships between engagement and representation breach and employee well-being.

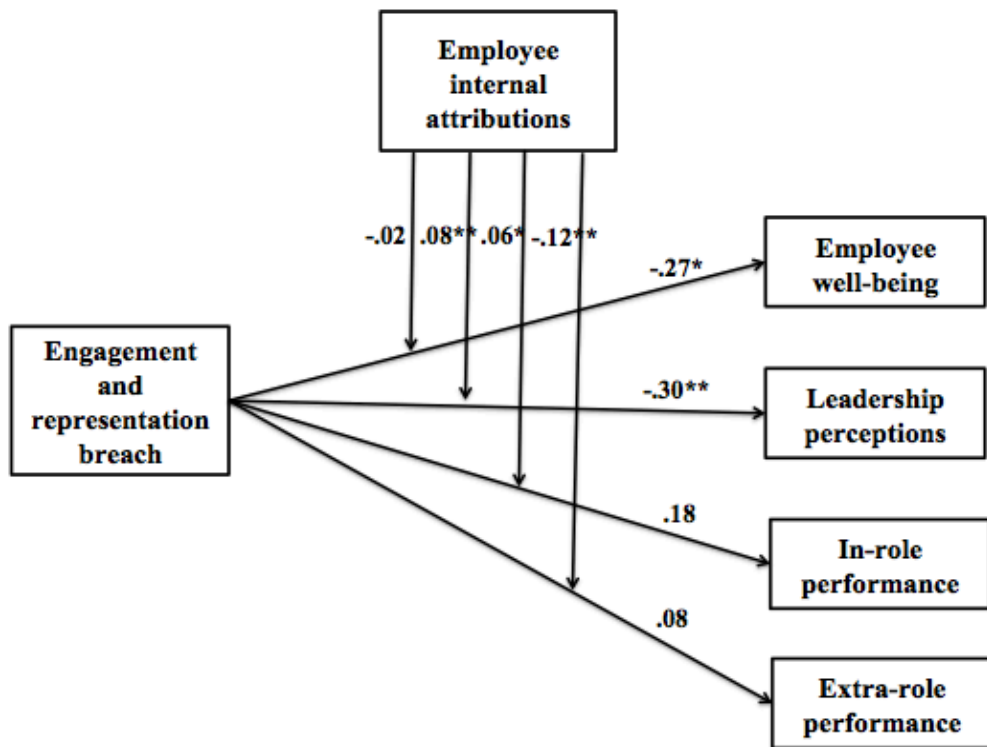


Figure 51 Specific Moderation Model (Engagement and representation breach & employee internal attributions)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 24 Moderating Role of Employee Internal Attributions in the Relationship between Engagement and Representation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Engagement and representation breach	$b = -.24^{**}$	$b = -.27^*$	$b = -.25^{**}$	$b = -.30^{**}$	$b = .18$	$b = .18$	$b = .09$	$b = .08$
Employee internal attributions	$b = .13^*$	$b = .15^{**}$	$b = .25^{**}$	$b = .29^{**}$	$b = .08$	$b = .11^*$	$b = .01$	$b = -.04$
Interaction term		$b = -.02$		$b = .08^{**}$		$b = .06^*$		$b = -.12^{**}$
$R^2$		0.23		0.1		0.11		0.05
$\Delta R^2$		0.00		0.02		0.01		0.04

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Leadership perceptions.** Employee internal attributions moderate the relationships between engagement and representation breach and leadership perceptions ( $b = .08$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .10$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of leadership perceptions. Plotting the interaction (Figure 52) shows that the negative relationship between engagement and representation breach and favourable leadership perceptions is stronger when employee internal attributions are low (i.e., employees do not blame themselves for the breach) but weaker when employee internal attributions are high.

Simple slope analysis shows that the slopes for both low employee internal attributions ( $-1$  SD,  $t = -3.47$ ,  $p < .01$ ) and high employee internal attributions ( $+1$  SD,  $t = -2.01$ ,  $p < .05$ ) are significant. Thus, when employees are less likely to make internal attributions for engagement and representation breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are more likely to make internal attributions for engagement and representation breach, the negative relationship between the breach and favourable leadership perceptions is significant as well.

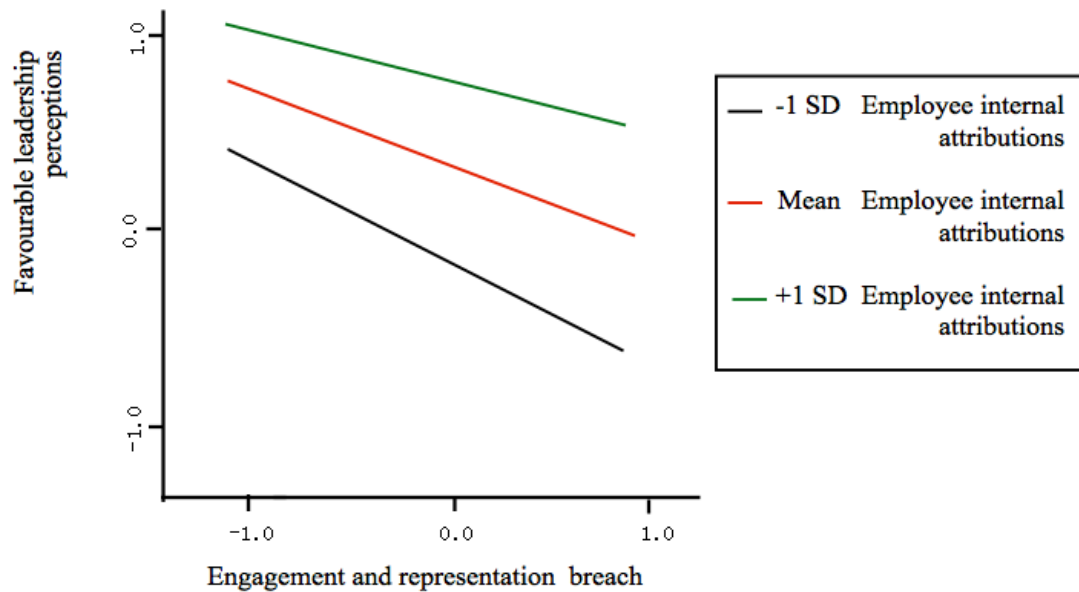


Figure 52 Interaction between Engagement and Representation Breach and Employee Internal Attributions on Favourable Leadership Perceptions

***In-role performance.*** Employee internal attributions moderate the relationships between engagement and representation breach and in-role performance ( $b = .06$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .11$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 53) shows that the positive relationship between engagement and representation breach and in-role performance is weaker when employee internal attributions are low (i.e., employees do not blame themselves for the breach) but stronger when employee internal attributions are high.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = .98$ , *ns.*) and high employee internal attributions (+1 SD,  $t = 1.95$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is above 1.01 and below 85.46. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of +2 SD is located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value plus two standard deviations equals 5.36, which is over the maximum value of the moderator (i.e., 5). Therefore, there is no significant relationship between

engagement and representation breach and in-role performance regardless of when employees are more or less likely to make employee internal attributions.

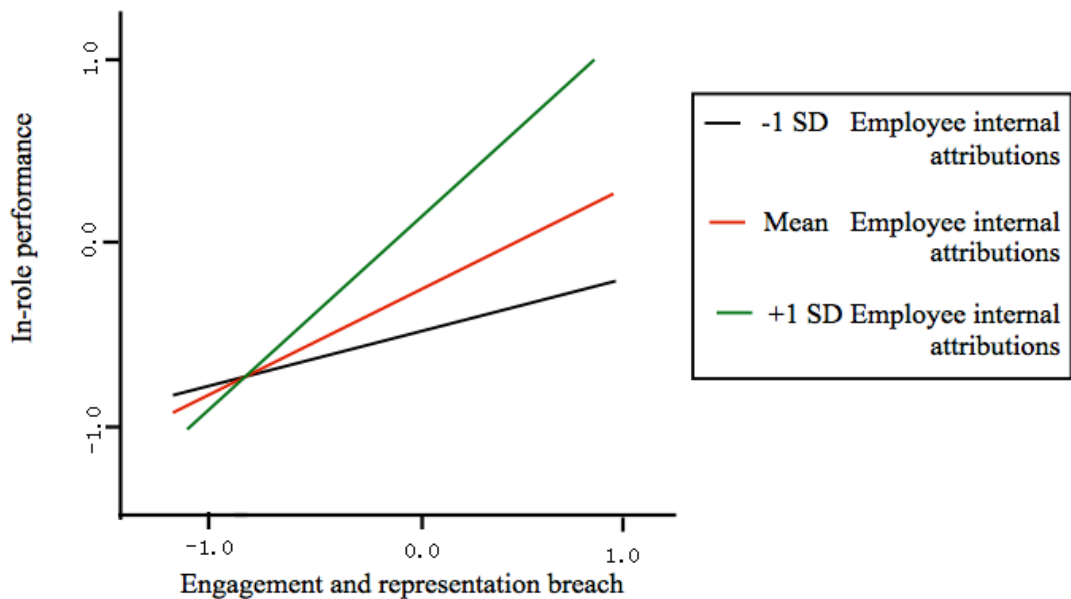


Figure 53 Interaction between Engagement and Representation Breach and Employee Internal Attributions on In-role Performance

**Extra-role performance.** Employee internal attributions moderate the relationships between engagement and representation breach and extra-role performance ( $b = -.12$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .05$ ,  $\Delta R^2 = .04$ ). The interaction term explains additional 4% of variance of extra-role performance. Plotting the interaction (Figure 54) shows that the relationship between engagement and representation breach and in-role performance is positive when employee internal attributions are low (i.e., employees do not blame themselves for the breach) but negative when employee internal attributions are high.

Simple slope analysis shows that the slopes for both low employee internal attributions (-1 SD,  $t = 1.20$ , *ns.*) and high employee internal attributions (+1 SD,  $t = -.24$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -2.57 or above 5.44. Thus, the mean value of the moderator plus and minus three standard deviations could be used as the conditional values of the moderator because the value of -3 SD is located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92.

The mean value minus three standard deviations equals .76, which is over the minimum value of the moderator (i.e., 1). Therefore, there is no significant relationship between engagement and representation breach and extra-role performance regardless of when employees are more or less likely to make employee internal attributions.

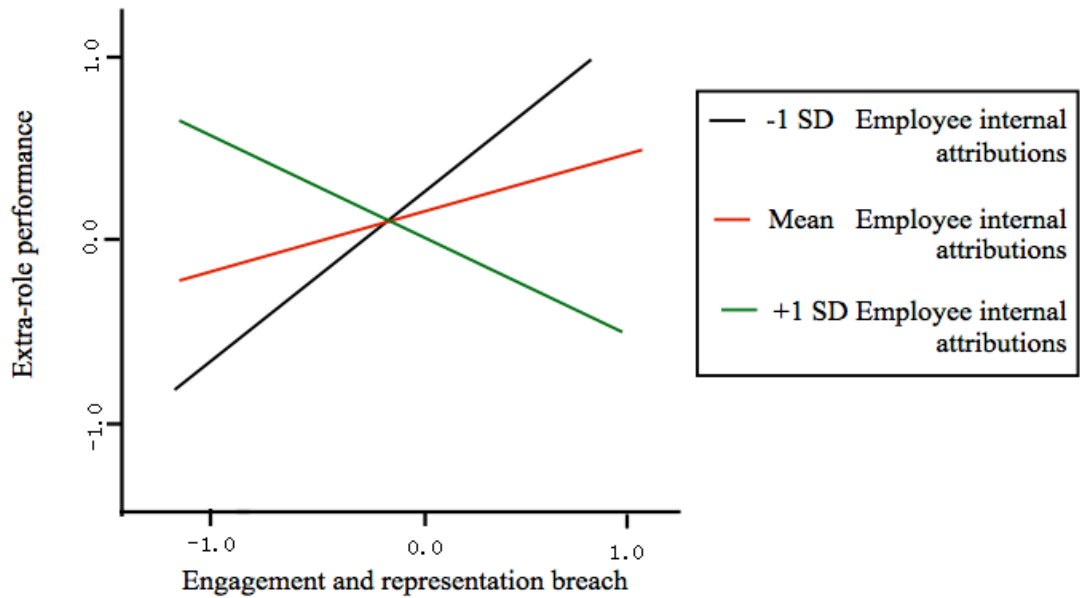


Figure 54 Interaction between Engagement and Representation Breach and Employee Internal Attributions on Extra-role Performance

## Attributions about the Supervisor

In this section, the interaction effects of attributions about the supervisor on the relationship between engagement and representation breach and employee outcomes will be reported. Figure 55 and Table 25 show the moderation results. Attributions about the supervisor moderate the relationships between engagement and representation breach and employee well-being and in-role performance, but do not moderate the relationships between engagement and representation breach and leadership perceptions and extra-role performance.



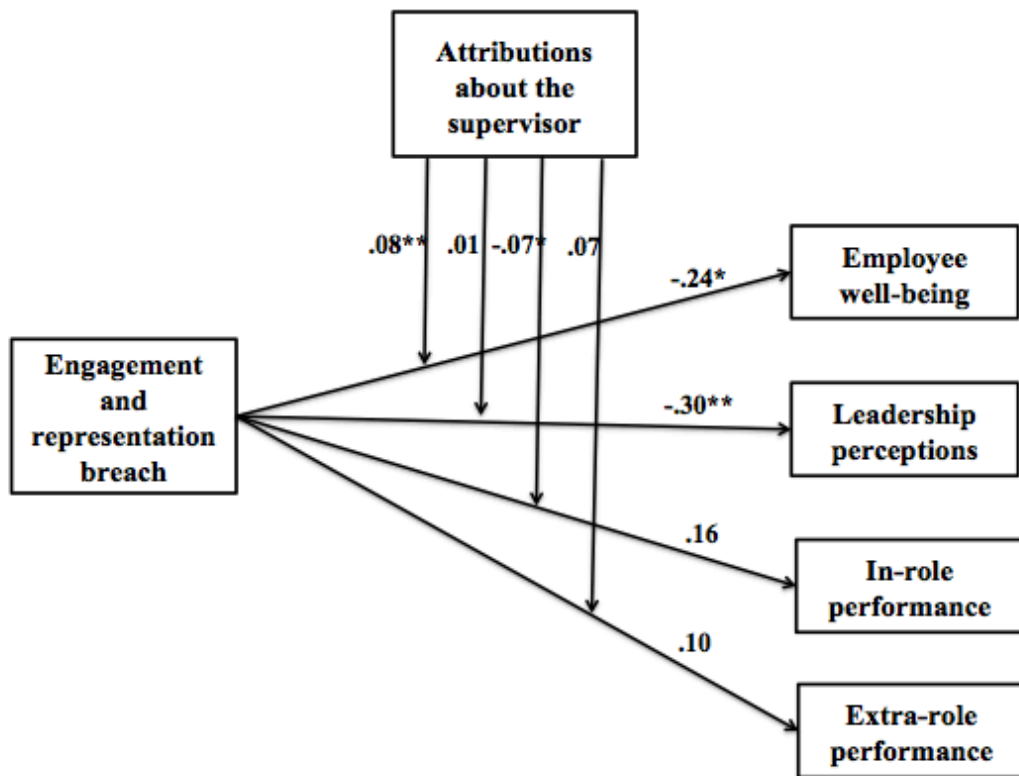


Figure 55 Specific Moderation Model (Engagement and representation breach & attributions about the supervisor)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

Table 25 Moderating Role of Attributions about the Supervisor in the Relationship between Engagement and Representation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Engagement and representation breach	$b = -.24^{**}$	$b = -.24^*$	$b = -.25^{**}$	$b = -.30^{**}$	$b = .18$	$b = .16$	$b = .09$	$b = .10$
Attributions about the supervisor	$b = -.01$	$b = .01$	$b = -.47^{**}$	$b = -.46^{**}$	$b = -.34^{**}$	$b = -.36^{**}$	$b = -.05$	$b = -.04$
Interaction term		$b = .08^{**}$		$b = .01$		$b = -.07^*$		$b = .07$
$R^2$		0.12		0.1		0.07		0.4
$\Delta R^2$		0.02		0.00		0.01		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the supervisor moderate the relationships between engagement and representation breach and employee well-being ( $b = .08$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .12$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 56) shows that the negative relationship between engagement and representation breach and employee well-being is stronger when attributions about the supervisor are low (i.e., employees do not blame the supervisor for the breach) but weaker when attributions about the supervisor are high.

Simple slope analysis shows that the slope for low attributions about the supervisor ( $-1$  SD,  $t = -2.91$ ,  $p < .01$ ) is significant, but for high attributions about the supervisor ( $+1$  SD,  $t = -1.46$ , ns.) is not. Thus, when employees are less likely to make attributions about the supervisor for engagement and representation breach, the negative relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the supervisor for engagement and representation breach, there is no significant relationship between the breach and employee well-being.

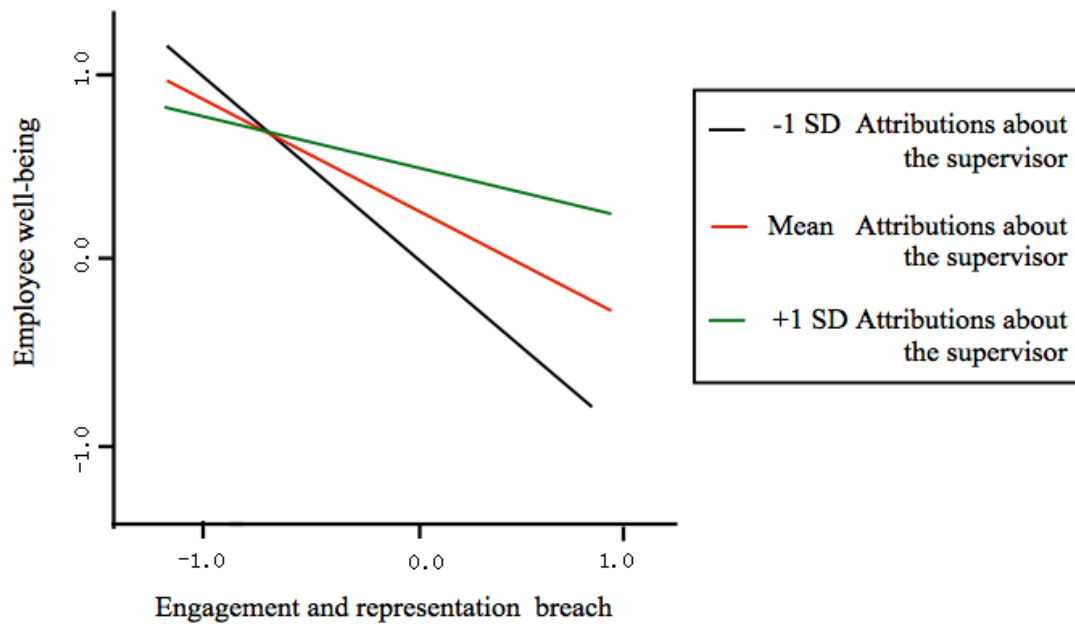


Figure 56 Interaction between Engagement and Representation Breach and Attributions about the Supervisor on Employee Well-being

***In-role performance.*** Attributions about the supervisor moderate the relationships between engagement and representation breach and in-role performance ( $b = -.07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .07$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of in-role performance. Plotting the interaction (Figure 57) shows that the positive relationship between engagement and representation breach and in-role performance is stronger when attributions about the supervisor are low (i.e., employees do not blame the supervisor for the breach) but weaker when attributions about the supervisor are high.

Simple slope analysis shows that the slopes for both low attributions about the supervisor (-1 SD,  $t = 1.82$ , *ns.*) and attributions about the supervisor (+1 SD,  $t = .71$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below -1.35 or above 22.73. Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of -2 SD is located in the region of significance. The mean score of the moderator is 3.52 and the standard deviation is .92. The mean value minus two standard deviations equals 1.68, which is over the minimum value of the moderator (i.e., 1). Simple slope analysis shows that the slope for low

attributions about the supervisor ( $-2$  SD,  $t = 2.18$ ,  $p < .05$ ) is significant, but for high attributions about the supervisor ( $+2$  SD,  $t = .15$ , *ns.*) is not. Thus, when employees are less likely to make attributions about the supervisor for engagement and representation breach, the negative relationship between the breach and in-role performance is significant. When employees are more likely to make attributions about the supervisor for engagement and representation breach, there is no significant relationship between the breach and in-role performance.

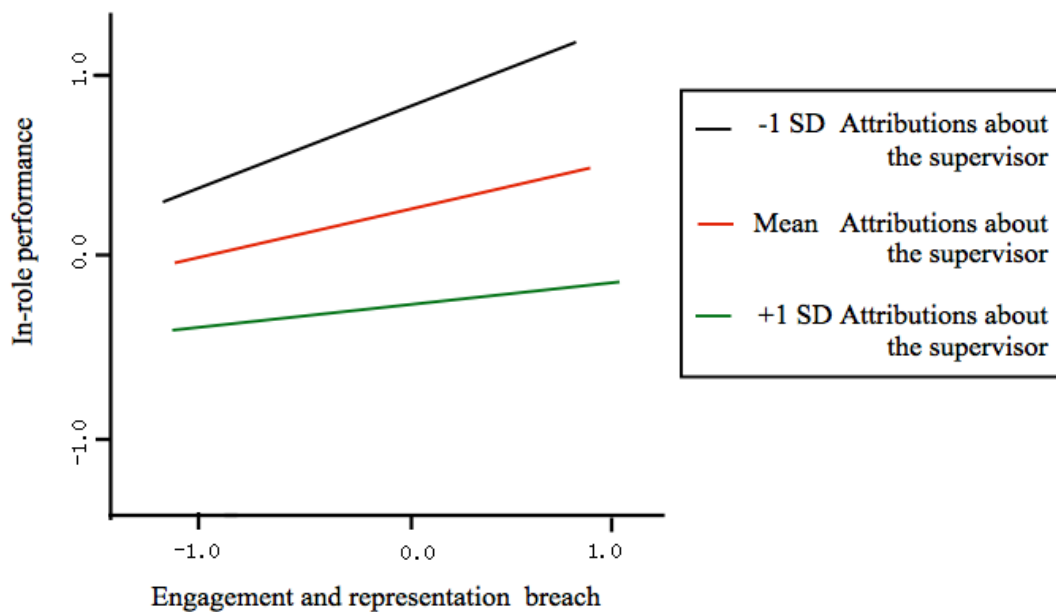


Figure 57 Interaction between Engagement and Representation Breach and Attributions about the Supervisor on Employee Well-being

### Attributions about the Organisation

In this section, the interaction effects of attributions about the organisation on the relationship between engagement and representation breach and employee outcomes will be reported. Figure 8.78 and Table 58 show the moderation results. Attributions about the organisation moderate the relationship between engagement and representation breach and employee well-being, but do not moderate the relationships between engagement and representation breach and leadership perceptions, in-role performance and extra-role performance.



Table 26 Moderating Role of Attributions about the Organisation in the Relationship between Engagement and Representation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Engagement and representation breach	$b = -.24^{**}$	$b = -.24^*$	$b = -.25^{**}$	$b = -.29^{**}$	$b = .18$	$b = .16$	$b = .09$	$b = .09$
Attributions about the organisation	$b = -.11$	$b = -.09$	$b = .28^{**}$	$b = .29^{**}$	$b = .39^{**}$	$b = .39^{**}$	$b = .14$	$b = .14$
Interaction term		$b = .08^*$		$b = .05$		$b = -.05$		$b = .03$
$R^2$		0.16		0.08		0.25		0.06
$\Delta R^2$		0.02		0.01		0.01		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Employee well-being.** Attributions about the organisation moderate the relationships between engagement and representation breach and employee well-being ( $b = .08$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .16$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of employee well-being. Plotting the interaction (Figure 59) shows that the negative relationship between engagement and representation breach and employee well-being is stronger when attributions about the organisation are low (i.e., employees do not blame the organisation for the breach) but weaker when attributions about the organisation are high.

Simple slope analysis shows that the slope for low attributions about the organisation ( $-1$  SD,  $t = -2.92$ ,  $p < .01$ ) is significant, and for high attributions about the organisation ( $+1$  SD,  $t = -1.46$ ,  $ns.$ ) is not. Thus, when employees are less likely to make attributions about the organisation for engagement and representation breach, the negative relationship between the breach and employee well-being is significant. When employees are more likely to make attributions about the organisation for engagement and representation breach, there is no significant relationship between the breach and employee well-being.

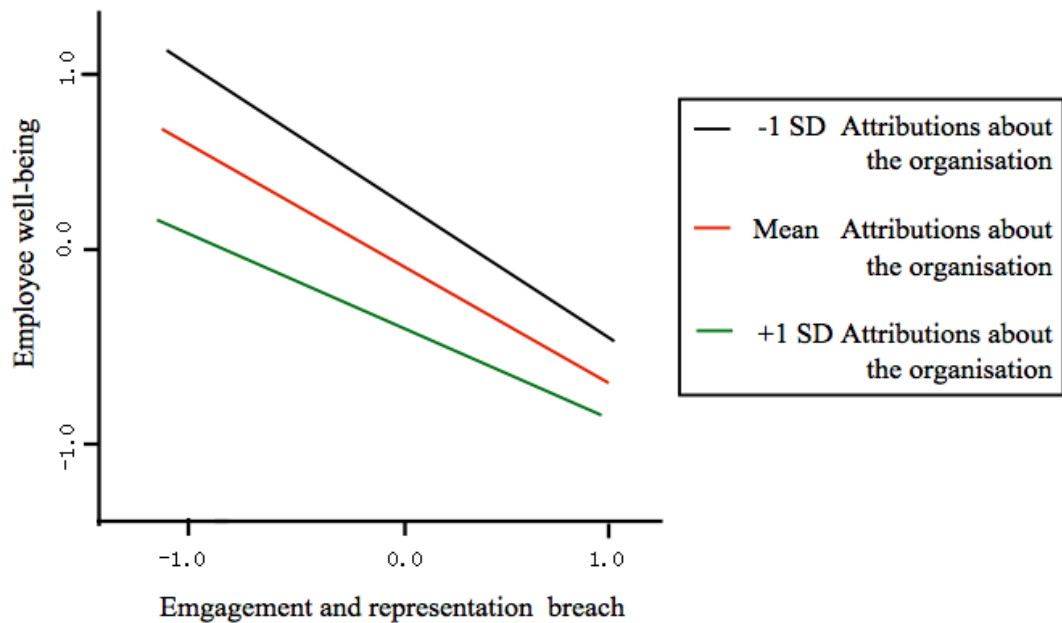


Figure 59 Interaction between Engagement and Representation Breach and Attributions about the Organisation on Employee Well-being

### Attributions outside of the Supervisor and the Organisation

In this section, the interaction effects of attributions outside of the supervisor and the organisation on the relationship between engagement and representation breach and employee outcomes will be reported. Figure 60 and Table 27 show the moderation results. Attributions outside of the supervisor and the organisation moderate the relationship between engagement and representation breach and leadership perceptions, but do not moderate the relationships between engagement and representation breach and employee well-being, in-role performance, and extra-role performance.

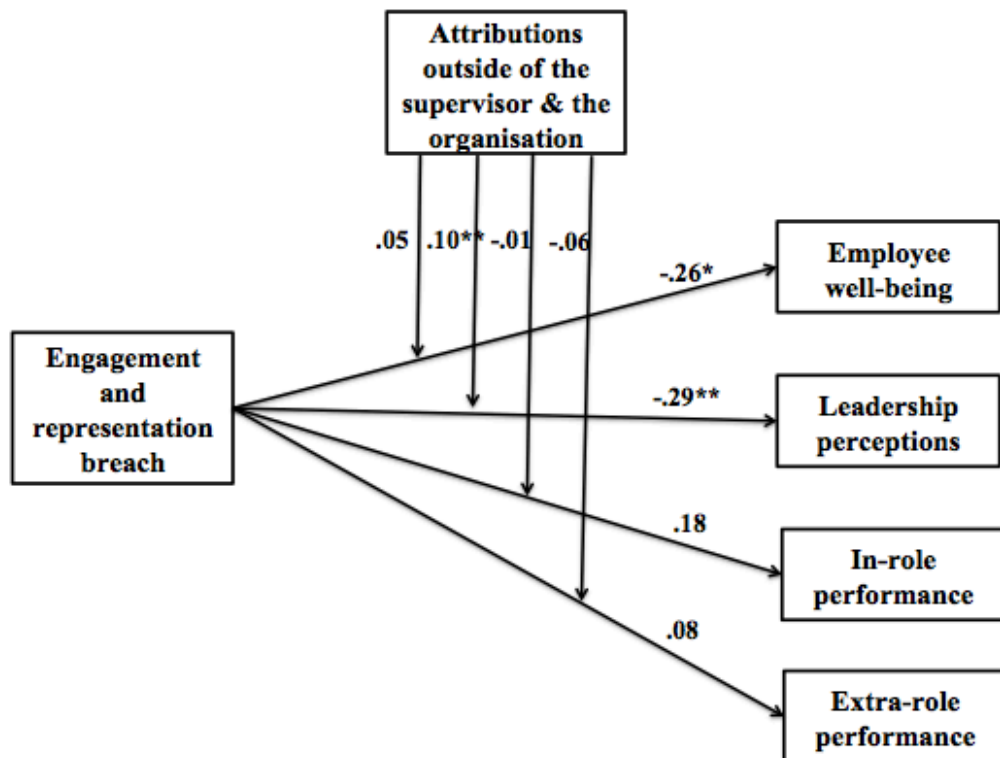


Figure 60 Specific Moderation Model (Engagement and representation breach & attributions outside of the supervisor and the organisation)

*Notes:* paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.



Table 27 Moderating Role of Attributions outside of the Supervisor and the Organisation in the Relationship between Engagement and Representation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Employee well-being	Leadership perceptions	Leadership perceptions	In-role performance	In-role performance	Extra-role performance	Extra-role performance
Engagement and representation breach	$b = -.24^{**}$	$b = -.26^*$	$b = -.25^{**}$	$b = -.29^{**}$	$b = .18$	$b = .18$	$b = .09$	$b = .08$
Attributions outside of the supervisor and the organisation	$b = .02$	$b = .01$	$b = .17^*$	$b = .23^{**}$	$b = .13$	$b = .12$	$b = .03$	$b = -.01$
Interaction term		$b = .05$		$b = .10^{**}$		$b = -.01$		$b = -.06$
$R^2$		0.12		0.11		0.11		0.02
$\Delta R^2$		0.01		0.03		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions to employee attributions and from employee attributions to employee outcomes are not shown.

**Leadership perceptions.** Attributions outside of the supervisor and the organisation moderate the relationships between engagement and representation breach and leadership perceptions ( $b = .10$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .11$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of leadership perceptions. Plotting the interaction (Figure 61) shows that the negative relationship between engagement and representation breach and favourable leadership perceptions is stronger when attributions outside of the supervisor and organisation are low (i.e., employees do not attribute the breach to factor beyond the supervisor's and the organisation's control) but weaker when attributions outside of the supervisor and the organisation are high.

Simple slope analysis shows that the slope for low attributions outside of the supervisor and the organisation ( $-1$  SD,  $t = -3.56$ ,  $p < .01$ ) is significant, but for high attributions outside of the supervisor and the organisation ( $+1$  SD,  $t = -1.73$ , *ns.*) is not. Thus, when employees are less likely to make attributions outside of the supervisor and the organisation for engagement and representation breach, the negative relationship between the breach and favourable leadership perceptions is significant. When employees are more likely to make attributions outside of the supervisor and the organisation for engagement and representation breach, there is no significant

relationship between the breach and favourable leadership perceptions.

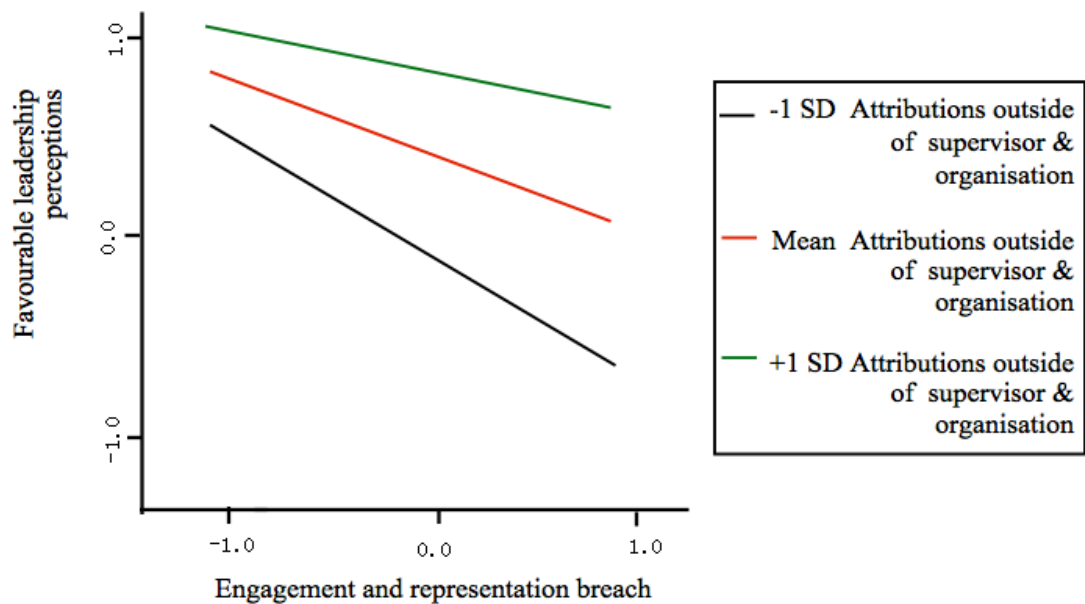


Figure 61 Interaction between Engagement and Representation Breach and Attributions outside of the Supervisor and the Organisation on Favourable Leadership Perceptions

Therefore, employee attributions partially moderate the relationship between engagement and representation breach and employee outcomes. Among the four employee attributions, employee internal attributions moderate almost all the relationships between engagement and representation system breach and employee outcomes. Thus, the employee internal attribution is an important moderator in the relationship between engagement and representation breach and employee outcomes. Compared with the moderating role of employee attributions in the relationship between psychological contract breach and employee outcomes, the moderating role of employee attributions do not change much in the relationship between the engagement and representation dimension of psychological contract breach and employee outcomes.

In general, considering the overall psychological contract breach, employee attributions moderate the relationship between psychological contract breach and employee outcomes partially. Employee internal attributions and attributions about the supervisor

almost moderate all the relationships between psychological contract breach and employee outcomes. Thus, employee internal attributions and attributions about the supervisor are two important moderators in the relationship between psychological contract breach and employee outcomes. The relationship between psychological contract breach and in-role performance is almost moderated by all employee attributions. Thus, employee attributions play an important role in the relationship between psychological contract breach and in-role performance.

In terms of the five dimensions of psychological contract breach, among the four employee attributions, attributions about the supervisor play the most important moderating role in the relationships between the five dimensions of psychological contract breach and employee outcomes. Among the four employee outcomes, the relationships between the five dimensions of psychological contract breach and employee well-being is moderated by employee attributions the most. Among the five dimensions of psychological contract breach, the relationships between engagement and representative breach and employee outcomes is moderated by employee attributions the most. By comparing with the moderating role of employee attributions in the relationship between global psychological contract breach and employee outcomes, employee attributions do not play a particularly different moderating role in the relationship between the five dimensions of psychological contract breach and employee outcomes. Moderation results are more consistent if psychological contract breach is measured as a single entity than separate elements.

## Appendix II Mediation Model with All Paths

For readability, the mediation model is separated into four sub models (each sub model includes one mediator, i.e. one dimension of employee attributions).

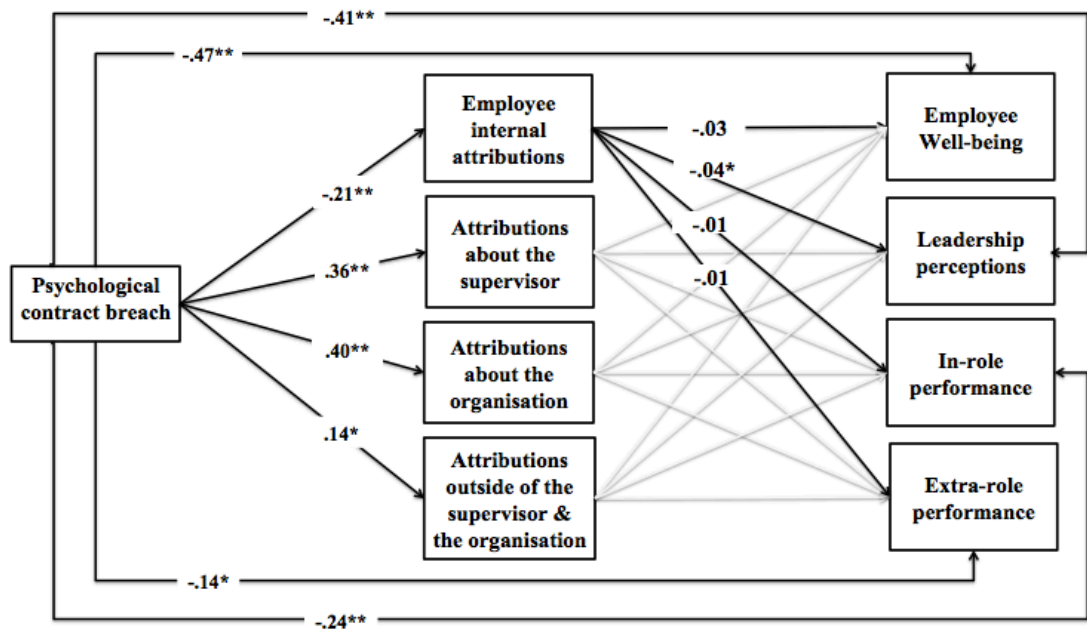


Figure 62 Mediation Model (Employee internal attributions)

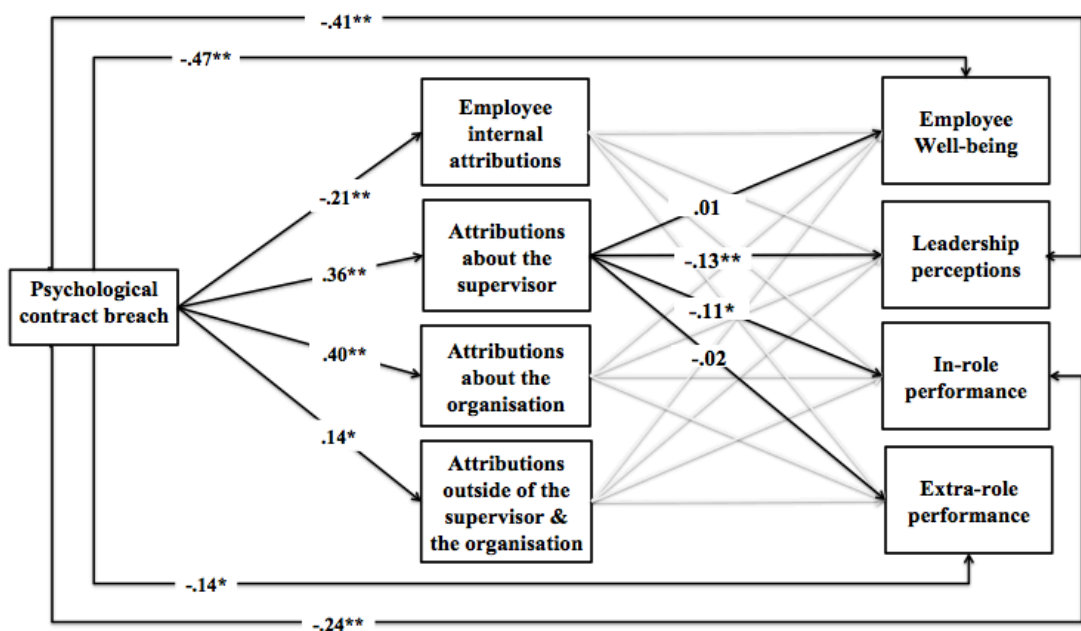


Figure 63 Mediation Model (Attributions about the supervisor)

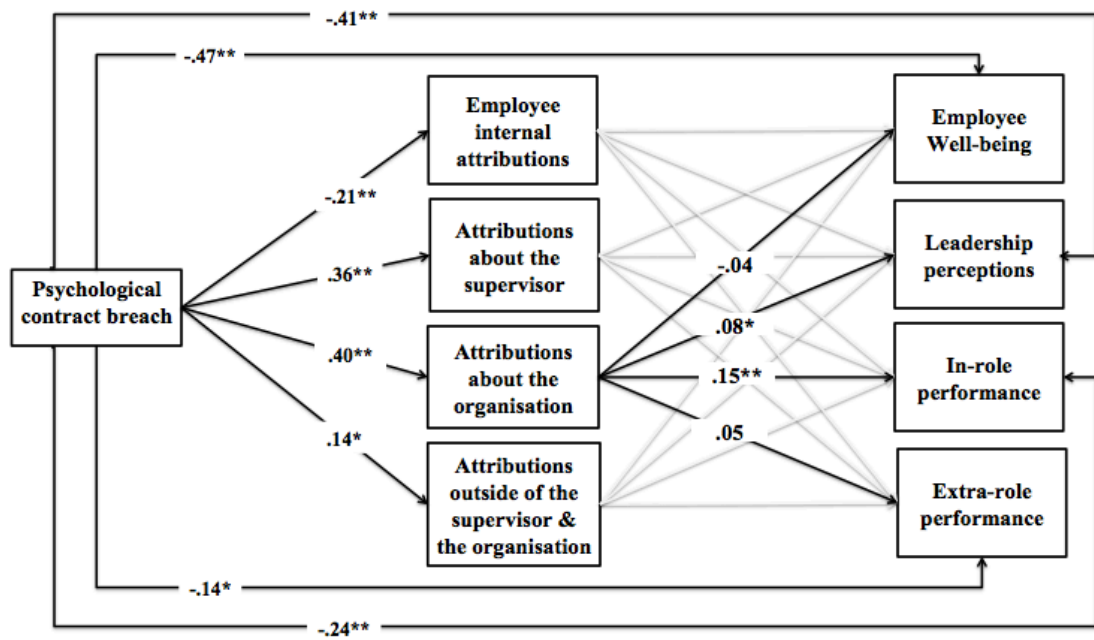


Figure 64 Mediation Model (Attributions about the organisation)

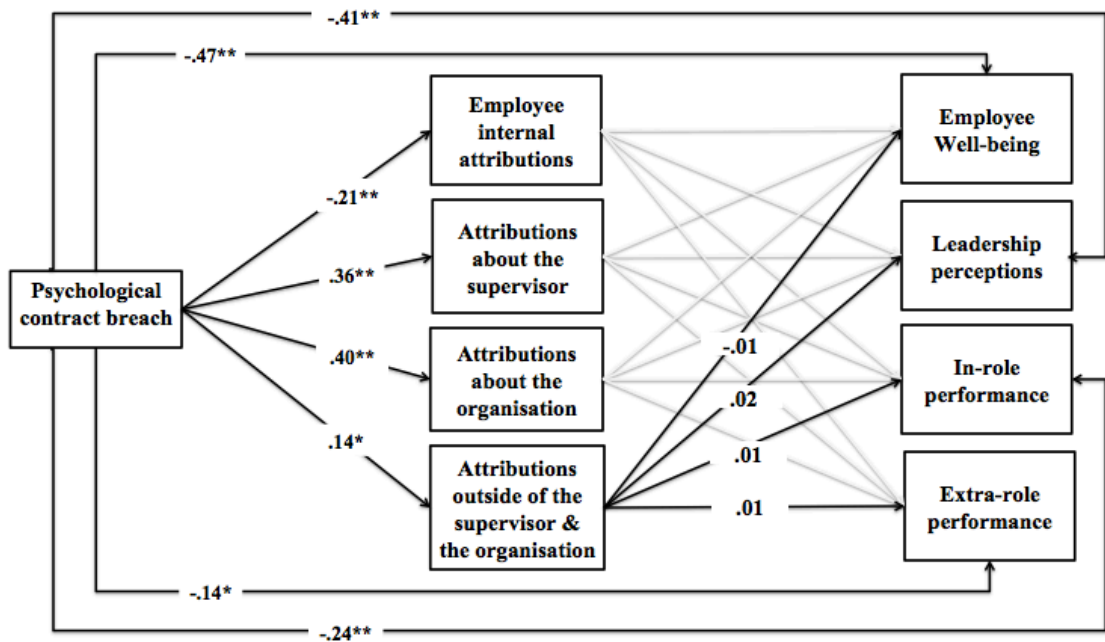


Figure 65 Mediation Model (Attributions outside of the supervisor and the organisation)

## Appendix III Mediation Model Analysis Using Five Psychological Contract Breach Dimensions

### Work Organisation Breach

This section will report the mediating of employee attributions in the relationship between work organisation breach and employee outcomes. Table 8.17 shows the results for the indirect effects of employee attributions. There is only one significant result.

Table 28 Indirect Effects of Employee Attributions on the Relationship between Work Organisation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Leadership perceptions	In-role performance	Extra-role performance
Employee internal attributions	$b = -.01$	$b = -.01$	$b = -.01$	$b = -.01$
Attributions about the supervisor	$b = -.01$	$b = -.05$	$b = -.04$	$b = -.01$
Attributions about the organisation	$b = -.01$	$b = .03$	$b = .05^*$	$b = .02$
Attributions outside of the supervisor and the organisation	$b = -.01$	$b = .02$	$b = .02$	$b = .01$

$*p < .05$ ,  $**p < .01$ .

- *Employee well-being.* The parameter estimate results of the indirect effect of work organisation breach on employee well-being through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.02, -.03]), attributions about the supervisor ( $b$

= -.01, *ns.*, 95% CI [.02, -.03]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.05]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.03]) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).

- *Favourable leadership perceptions.* The parameter estimate results of the indirect effect of work organisation breach on employees' favourable evaluations of leadership through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.03, -.05]), attributions about the supervisor ( $b = -.05$ , *ns.*, 95% CI [.01, -.02]), attributions about the organisation ( $b = .03$ , *ns.*, 95% CI [.09, -.01]), and attributions outside of the supervisor and the organisation ( $b = .02$ , *ns.*, 95% CI [.06, -.01]) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).
- *In-role performance.* The parameter estimate result of the indirect effect of work organisation breach on in-role performance through attributions about the organisation is -.05 ( $p < .05$ ) with a 95% CI [-.14, -.01]. The confidence interval does not cross zero, thus the indirect effect is statistically significant (Preacher and Hayes, 2008). The parameter estimate results of the indirect effect of work organisation breach on in-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.01, -.02]), attributions about the supervisor ( $b = -.04$ , *ns.*, 95% CI [.01, -.02]), and attributions outside of the supervisor and the organisation ( $b = .02$ , *ns.*, 95% CI [.06, -.01]) are not significant.
- *Extra-role performance.* The parameter estimate results of the indirect effect of work organisation breach on extra-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.01, -.02]), attributions about the supervisor ( $b = -.01$ , *ns.*, 95% CI [.05, -.06]), attributions about the organisation ( $b = .02$ , *ns.*, 95% CI [.09, -.04]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.05, -.04]) are not significant. All confidence intervals cross zero, then the indirect effects are statistically not significant (Preacher and Hayes, 2008).

## Wages and Payment System Breach

This section will report the mediating role of employee attributions in the relationship between wages and payment system breach and employee outcomes. Table 29 shows the results of the indirect effects of employee attributions. There is no significant result.

Table 29 Indirect Effects of Employee Attributions on the Relationship between Wages and Payment System Breach and Employee Outcomes ( $N = 634$ )

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions	$b = -.01$	$b = -.01$	$b = -.01$	$b = -.01$
Attributions about the supervisor	$b = .01$	$b = .02$	$b = .02$	$b = .01$
Attributions about the organisation	$b = -.01$	$b = -.01$	$b = -.01$	$b = -.01$
Attributions outside of the supervisor and the organisation	$b = -.01$	$b = .02$	$b = .02$	$b = .01$

$*p < .05$ ,  $**p < .01$ .

- *Employee well-being.* The parameter estimate results of the indirect effect of wages and payment system breach on employee well-being through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.02, -.02]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.02, -.02]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.04]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.01, -.01].) are not significant.
- *Favourable leadership perceptions.* The parameter estimate results of the indirect effect of wages and payment system breach on employees' favourable evaluations of leadership through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.03, -.03]), attributions about the supervisor ( $b = .02$ , *ns.*, 95% CI [.10, -.03]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.07, -.03]), and attributions outside of the supervisor and the organisation ( $b = .02$ , *ns.*, 95% CI [.03, -.03]) are not significant.
- *In-role performance.* The parameter estimate results of the indirect effect of wages



and payment system breach on in-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.02, -.02]), attributions about the supervisor ( $b = .02$ , *ns.*, 95% CI [.01, -.03]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.11, -.05]), and attributions outside of the supervisor and the organisation ( $b = .02$ , *ns.*, 95% CI [.03, -.03]) are not significant.

- *Extra-role performance.* The parameter estimate results of the indirect effect of wages and payment system breach on extra-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.02, -.01]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.04, -.03]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.06, -.03]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.02, -.02]) are not significant. All confidence intervals cross zero, thus the indirect effects are statistically not significant (Preacher and Hayes, 2008).

## Security and Flexibility Breach

This section will report the mediating role of employee attributions in the relationship between security and flexibility breach and employee outcomes. Table 30 shows the results for the indirect effects of employee attributions on the relationship between security and flexibility breach and employee outcomes. There is only one significant result.

Table 30 Indirect Effects of Employee Attributions on the Relationship between Security and Flexibility Breach and Employee Outcomes ( $N = 634$ )

	<b>Employee well-being</b>	<b>Leadership perceptions</b>	<b>In-role performance</b>	<b>Extra-role performance</b>
Employee internal attributions	$b = -.01$	$b = .02$	$b = -.01$	$b = -.01$
Attributions about the supervisor	$b = -.01$	$b = -.07^*$	$b = -.06$	$b = -.01$
Attributions about the organisation	$b = -.01$	$b = .01$	$b = .02$	$b = .02$
Attributions outside of the supervisor and the organisation	$b = .01$	$b = -.01$	$b = -.01$	$b = -.01$

$*p < .05$ ,  $**p < .01$ .

- *Employee well-being.* The parameter estimate results of the indirect effect of security and flexibility breach on employee well-being through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.01, -.05]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.03, -.05]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.04]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.03, -.02]) are not significant.
- *Leadership perceptions.* The parameter estimate result of the indirect effect of security and flexibility breach on employees' favourable evaluations of leadership through attributions about the supervisor is  $-.07$  ( $p < .05$ ) with a 95% CI [-.01, -.16]. The confidence interval does not cross zero, thus the indirect effect is statistically significant (Preacher and Hayes, 2008). The parameter estimate results of the indirect effect of security and flexibility breach on employees' favourable evaluations of leadership through employee internal attributions ( $b = .02$ , *ns.*, 95% CI [.02, -.06]), attributions about the organisation ( $b = .01$ , *ns.*, 95% CI [.07, -.03]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.01, -.05]) are not significant.
- *In-role performance.* The parameter estimate results of the indirect effect of security and flexibility breach on in-role performance through employee internal

attributions ( $b = -.01$ , *ns.*, 95% CI [.01, -.03]), attributions about the supervisor ( $b = -.06$ , *ns.*, 95% CI [.01, -.15]), attributions about the organisation ( $b = .02$ , *ns.*, 95% CI [.11, -.05]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.01, -.05]) are not significant.

- *Extra-role performance.* The parameter estimate results of the indirect effect of security and flexibility breach on extra-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.03, -.04]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.06, -.08]), attributions about the organisation ( $b = .02$ , *ns.*, 95% CI [.06, -.03]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.03, -.04]) are not significant.

## Skills and Development Breach

This section will report the mediating role of employee attributions in the relationship between skills and development breach and employee outcomes. Table 8.20 shows the results of the indirect effects of employee attributions. There is no significant result.

Table 31 Indirect Effects of Employee Attributions on the Relationship between Skills and Development Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Leadership perceptions	In-role performance	Extra-role performance
Employee internal attributions	$b = .02$	$b = .01$	$b = .01$	$b = .01$
Attributions about the supervisor	$b = .01$	$b = .01$	$b = .01$	$b = .01$
Attributions about the organisation	$b = .01$	$b = -.01$	$b = -.01$	$b = -.01$
Attributions outside of the supervisor and the organisation	$b = -.01$	$b = .02$	$b = .01$	$b = .01$

\* $p < .05$ , \*\* $p < .01$ .

- *Employee well-being.* The parameter estimate results of the indirect effect of skills

and development on employee breach well-being through employee internal attributions ( $b = .02$ , *ns.*, 95% CI [.07, -.01]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.03, -.03]), attributions about the organisation ( $b = .01$ , *ns.*, 95% CI [.05, -.04]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.03, -.04]) are not significant.

- *Leadership perceptions.* The parameter estimate results of the indirect effect of skills and development breach on employees' favourable evaluations of leadership through employee internal attributions ( $b = .01$ , *ns.*, 95% CI [.10, -.02]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.10, -.11]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.06, -.09]), and attributions outside of the supervisor and the organisation ( $b = .02$ , *ns.*, 95% CI [.08, -.01]) are not significant.
- *In-role performance.* The parameter estimate results of the indirect effect of skills and development breach on in-role performance through employee internal attributions ( $b = .01$ , *ns.*, 95% CI [.06, -.01]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.10, -.10]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.11, -.13]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.09, -.01]) are not significant.
- *Extra-role performance.* The parameter estimate results of the indirect effect of skills and development breach on extra-role performance through employee internal attributions ( $b = .01$ , *ns.*, 95% CI [.06, -.03]), attributions about the supervisor ( $b = .01$ , *ns.*, 95% CI [.05, -.05]), attributions about the organisation ( $b = -.01$ , *ns.*, 95% CI [.06, -.08]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.07, -.05]) are not significant. All confidence intervals cross zero, thus the indirect effects are statistically not significant (Preacher and Hayes, 2008).

## Engagement and Representation Breach

This section will report the mediating role of employee attributions in the relationship between engagement and representation breach and employee outcomes. Table 8.21 shows the results of the indirect effects of employee attributions on the relationship between engagement and representation breach and employee outcomes. There was no

significant result.

Table 32 Indirect Effects of Employee Attributions in the Relationship between Engagement and Representation Breach and Employee Outcomes ( $N = 634$ )

	Employee well-being	Leadership perceptions	In-role performance	Extra-role performance
Employee internal attributions	$b = -.03$	$b = -.04$	$b = -.02$	$b = -.01$
Attributions about the supervisor	$b = -.01$	$b = -.04$	$b = -.03$	$b = -.01$
Attributions about the organisation	$b = -.02$	$b = .05$	$b = .08$	$b = .03$
Attributions outside of the supervisor and the organisation	$b = .01$	$b = -.01$	$b = -.01$	$b = -.01$

\* $p < .05$ , \*\* $p < .01$ .

- *Employee well-being.* The parameter estimate results of the indirect effect of engagement and representation breach on employee well-being through employee internal attributions ( $b = -.03$ , *ns.*, 95% CI [.01, -.09]), attributions about the supervisor ( $b = -.01$ , *ns.*, 95% CI [.03, -.03]), attributions about the organisation ( $b = -.02$ , *ns.*, 95% CI [.03, -.09]), and attributions outside of the supervisor and the organisation ( $b = .01$ , *ns.*, 95% CI [.03, -.02]) are not significant.
- *Leadership perceptions.* The parameter estimate results of the indirect effect of engagement and representation breach on employees' favourable leadership perceptions through employee internal attributions ( $b = -.04$ , *ns.*, 95% CI [.01, -.12]), attributions about the supervisor ( $b = -.04$ , *ns.*, 95% CI [.07, -.14]), attributions about the organisation ( $b = .05$ , *ns.*, 95% CI [.16, -.01]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.07]) are not significant.
- *In-role performance.* The parameter estimate results of the indirect effect of engagement and representation breach on in-role performance through employee internal attributions ( $b = -.02$ , *ns.*, 95% CI [.01, -.07]), attributions about the

supervisor ( $b = -.03$ , *ns.*, 95% CI [.06, -.14]), attributions about the organisation ( $b = .08$ , *ns.*, 95% CI [.23, -.03]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.02, -.08]) are not significant.

- *Extra-role performance.* The parameter estimate results of the indirect effect of engagement and representation breach on extra-role performance through employee internal attributions ( $b = -.01$ , *ns.*, 95% CI [.05, -.06]), attributions about the supervisor ( $b = -.01$ , *ns.*, 95% CI [.05, -.07]), attributions about the organisation ( $b = .03$ , *ns.*, 95% CI [.15, -.06]), and attributions outside of the supervisor and the organisation ( $b = -.01$ , *ns.*, 95% CI [.03, -.05]) are not significant. All confidence intervals cross zero, thus the indirect effects are statistically not significant (Preacher and Hayes, 2008).

*Summary.* In general, there are only two significant indirect effects of employee attributions on the relationship between the five dimensions of psychological contract breach and employee outcomes. Compared with the mediating role of employee attributions in the relationship between global psychological contract breach and employee outcomes (five significant indirect effects), employee attributions play a much weaker mediating role in the relationship between the five psychological contract breach dimensions and employee outcomes. The research suggests that global psychological contract breach plays a more important role in understanding employees' responds to psychological contract breach.

## **Appendix IV Individual Differences Analysis Using**

### **Five Psychological Contract Breach Dimensions**

#### **Moderating Role of Individual Difference in the Relationship between Work Organisation Breach and Employee Attributions**

The moderating role of individual differences in the relationship between work organisation breach and employee attributions was tested in Mplus. Table 33 shows the overview of the interaction effects of individual differences. Individualism/collectivism moderate the relationship between work organisation breach and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationships between work organisation breach and employee internal attributions and attributions about the supervisor. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 33 Moderating Role of Individual Differences in the Relationship between Work Organisation Breach and Employee Attributions

	<b>Employee internal attributions</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Individualism /collectivism				X
Employee proactivity	X	X		

#### **Individualism/collectivism**

In this section, the interaction effects of individualism/collectivism on the relationship between work organisation breach and employee attributions will be reported. Figure 66 and Table 34 shows the moderation results. Individualism/collectivism moderate the relationship between work organisation breach and attributions outside of the supervisor and the organisation. But individualism/collectivism do not moderate the relationships between work organisation breach and employee internal attributions, attributions about the supervisor and attributions about the organisation.

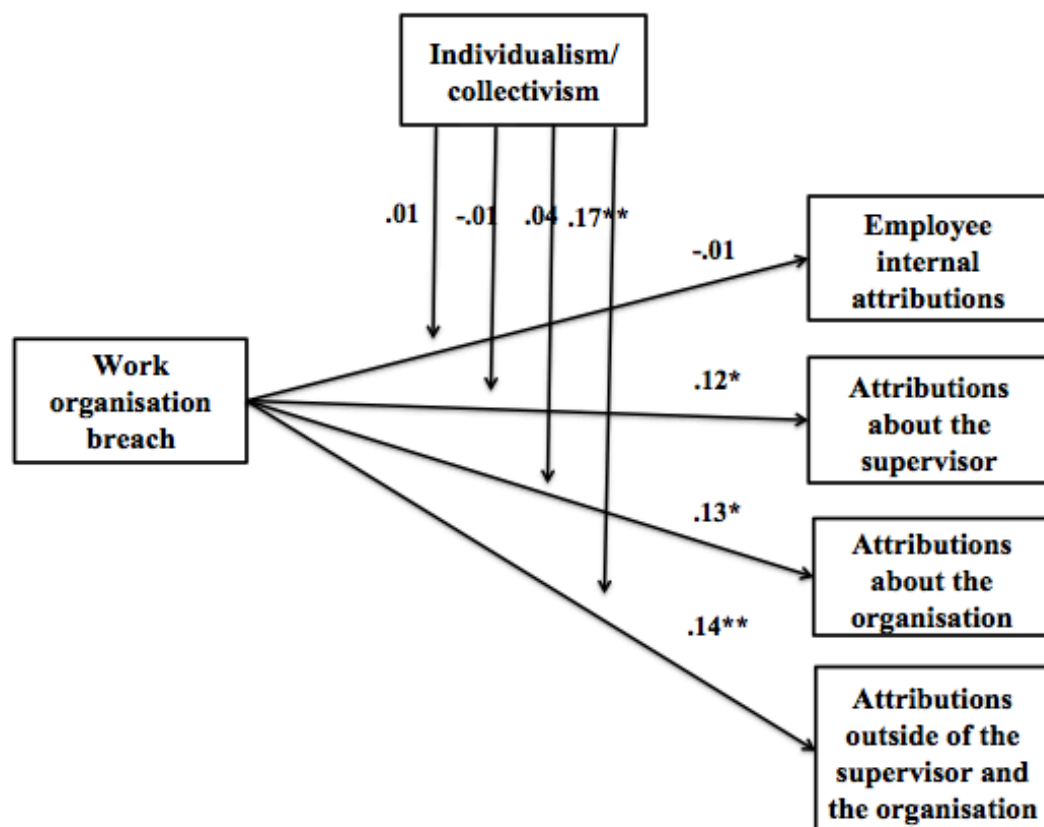


Figure 66 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except work organisation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.



Table 34 Moderating Role of Individualism/collectivism in the Relationship between Work Organisation Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Work organisation breach	$b = -.05$	$b = -.01$	$b = .12^*$	$b = .12^*$	$b = .16^{**}$	$b = .13^*$	$b = .16^{**}$	$b = .14^{**}$
Individualism /collectivism	$b = .36^{**}$	$b = .36^{**}$	$b = -.07$	$b = -.07$	$b = -.15$	$b = -.15$	$b = -.07$	$b = -.09$
Interaction term		$b = .01$		$b = -.01$		$b = .04$		$b = .17^{**}$
$R^2$		0.11		0.01		0.02		0.1
$\Delta R^2$		0.00		0.00		0.00		0.08

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except work organisation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions outside of the supervisor and the organisation.** Individualism/collectivism moderate the relationships between work organisation breach and attributions outside of the supervisor and the organisation ( $b = .17$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .10$ ,  $\Delta R^2 = .08$ ). The interaction term explains additional 8% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 67) shows that the relationship between work organisation breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slope for low collectivism and high individualism ( $-1$  SD,  $t = -.39$ ,  $ns.$ ) is not significant, but for high collectivism and low individualism ( $+1$  SD,  $t = 4.00$ ,  $p < .01$ ) is significant. Thus, when employees report individualism, there is no relationship between work organisation breach and attributions outside of the supervisor and the organisation. When employees report collectivism, the positive relationship between work organisation breach and attributions outside of the supervisor and the organisation is significant.

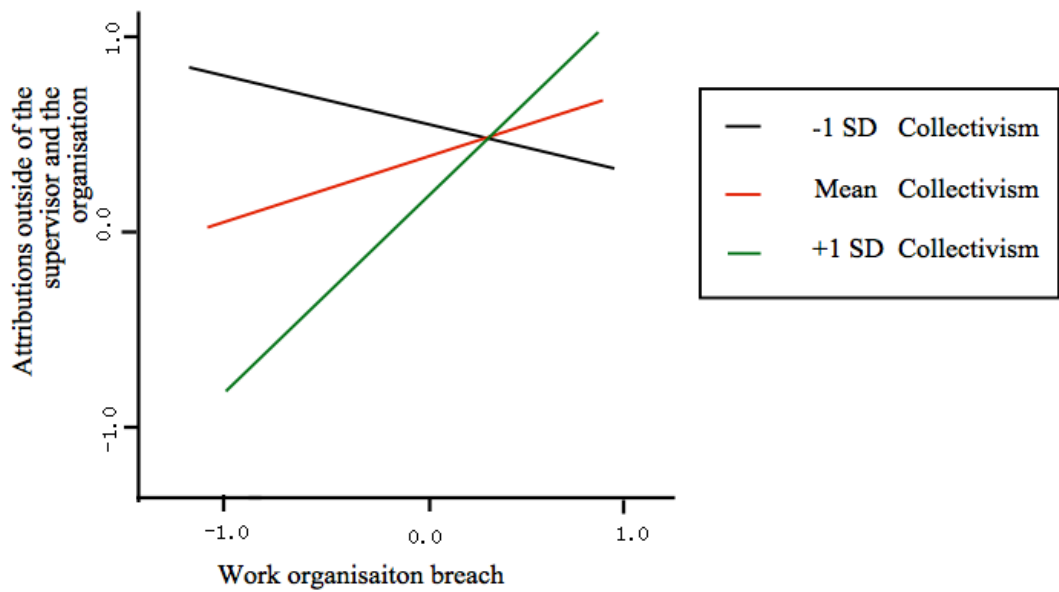


Figure 67 Interaction between Work Organisation Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

### 8.15.2 Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between work organisation breach and employee attributions will be reported. Figure 68 and Table 35 shows the moderation results. Employee proactivity moderates the relationships between work organisation breach and employee internal attributions and attributions about the supervisor. While, employee proactivity do not moderate the relationships between work organisation breach and attributions about the organisation and attributions outside of the supervisor and the organisation.

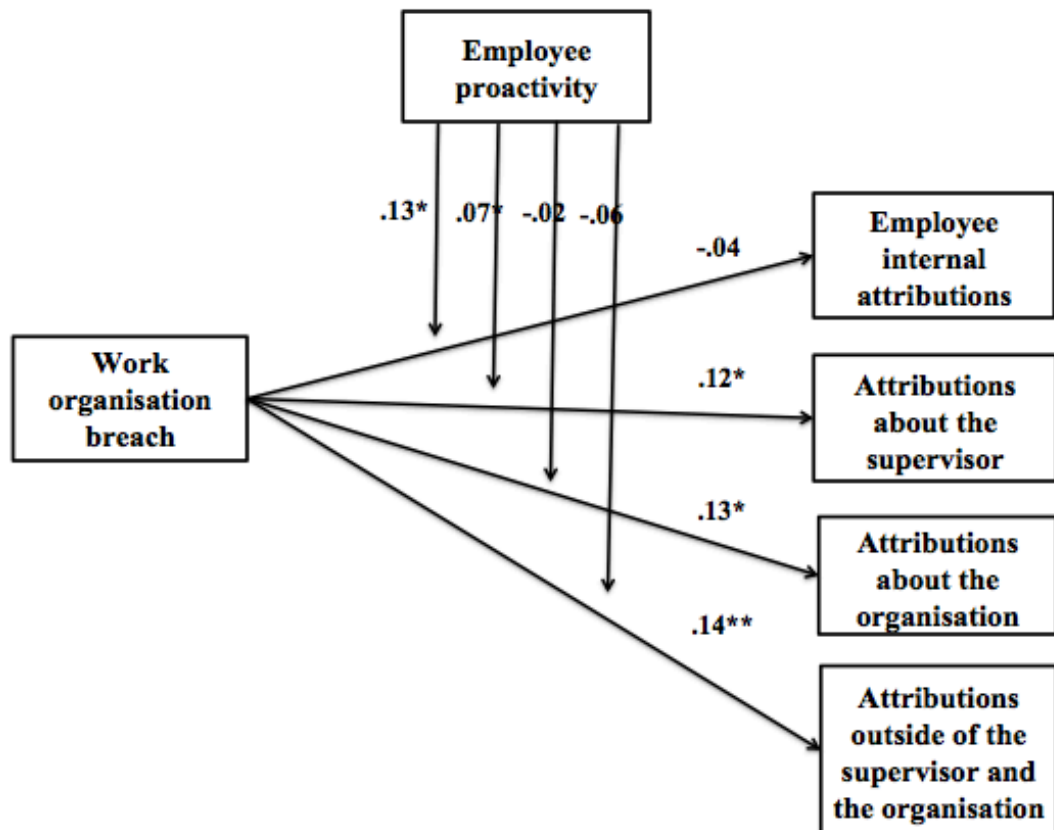


Figure 68 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except work organisation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 35 Moderating Role of Employee Proactivity in the Relationship between Work Organisation Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Work organisation breach	$b = -.05$	$b = -.04$	$b = .12^*$	$b = .12^*$	$b = .16^{**}$	$b = .13^*$	$b = .16^{**}$	$b = .14^{**}$
Employee proactivity	$b = .01$	$b = .07$	$b = .08$	$b = .10^*$	$b = .11^*$	$b = .10$	$b = .08$	$b = .06$
Interaction term		$b = .13^*$		$b = .07^*$		$b = -.02$		$b = -.06$
$R^2$		0.05		0.07		0.07		0.07
$\Delta R^2$		0.04		0.01		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except work organisation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Employee internal attributions.** Employee proactivity moderates the relationships between work organisation breach and employee internal attributions ( $b = .13$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .05$ ,  $\Delta R^2 = .04$ ). The interaction term explains additional 4% of variance of employee internal attributions. Plotting the interaction (Figure 69) shows that the relationship between work organisation breach and employee internal attributions is negative for less proactive employees but is positive for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity ( $-1$  SD,  $t = -2.03$ ,  $p < .05$ ) is significant, but for high employee proactivity ( $+1$  SD,  $t = 1.07$ ,  $ns.$ ) is not. Thus, when employees report low employee proactivity, the negative relationship between work organisation breach and employee internal attributions is significant. When employees report high employee proactivity, there is no significant relationship between work organisation breach and employee internal attributions.

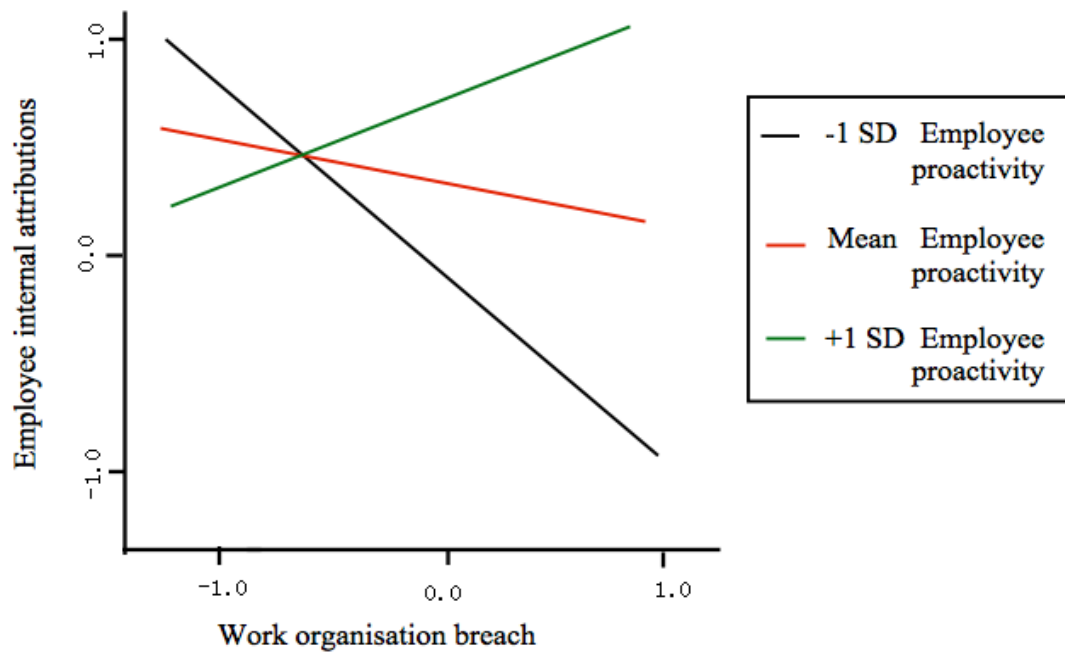


Figure 69 Interaction between Work Organisation Breach and Employee Proactivity on Employee Internal Attributions

**Attributions about the supervisor.** Employee proactivity moderates the relationships between work organisation breach and attributions about the supervisor ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .07$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Plotting the interaction (Figure 70) shows that the positive relationship between work organisation breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity (-1 SD,  $t = .79$ , *ns.*) is not significant, but for high employee proactivity (+1 SD,  $t = 3.00$ ,  $p < .01$ ) is significant. Thus, when employees report low employee proactivity, there is no relationship between work organisation breach and attributions about the supervisor. When employees report high employee proactivity, the positive relationship between work organisation breach and attributions about the supervisor is significant.

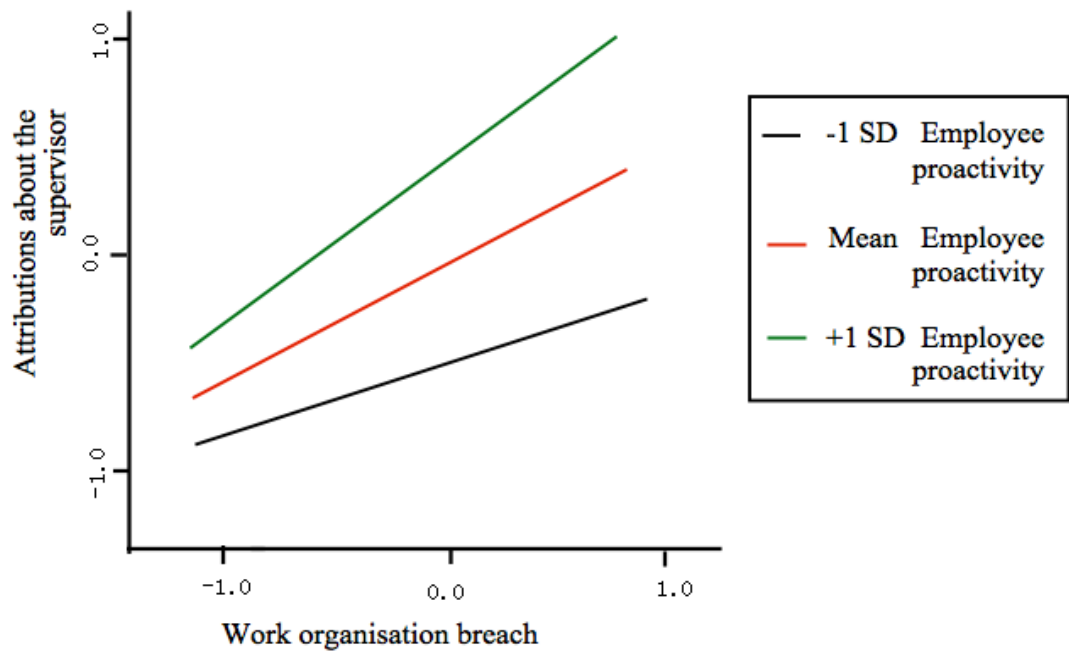


Figure 70 Interaction between Work Organisation Breach and Employee Proactivity on Attributions about the Supervisor

In general, individual differences (i.e., individualism/collectivism and employee proactivity) moderate the relationship between work organisation breach and employee attributions partially. Compared with the moderating role of individualism/collectivism and employee proactivity in the relationship between global psychological contract breach and employee attributions, the moderating role of individualism/collectivism and employee proactivity is not stronger in the relationship between the work organisation dimension of psychological contract breach and employee attributions.

## **Moderating Role of Individual Differences in the Relationship between Wage and Payment System Breach and Employee Attributions**

The moderating role of individual differences in the relationship between wage and payment system breach and employee attributions was tested in Mplus. Table 36 shows the overview of the interaction effects of individual differences. Individualism/collectivism moderate the relationship between wage and payment

system breach and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationships between wage and payment system breach and attributions about the supervisor and attributions outside of the supervisor and the organisation. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 36 Moderating Role of Individual Differences in the Relationship between Wage and Payment System Breach and Employee Attributions

	<b>Employee internal attributions</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Individualism /collectivism				X
Employee proactivity		X		X

### **Individualism/collectivism**

In this section, the interaction effects of individualism/collectivism on the relationship between wage and payment system breach and employee attributions will be reported. Figure 71 and Table 37 shows the moderation results. Individualism/collectivism moderate the relationship between wage and payment system breach and attributions outside of the supervisor and the organisation, but do not moderate the relationships between wage and payment system breach and employee internal attributions, attributions about the supervisor and attributions about the organisation.

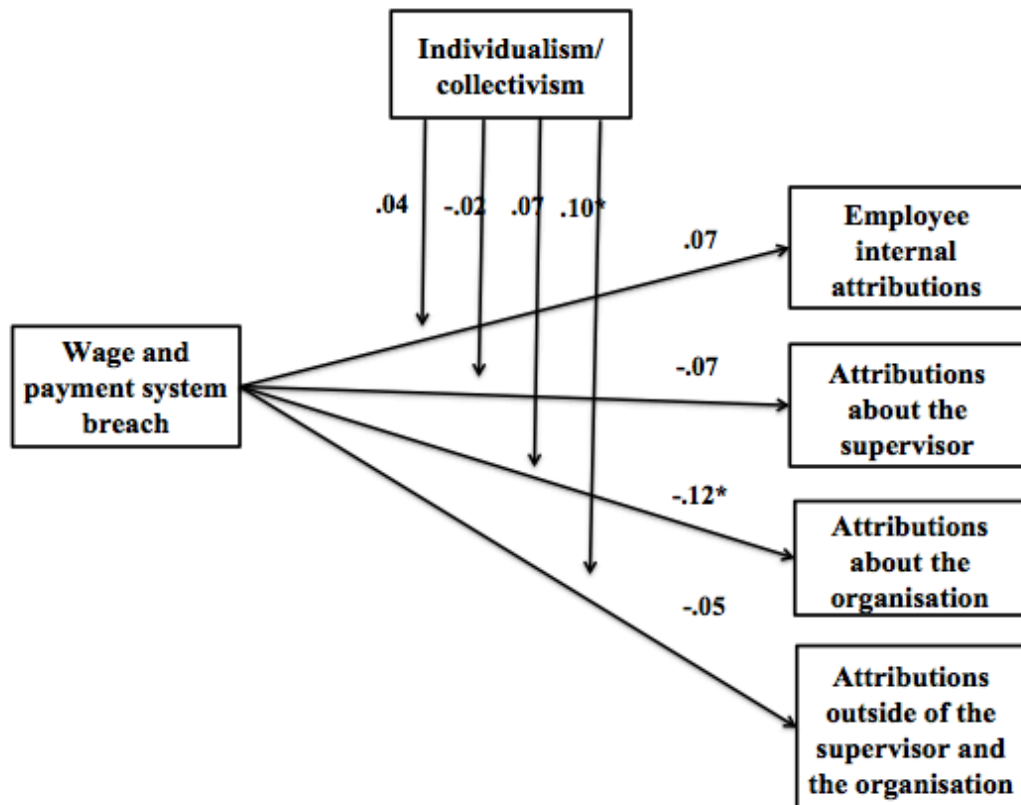


Figure 71 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except wage and payment system breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.



Table 37 Moderating Role of Individualism/collectivism in the Relationship between Wage and Payment System Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Wage and payment system breach	$b = -.04$	$b = .07$	$b = -.04$	$b = -.07$	$b = -.06$	$b = -.12^*$	$b = -.01$	$b = -.05$
Individualism /collectivism	$b = .36^{**}$	$b = .36^{**}$	$b = -.07$	$b = -.07$	$b = -.15$	$b = -.16$	$b = -.07$	$b = -.08$
Interaction term		$b = .04$		$b = -.02$		$b = .07$		$b = .10^*$
$R^2$		0.16		0.03		0.05		0.05
$\Delta R^2$		0.00		0.00		0.01		0.03

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except wage and payment system breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions outside of the supervisor and the organisation.** Individualism/collectivism moderate the relationships between wage and payment system breach and attributions outside of the supervisor and the organisation ( $b = .10$ ,  $SE = .05$ ,  $p < .05$ ;  $R^2 = .05$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 72) shows that the relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism ( $-1$  SD,  $t = -1.80$ , *ns.*) and for high collectivism and low individualism ( $+1$  SD,  $t = .60$ , *ns.*) are both non-significant. The region of significance shows that simple slopes are significant when the moderator is above  $-4.78$  and below  $-1.75$ . Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of  $-2$  SD is located in the region of significance. The mean score of the moderator is  $3.71$  and the standard deviation is  $.67$ . The mean value minus two standard deviations equals  $2.37$ , which is not over the minimum value of the moderator (i.e.,  $1$ ). Then the slope for low collectivism and

high individualism ( $-2\text{ SD}$ ,  $t = -1.98$ ,  $p < .05$ ) is significant, but for high collectivism and low individualism ( $+2\text{SD}$ ,  $t = 1.18$ ,  $ns.$ ) is not. Thus, when employees report individualism, there negative relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is significant. When employees report collectivism, there is no significant relationship between wage and payment system breach and attributions outside of the supervisor and the organisation.

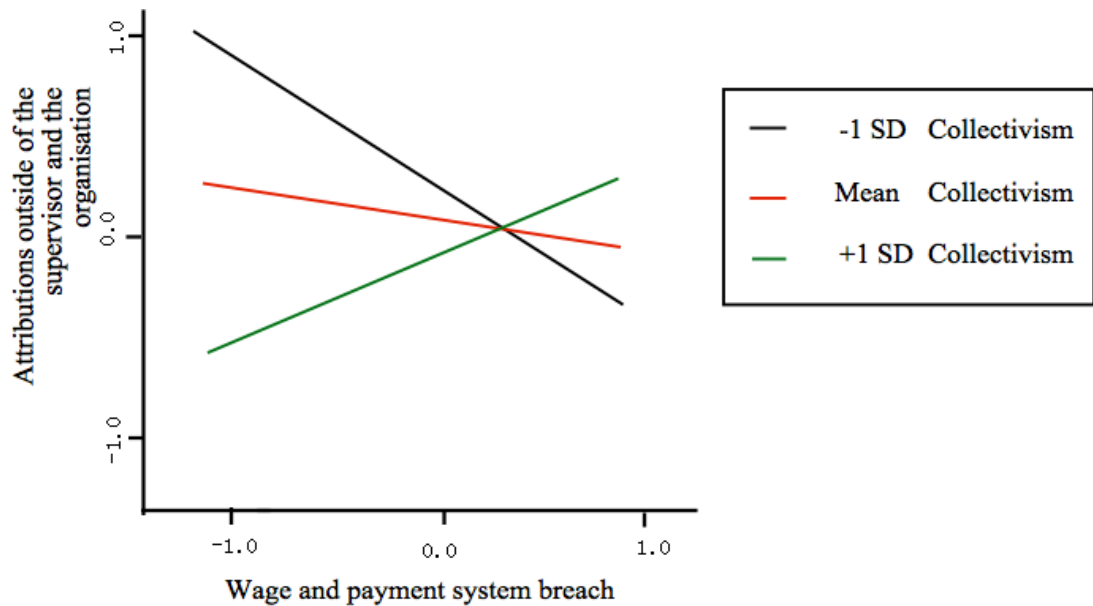


Figure 72 Interaction between Wage and Payment System Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

## Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between wage and payment system breach and employee attributions will be reported. Figure 73 and Table 38 shows the moderation results. Employee proactivity moderates the relationships between wage and payment system breach and attributions about the supervisor and attributions outside of the supervisor and the organisation, but does not moderate the relationships between wage and payment system breach and employee internal attributions and attributions about the organisation.

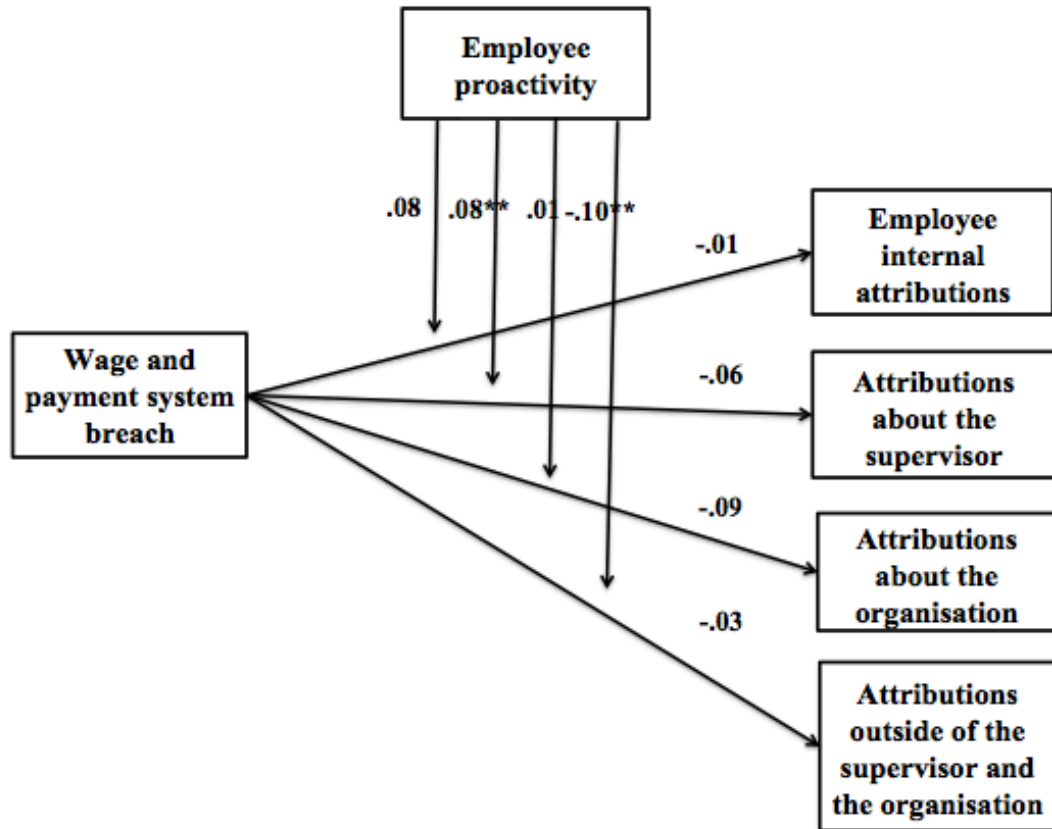


Figure 73 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except wage and payment system breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 38 Moderating Role of Employee Proactivity in the Relationship between Wage and Payment System Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Wage and payment system breach	$b = -.04$	$b = -.01$	$b = -.04$	$b = -.06$	$b = -.06$	$b = -.09$	$b = -.01$	$b = -.03$
Employee proactivity	$b = .01$	$b = .05$	$b = .08$	$b = .11^*$	$b = .11^*$	$b = .12$	$b = .08$	$b = .03$
Interaction term		$b = .08$		$b = .08^{**}$		$b = .01$		$b = -.10^{**}$
$R^2$		0.02		0.04		0.07		0.01
$\Delta R^2$		0.01		0.02		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except wage and payment system breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the supervisor.** Employee proactivity moderates the relationships between wage and payment system breach and attributions about the supervisor ( $b = .08$ ,  $SE = .03$ ,  $p < .01$ ;  $R^2 = .04$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of attributions about the supervisor. Plotting the interaction (Figure 79) shows that the relationship between wage and payment system breach and attributions about the supervisor is negative for less proactive employees but is positive for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity ( $-1$  SD,  $t = -2.22$ ,  $p < .05$ ) is significant, but for high employee proactivity ( $+1$  SD,  $t = .32$ ,  $ns.$ ) is not. Thus, when employees report low employee proactivity, the negative relationship between wage and payment system breach and attributions about the supervisor is significant. When employees report high employee proactivity, there is no significant relationship between wage and payment system breach and attributions about the supervisor.

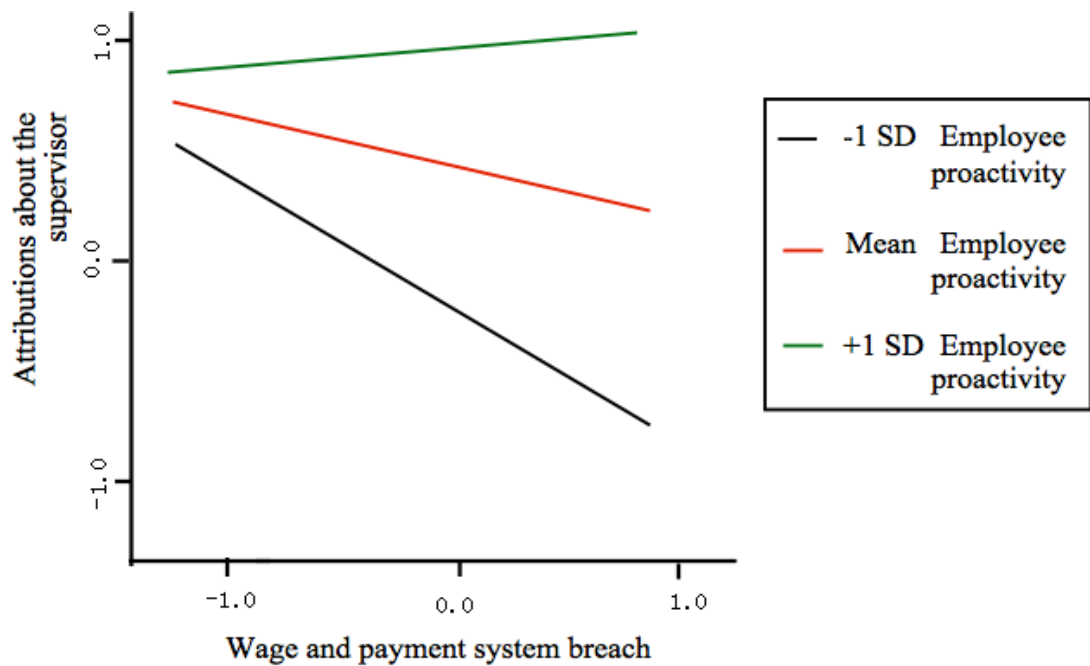


Figure 79 Interaction between Wage and Payment System Breach and Employee Proactivity on Attributions about the Supervisor

***Attributions outside of the supervisor and the organisation.*** Employee proactivity moderates the relationships between wage and payment system breach and attributions outside of the supervisor and the organisation ( $b = -.10$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .03$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 80) shows that the relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is positive for less proactive employees but is negative for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity (-1 SD,  $t = 1.11$ ,  $ns.$ ) is not significant, but for high employee proactivity (+1 SD,  $t = -2.05$ ,  $p < .05$ ) is significant. Thus, when employees report low employee proactivity, there is no significant relationship between wage and payment system breach and attributions outside of the supervisor and the organisation. When employees report high employee proactivity, the negative relationship between wage and payment system breach and attributions outside of the supervisor and the organisation is significant.



Figure 80 Interaction between Wage and Payment System Breach and Employee Proactivity on Attributions outside of the Supervisor and the Organisation

In general, individual differences (i.e., individualism/collectivism and employee proactivity) moderate the relationship between wage and payment system breach and employee attributions partially. Compared with the moderating role of individualism/collectivism and employee proactivity in the relationship between global psychological contract breach and employee attributions, the moderating role of individualism/collectivism and employee proactivity is not stronger in the relationship between the wage and payment system dimension of psychological contract breach and employee attributions.

## **Moderating Role of Individual Differences in the Relationship between Security and Flexibility Breach and Employee Attributions**

The moderating role of individual differences in the relationship between security and flexibility breach and employee attributions was tested in Mplus. Table 39 shows the overview of the interaction effects of individual differences. Individualism/collectivism

moderate the relationship between security and flexibility breach and attributions about the organisation. Employee proactivity moderates the relationships between security and flexibility breach and employee internal attributions, attributions about the supervisor and attributions outside of the supervisor and the organisation. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 39 Moderating Role of Individual Differences in the Relationship between Security and Flexibility Breach and Employee Attributions

	<b>Employee internal attributions</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Individualism /collectivism			X	
Employee proactivity	X	X		X

### **Individualism/collectivism**

In this section, the interaction effects of individualism/collectivism on the relationship between security and flexibility breach and employee attributions will be reported. Figure 81 and Table 40 shows the moderation results. Individualism/collectivism moderate the relationship between security and flexibility breach and attributions about the organisation, but do not moderate the relationships between security and flexibility breach and employee internal attributions, attributions about the supervisor and attributions outside of the supervisor and the organisation.

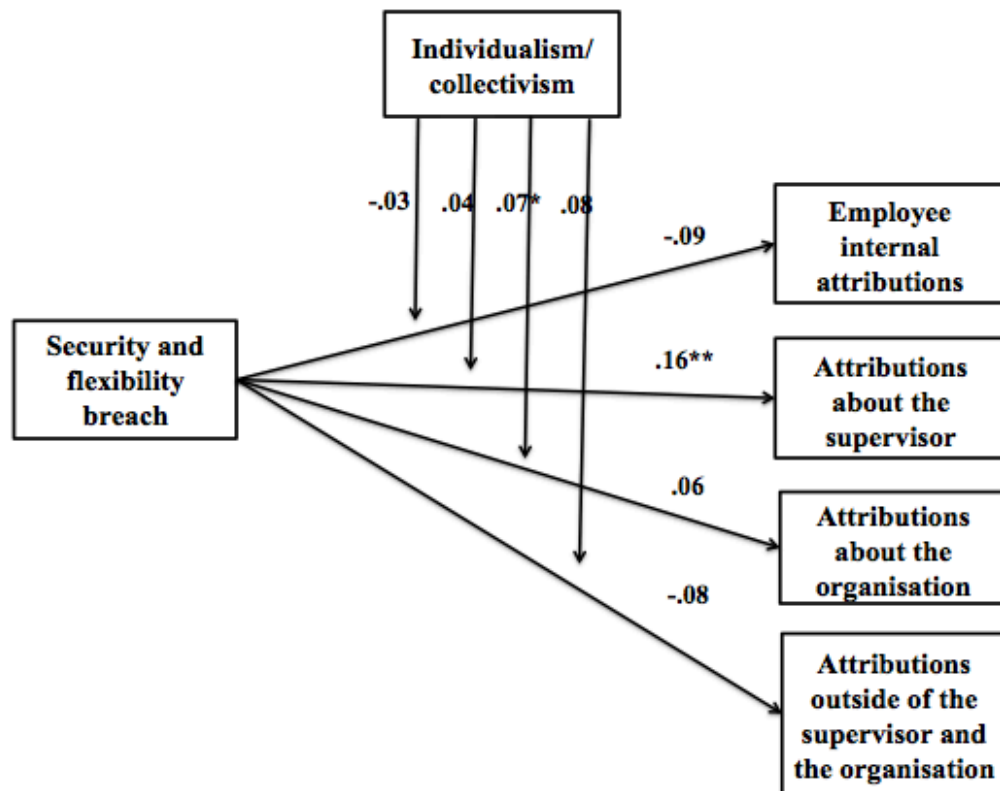


Figure 81 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except security and flexibility breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.



Table 40 Moderating Role of Individualism/collectivism in the Relationship between Security and Flexibility Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Security and flexibility breach	$b = -.06$	$b = -.09$	$b = .15^*$	$b = .16^{**}$	$b = .04$	$b = .06$	$b = -.12$	$b = -.08$
Individualism /collectivism	$b = .36^{**}$	$b = .36^{**}$	$b = -.07$	$b = -.07$	$b = -.15$	$b = -.17^*$	$b = -.07$	$b = -.09$
Interaction term		$b = -.03$		$b = .04$		$b = .07^*$		$b = .08$
$R^2$		0.08		0.04		0.03		0.05
$\Delta R^2$		0.00		0.00		0.01		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except security and flexibility breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the organisation.** Individualism/collectivism moderate the relationships between security and flexibility breach and attributions about the organisation ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .03$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the organisation. Plotting the interaction (Figure 82) shows that the relationship between security and flexibility breach and attributions about the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism ( $-1$  SD,  $t = -.14$ , *ns.*) and for high collectivism and low individualism ( $+1$  SD,  $t = 1.83$ , *ns.*) are both non-significant. The region of significance shows that simple slopes are significant when the moderator is below  $-9.14$  or above  $1.23$ . Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of  $+2$  SD is located in the region of significance. The mean score of the moderator is  $3.71$  and the standard deviation is  $.67$ . The mean value plus two standard deviations equals  $5.05$ , which is over the maximum value of the moderator (i.e.,  $5$ ). Therefore, there is no significant relationship between security and flexibility breach and attributions about the organisation regardless of

when employees are individualistic or collectivistic.

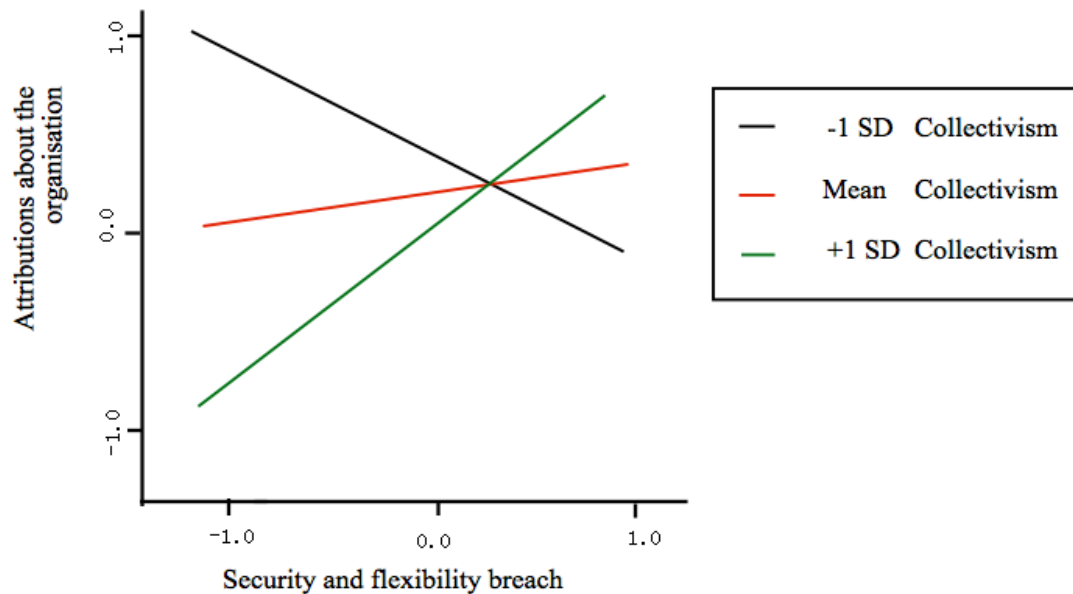


Figure 82 Interaction between Security and Flexibility Breach and Individualism/collectivism on Attributions about the Organisation

## Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between security and flexibility breach and employee attributions will be reported. Figure 83 and Table 41 shows the moderation results. Employee proactivity moderates the relationship between security and flexibility breach and employee internal attributions, attributions about the supervisor and attributions outside of the supervisor and the organisation, but does not moderate the relationships between security and flexibility breach and attributions about the organisation.

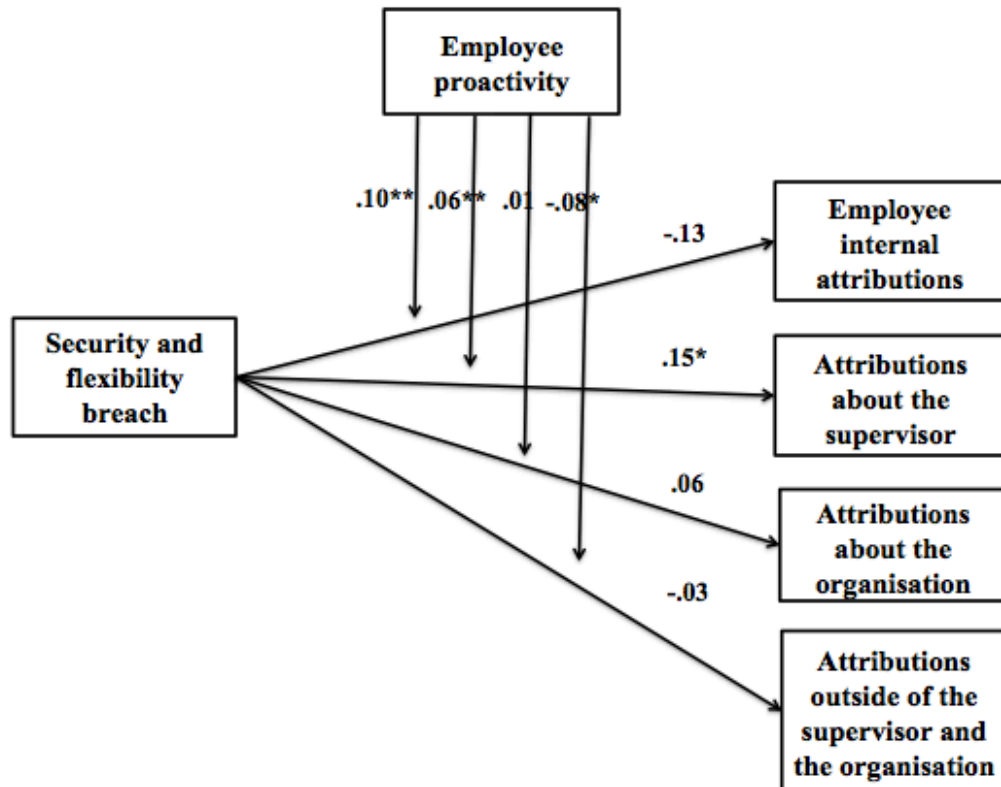


Figure 83 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except security and flexibility breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 41 Moderating Role of Employee Proactivity in the Relationship between Security and Flexibility Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Security and flexibility breach	$b = -.06$	$b = -.13$	$b = .15^{**}$	$b = .15^*$	$b = .04$	$b = .06$	$b = -.02$	$b = -.03$
Employee proactivity	$b = .01$	$b = .04$	$b = .08$	$b = .09^*$	$b = .11^*$	$b = .12^*$	$b = .08$	$b = .06$
Interaction term		$b = .10^{**}$		$b = .06^{**}$		$b = .01$		$b = -.08^*$
$R^2$		0.05		0.08		0.04		0.02
$\Delta R^2$		0.03		0.01		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except security and flexibility breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Employee internal attributions.** Employee proactivity moderates the relationships between security and flexibility breach and employee internal attributions ( $b = .10$ ,  $SE = .04$ ,  $p < .01$ ;  $R^2 = .05$ ,  $\Delta R^2 = .03$ ). The interaction term explains additional 3% of variance of employee internal attributions. Plotting the interaction (Figure 84) shows that the negative relationship between security and flexibility breach and employee internal attributions is stronger for less proactive employees but is weaker for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity ( $-1$  SD,  $t = -2.97$ ,  $p < .01$ ) is significant, but for high employee proactivity ( $+1$  SD,  $t = -.39$ ,  $ns.$ ) is not. Thus, when employees report low employee proactivity, the negative relationship between security and flexibility breach and employee internal attributions is significant. When employees report high employee proactivity, there is no significant relationship between security and flexibility breach and employee internal attributions.

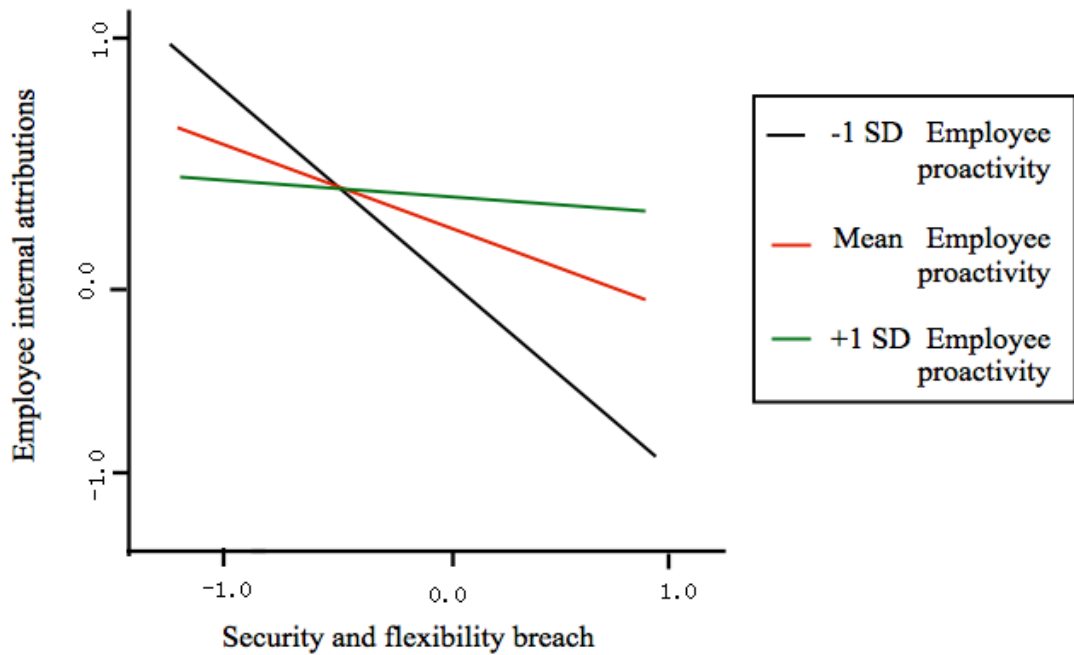


Figure 84 Interaction between Security and Flexibility Breach and Employee Proactivity on Employee Internal Attributions

**Attributions about the supervisor.** Employee proactivity moderates the relationships between security and flexibility breach and attributions about the supervisor ( $b = .06$ ,  $SE = .02$ ,  $p < .01$ ;  $R^2 = .08$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Plotting the interaction (Figure 85) shows that the positive relationship between security and flexibility breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity (-1 SD,  $t = 1.43$ , *ns.*) is not significant, but for high employee proactivity (+1 SD,  $t = 3.31$ ,  $p < .01$ ) is significant. Thus, when employees report low employee proactivity, there is no relationship between security and flexibility breach and attributions about the supervisor. When employees report high employee proactivity, the positive significant relationship between security and flexibility breach and attributions about the supervisor is significant.

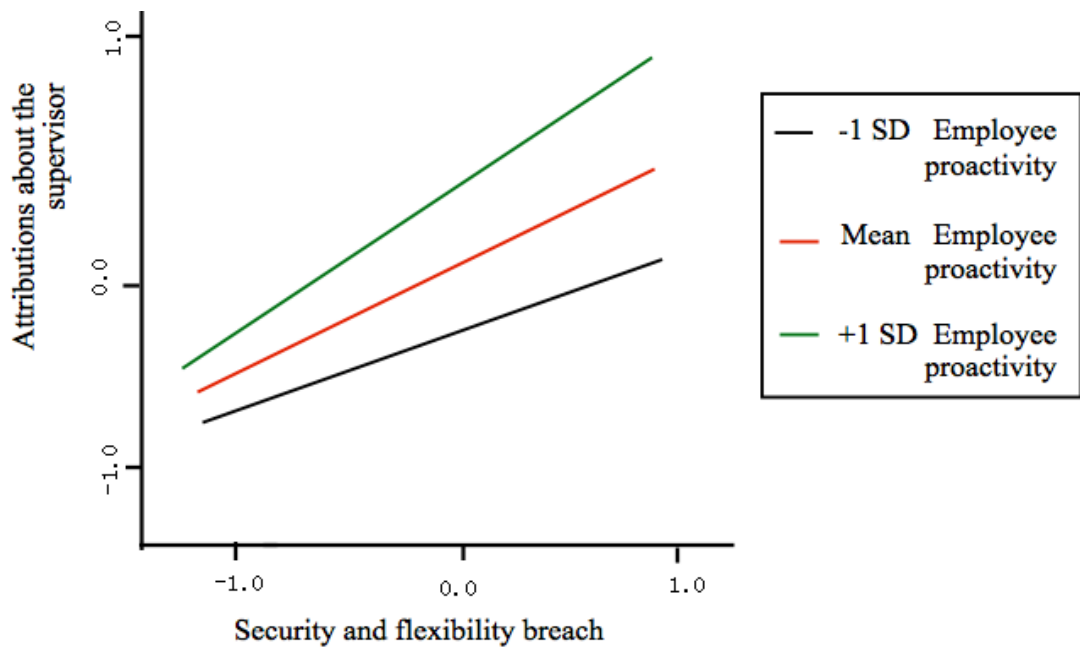


Figure 85 Interaction between Security and Flexibility Breach and Employee Proactivity on Attributions about the Supervisor

***Attributions outside of the supervisor and the organisation.*** Employee proactivity moderates the relationships between security and flexibility breach and attributions outside of the supervisor and the organisation ( $b = -.08$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .02$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 86) shows that the relationship between security and flexibility breach and attributions outside of the supervisor and the organisation is positive for less proactive employees but is negative for more proactive employees.

Simple slope analysis shows that the slope for low employee proactivity (-1 SD,  $t = .16$ ,  $ns.$ ) is not significant, but for high employee proactivity (+1 SD,  $t = -2.37$ ,  $p < .05$ ) is significant. Thus, when employees report low employee proactivity, there is no relationship between security and flexibility breach and attributions outside of the supervisor and the organisation. When employees report high employee proactivity, the negative significant relationship between security and flexibility breach and attributions outside of the supervisor and the organisation is significant.

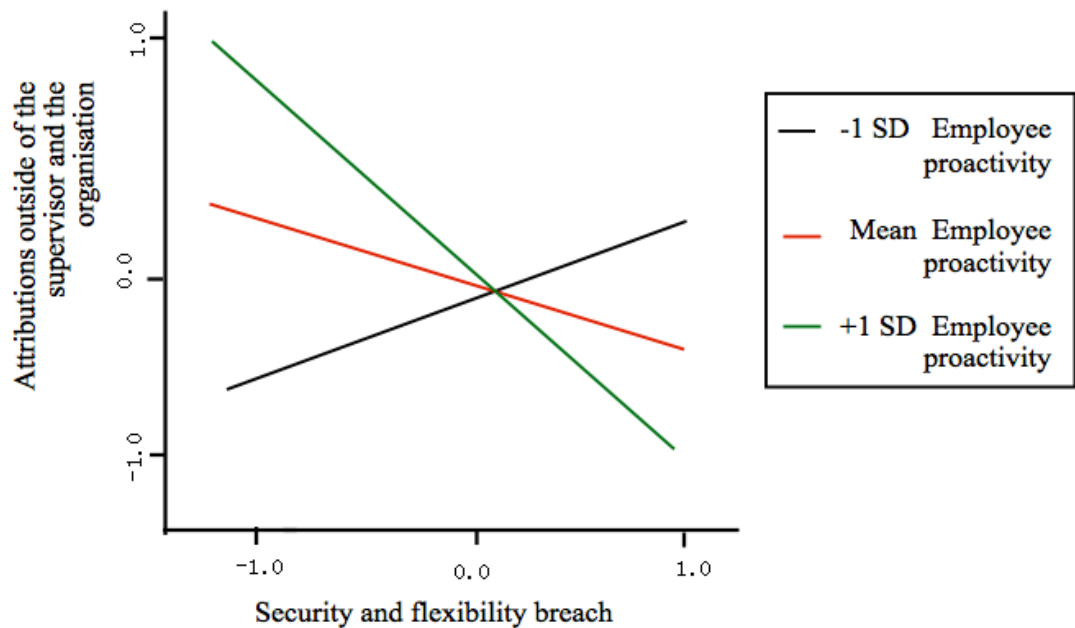


Figure 86 Interaction between Security and Flexibility Breach and Employee Proactivity on Attributions outside of the Supervisor and the Organisation

In general, individual differences (i.e., individualism/collectivism and employee proactivity) moderate the relationship between security and flexibility breach and employee attributions partially. Compared with the moderating role of individualism/collectivism and employee proactivity in the relationship between global psychological contract breach and employee attributions, the moderating role of individualism/collectivism does not change much in the relationship between the security and flexibility dimension of psychological contract breach and employee attributions. But employee proactivity plays a more important moderating role in the relationship between security and flexibility breach and employee attributions than in the relationship between global psychological contract breach and employee attributions. Employee proactivity only moderates the relationship between psychological contract breach and attributions about the supervisor, while employee proactivity moderates almost all the relationships between security and flexibility and employee attributions except attributions about the organisation.

## **Moderating Role of Individual Differences in the Relationship between Skills and Development Breach and**

## Employee Attributions

The moderating role of individual differences in the relationship between skills and development breach and employee attributions was tested in Mplus. Table 42 shows the overview of the interaction effects of individual differences. Individualism/collectivism moderate the relationships between skills and development breach and attributions about the organisation and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationship between skills and development breach and attributions about the supervisor. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 42 Moderating Role of Individual Differences in the Relationship between Skills and Development Breach and Employee Attributions

	<b>Employee internal attributions</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Individualism /collectivism			X	X
Employee proactivity		X		

### Individualism/collectivism

In this section, the interaction effects of individualism/collectivism on the relationship between skills and development breach and employee attributions will be reported. Figure 87 and Table 43 shows the moderation results. Individualism/collectivism moderate the relationships between skills and development breach and attributions about the organisation and attributions outside of the supervisor and the organisation, but do not moderate the relationships between skills and development breach and employee internal attributions and attributions about the supervisor.



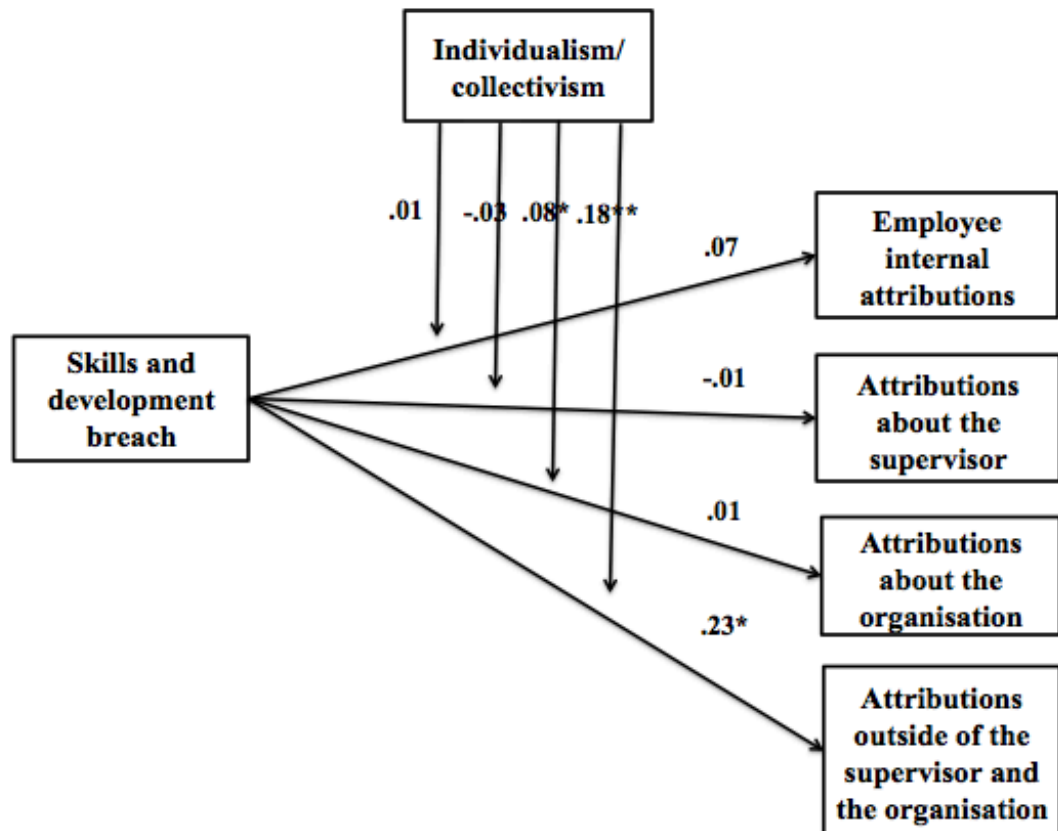


Figure 87 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except skills and development breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 43 Moderating Role of Individualism/collectivism in the Relationship between Skills and Development Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Skills and development breach	$b = .27^*$	$b = .07$	$b = -.05$	$b = -.01$	$b = -.09$	$b = .01$	$b = .15$	$b = .23^*$
Individualism /collectivism	$b = .36^{**}$	$b = .35^{**}$	$b = -.07$	$b = -.07$	$b = -.15$	$b = -.16$	$b = -.07$	$b = -.10$
Interaction term		$b = .01$		$b = -.03$		$b = .08^*$		$b = .18^{**}$
$R^2$		0.15		0.01		0.04		0.14
$\Delta R^2$		0.00		0.00		0.02		0.08

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except skills and development breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the organisation.** Individualism/collectivism moderate the relationships between skills and development breach and attributions about the organisation ( $b = .08$ ,  $SE = .04$ ,  $p < .05$ ;  $R^2 = .04$ ,  $\Delta R^2 = .02$ ). The interaction term explains additional 2% of variance of attributions about the organisation. Plotting the interaction (Figure 88) shows that the relationship between skills and development breach and attributions about the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism ( $-1$  SD,  $t = -.57$ , *ns.*) and for high collectivism and low individualism ( $+1$  SD,  $t = .73$ , *ns.*) are both non-significant. The region of significance shows that simple slopes are significant when the moderator is below  $-4.90$  or above  $4.30$ . Thus, the mean value of the moderator plus and minus five standard deviations could be used as the conditional values of the moderator because the values of  $-5$  SD and  $+5$  SD are located in the region of significance. The mean score of the moderator is  $3.71$  and the standard deviation is  $.67$ . The mean value plus two standard deviations equals  $7.06$ , which is over the maximum value of the moderator (i.e.,  $5$ ). Therefore, there is no significant relationship between skills and development breach and attributions about the

organisation regardless of when employees are individualistic or collectivistic.

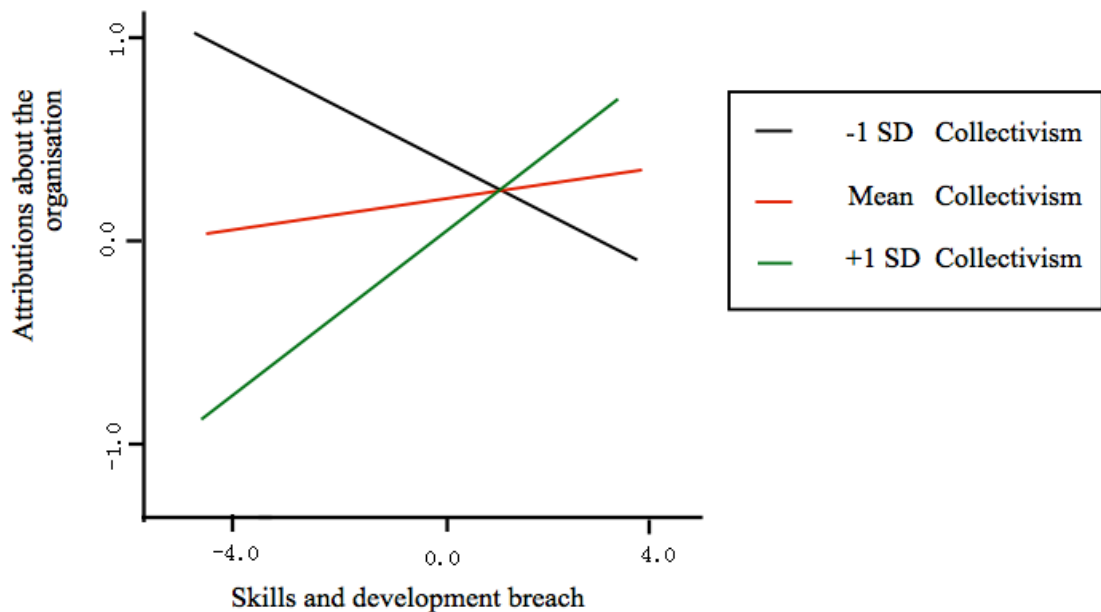


Figure 88 The interaction between skills and development breach and individualism/collectivism on attributions about the organisation

***Attributions outside of the supervisor and the organisation.***

Individualism/collectivism moderate the relationships between skills and development breach and attributions outside of the supervisor and the organisation ( $b = .18$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .14$ ,  $\Delta R^2 = .08$ ). The interaction term explains additional 8% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 89) shows that the positive relationship between skills and development breach and attributions outside of the supervisor and the organisation is weaker for individualistic employees but is stronger for collectivistic employees.

Simple slope analysis shows that the slope for low collectivism and high individualism (-1 SD,  $t = .41$ , *ns.*) is not significant, but for high collectivism and low individualism (+1 SD,  $t = 3.35$ ,  $p < .01$ ) is significant. Thus, when employees report individualism, there is no significant relationship between skills and development breach and attributions outside of the supervisor and the organisation. But when employees report collectivism, the positive relationship between skills and development breach and attributions outside of the supervisor and the organisation is significant.

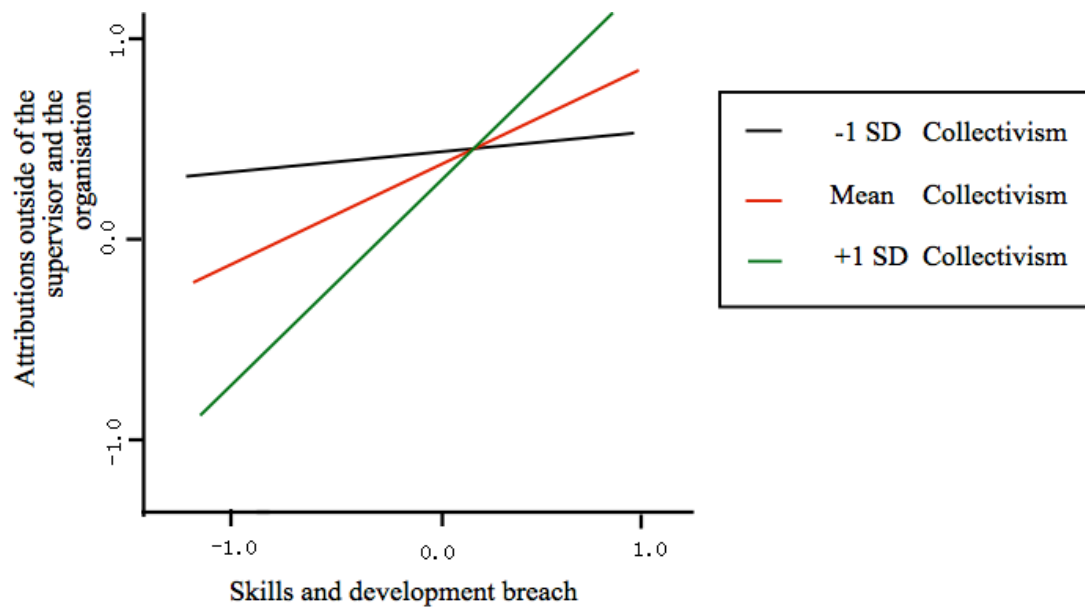


Figure 89 Interaction between Skills and Development Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

## Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between skills and development breach and employee attributions will be reported. Figure 90 and Table 44 shows the moderation results. Employee proactivity moderates the relationship between skills and development breach and attributions about the supervisor, but does not moderate the relationships between skills and development breach and employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation.

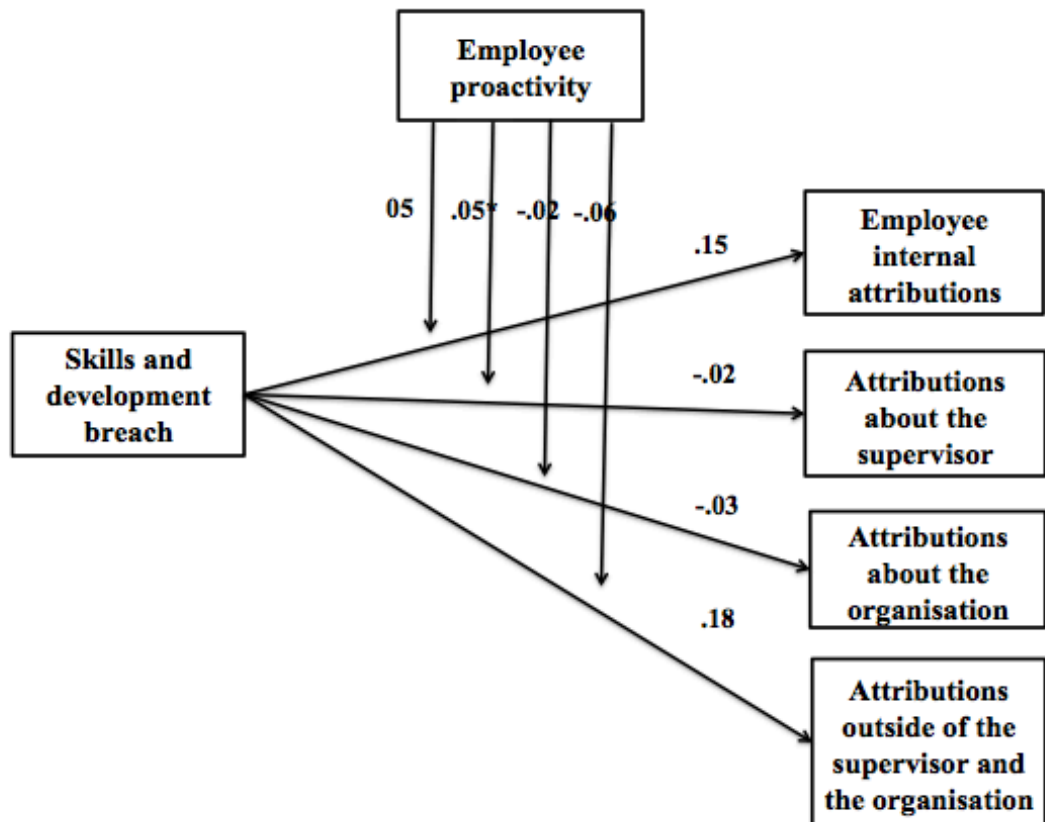


Figure 90 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except skills and development breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 44 Moderating Role of Employee Proactivity in the Relationship between Skills and Development Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Skills and development breach	$b = .27^*$	$b = .15$	$b = -.05$	$b = -.02$	$b = -.09$	$b = -.03$	$b = .15$	$b = .18$
Employee proactivity	$b = .01$	$b = .03$	$b = .08$	$b = .10^*$	$b = .11^*$	$b = .11^*$	$b = .08$	$b = .06$
Interaction term		$b = .05$		$b = .05^*$		$b = -.02$		$b = -.06$
$R^2$		0.06		0.02		0.02		0.12
$\Delta R^2$		0.01		0.01		0.00		0.01

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except skills and development breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the supervisor.** Employee proactivity moderates the relationships between skills and development breach and attributions about the supervisor ( $b = .05$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .02$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Plotting the interaction (Figure 91) shows that the relationship between skills and development breach and attributions about the supervisor is negative for less proactive employees but is positive for more proactive employees.

Simple slope analysis shows that the slopes for both low employee proactivity ( $-1$  SD,  $t = -.70$ ,  $ns.$ ) and high employee proactivity ( $+1$  SD,  $t = .30$ ,  $ns.$ ) are not significant. The region of significance shows that simple slopes are significant when the moderator is below  $-3.53$  or above  $4.38$ . Thus, the mean value of the moderator plus and minus four standard deviations could be used as the conditional values of the moderator because the value of  $-4$  SD is located in the region of significance. The mean score of the moderator is  $4.27$  and the standard deviation is  $1.07$ . The mean value minus four standard deviations equals  $-.01$ , which is over the minimum value of the moderator (i.e.,  $1$ ). Therefore, there is no significant relationship between skills and development breach and attributions about the supervisor regardless of whether employees are

proactive or not.

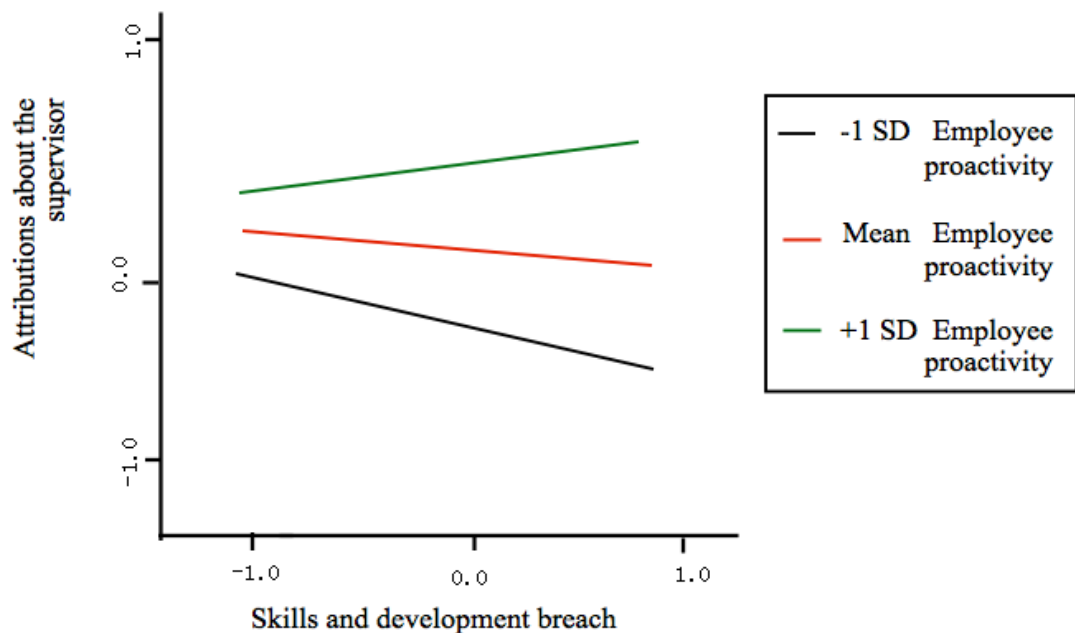


Figure 91 Interaction between Skills and Development Breach and Employee proactivity on Attributions about the Supervisor

In general, individualism/collectivism and employee proactivity moderate the relationship between skills and development breach and employee attributions partially. Compared with the moderating role of individualism/collectivism and employee proactivity in the relationship between psychological contract breach and employee attributions, the moderating role of individualism/collectivism and employee proactivity is not stronger in the relationship between the skills and development dimension of psychological contract breach and employee attributions.

## **Moderating Role of Individual Differences in the Relationship between Engagement and Representation Breach and Employee Attributions**

The moderating role of individual differences in the relationship between engagement and representation breach and employee attributions was tested in Mplus. Table 45

shows the overview of the interaction effects of individual differences. Individualism/collectivism moderate the relationships between engagement and representation breach and attributions about the organisation and attributions outside of the supervisor and the organisation. Employee proactivity moderates the relationship between engagement and representation breach and attributions about the supervisor. In the following sections, the interaction effects of each individual differences moderator will be reported.

Table 45 Moderating Role of Individual Differences in the Relationship between Engagement and Representation Breach and Employee Attributions

	<b>Employee internal attributions</b>	<b>Attributions about the supervisor</b>	<b>Attributions about the organisation</b>	<b>Attributions outside of the supervisor and the organisation</b>
Individualism /collectivism			X	X
Employee proactivity		X		

### **Individualism/collectivism**

In this section, the interaction effects of individualism/collectivism on the relationship between engagement and representation breach and employee attributions will be reported. Figure 92 and Table 46 shows the moderation results. Individualism/collectivism moderate the relationships between engagement and representation breach and attributions about the organisation and attributions outside of the supervisor and the organisation, but do not moderate the relationships between engagement and representation breach and employee internal attributions and attributions about the supervisor.



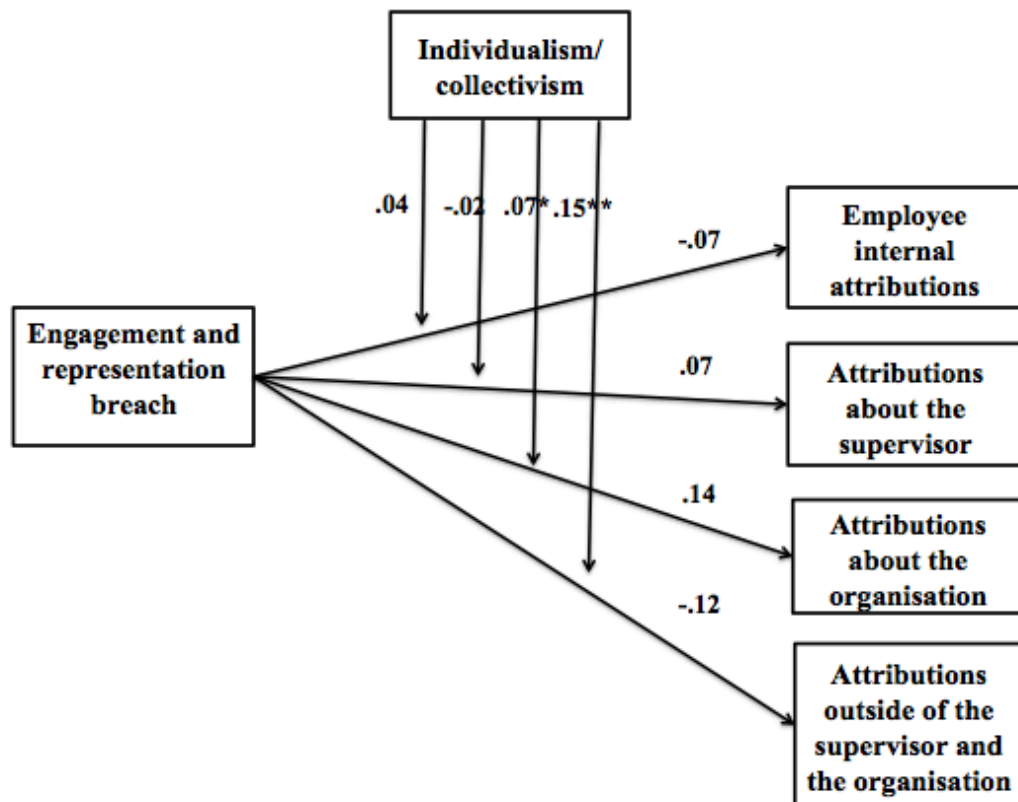


Figure 92 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except engagement and representation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 46 Moderating Role of Individualism/collectivism in the Relationship between Engagement and Representation Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Engagement and representation breach	$b = -.33^{**}$	$b = -.07$	$b = .13$	$b = .07$	$b = .29^{**}$	$b = .14$	$b = -.08$	$b = -.12$
Individualism /collectivism	$b = .36^{**}$	$b = .35^{**}$	$b = -.07$	$b = -.07$	$b = -.15$	$b = -.16$	$b = -.07$	$b = -.10$
Interaction term		$b = .04$		$b = -.02$		$b = .07^*$		$b = .15^{**}$
$R^2$		0.08		0.01		0.03		0.12
$\Delta R^2$		0.00		0.00		0.01		0.06

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except engagement and representation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the organisation.** Individualism/collectivism moderate the relationships between engagement and representation breach and attributions about the organisation ( $b = .07$ ,  $SE = .03$ ,  $p < .05$ ;  $R^2 = .03$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the organisation. Plotting the interaction (Figure 93) shows that the relationship between engagement and representation breach and attributions about the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slopes for low collectivism and high individualism ( $-1$  SD,  $t = .59$ , *ns.*) and for high collectivism and low individualism ( $+1$  SD,  $t = 1.77$ , *ns.*) are both non-significant. The region of significance shows that simple slopes are significant when the moderator is below  $-20.00$  or above  $1.45$ . Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of  $+2$  SD is located in the region of significance. The mean score of the moderator is  $3.71$  and the standard deviation is  $.67$ . The mean value plus two standard deviations equals  $5.05$ , which is over the maximum value of the moderator (i.e.,  $5$ ). Therefore, there is no significant relationship between engagement and representation breach and attributions about the organisation

regardless of when employees are individualistic or collectivistic.

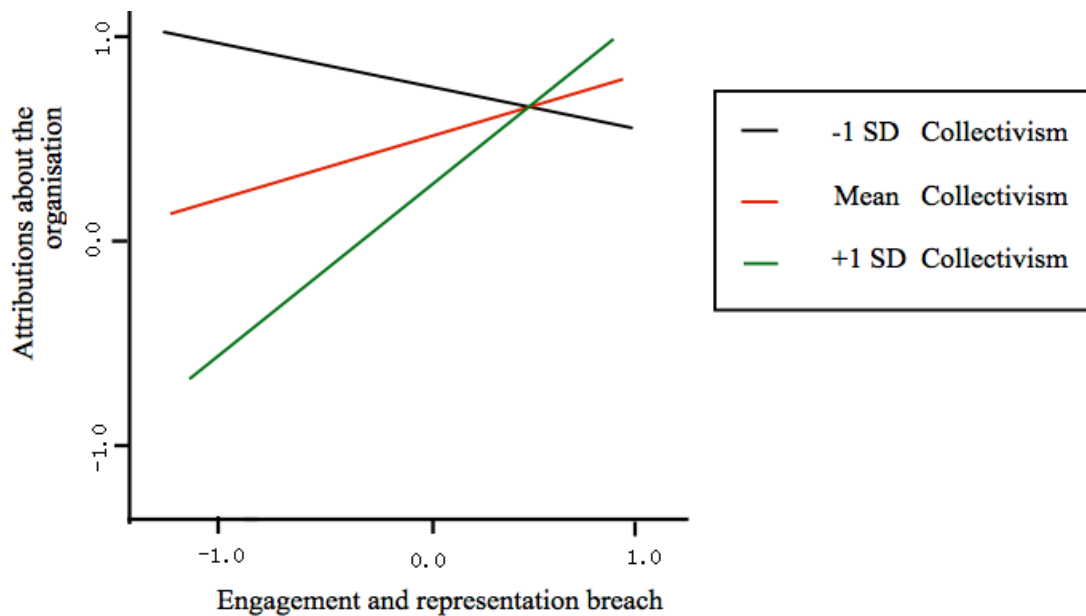


Figure 93 Interaction between Engagement and Representation Breach and Individualism/collectivism on Attributions about the Organisation

***Attributions outside of the supervisor and the organisation.***

Individualism/collectivism moderate the relationships between engagement and representation breach and attributions outside of the supervisor and the organisation ( $b = .15$ ,  $SE = .05$ ,  $p < .01$ ;  $R^2 = .12$ ,  $\Delta R^2 = .06$ ). The interaction term explains additional 6% of variance of attributions outside of the supervisor and the organisation. Plotting the interaction (Figure 94) shows that the relationship between engagement and representation breach and attributions outside of the supervisor and the organisation is negative for individualistic employees but is positive for collectivistic employees.

Simple slope analysis shows that the slope for low collectivism and high individualism (-1 SD,  $t = -2.58$ ,  $p < .05$ ) is significant, but for high collectivism and low individualism (+1 SD,  $t = .29$ ,  $ns.$ ) is not significant. Thus, when employees report individualism, the negative significant relationship between engagement and representation breach and attributions outside of the supervisor and the organisation is significant. But when employees report collectivism, there is no significant relationship between engagement and representation breach and attributions outside of the

supervisor and the organisation.

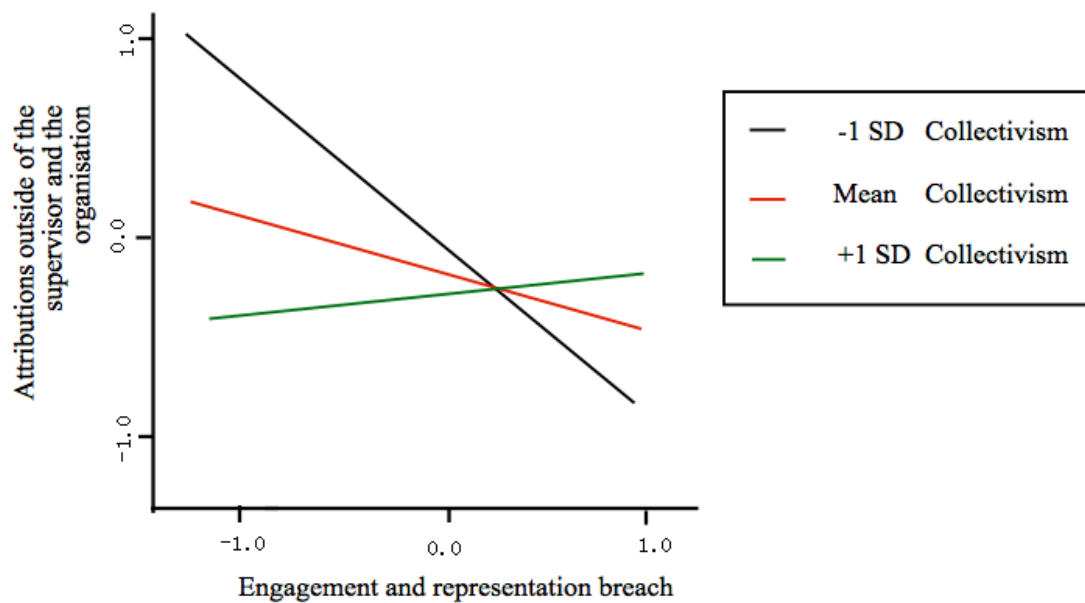


Figure 94 Interaction between Engagement and Representation Breach and Individualism/collectivism on Attributions outside of the Supervisor and the Organisation

## Employee Proactivity

In this section, the interaction effects of employee proactivity on the relationship between engagement and representation breach and employee attributions will be reported. Figure 95 and Table 47 shows the moderation results. Employee proactivity moderates the relationships between engagement and representation breach and attributions about the supervisor, but does not moderate the relationships between engagement and representation breach and employee internal attributions, attributions about the organisation and attributions outside of the supervisor and the organisation.

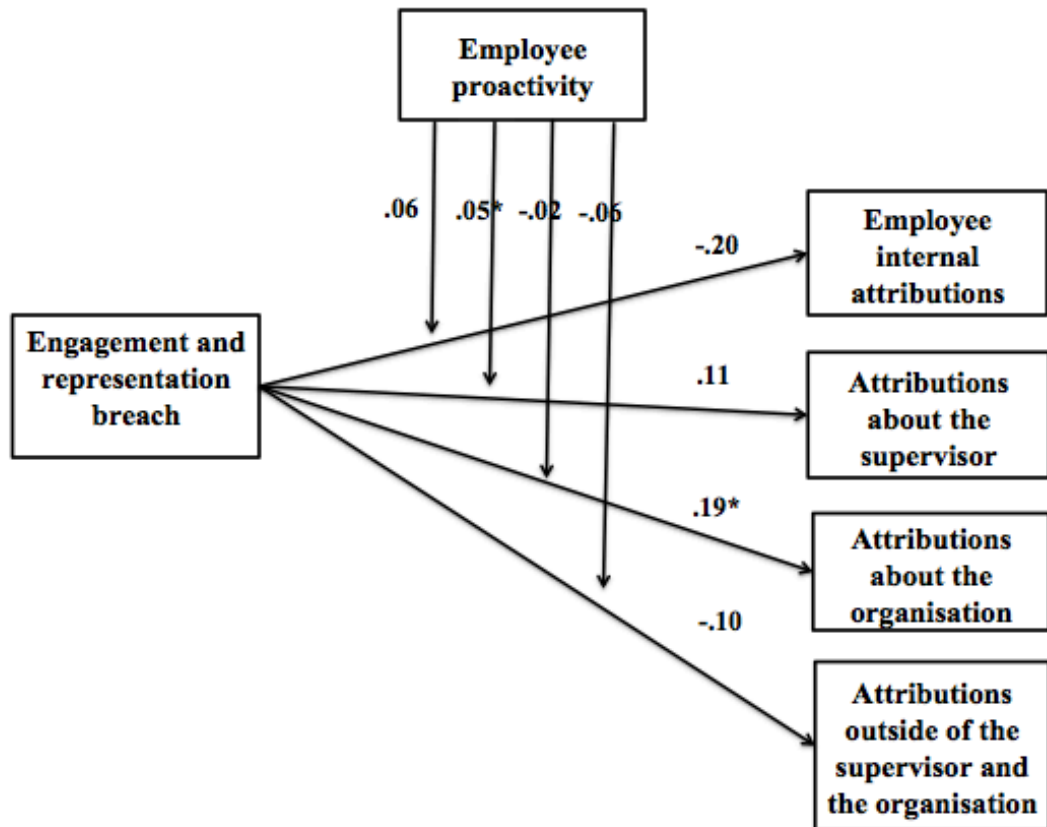


Figure 95 Specific Individual Differences Model

*Notes:* paths from five psychological contract breach dimensions except engagement and representation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

Table 47 Moderating Role of Employee Proactivity in the Relationship between Engagement and Representation Breach and Employee Attributions ( $N = 634$ )

	Employee internal attributions	Employee internal attributions	Attributions about the supervisor	Attributions about the supervisor	Attributions about the organisation	Attributions about the organisation	Attributions outside of the supervisor and the organisation	Attributions outside of the supervisor and the organisation
Engagement and representation breach	$b = -.33^{**}$	$b = -.20$	$b = .13$	$b = .11$	$b = .29^{**}$	$b = .19^*$	$b = -.08$	$b = -.10$
Employee proactivity	$b = .01$	$b = .03$	$b = .08$	$b = .10^*$	$b = .11^*$	$b = .11^*$	$b = .08$	$b = .06$
Interaction term		$b = .06$		$b = .05^*$		$b = -.02$		$b = -.06$
$R^2$		0.08		0.02		0.11		0.02
$\Delta R^2$		0.01		0.01		0.00		0.00

Notes:  $*p < .05$ ,  $**p < .01$ ; the paths from five psychological contract breach dimensions except engagement and representation breach to employee attributions, from five psychological contract breach dimensions to employee outcomes and from employee attributions to employee outcomes are not shown.

**Attributions about the supervisor.** Employee proactivity moderates the relationships between engagement and representation breach and attributions about the supervisor ( $b = .05$ ,  $SE = .02$ ,  $p < .05$ ;  $R^2 = .02$ ,  $\Delta R^2 = .01$ ). The interaction term explains an additional 1% of variance of attributions about the supervisor. Plotting the interaction (Figure 96) shows that the positive relationship between engagement and representation breach and attributions about the supervisor is weaker for less proactive employees but is stronger for more proactive employees.

Simple slope analysis shows that the slopes for both low employee proactivity ( $-1$  SD,  $t = .67$ , *ns.*) and high employee proactivity ( $+1$  SD,  $t = 1.79$ , *ns.*) are not significant. The region of significance shows that simple slopes are significant when the moderator is below  $-5.76$  or above  $1.32$ . Thus, the mean value of the moderator plus and minus two standard deviations could be used as the conditional values of the moderator because the value of  $+2$  SD is located in the region of significance. The mean score of the moderator is  $4.27$  and the standard deviation is  $1.07$ . The mean value plus two standard deviations equals  $6.41$ , which is over the maximum value of the moderator (i.e.,  $5$ ). Therefore, there is no significant relationship between engagement and representation breach and attributions about the supervisor regardless of whether employees are

proactive or not.

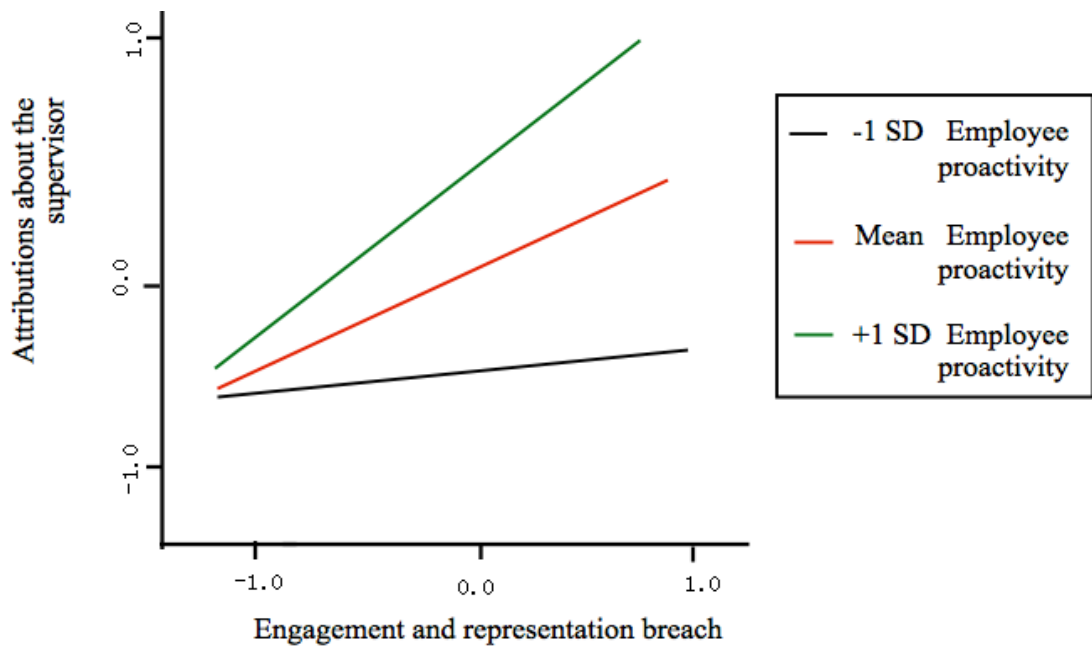


Figure 96 Interaction between Engagement and Representation Breach and Employee Proactivity on Attributions about the Supervisor

In general, individualism/collectivism and employee proactivity partially played a moderating role in the relationship between engagement and representation breach and employee attributions. Compared with the moderating role of individualism/collectivism and employee proactivity in the relationship between psychological contract breach and employee attributions, the moderating role of individualism/collectivism and employee proactivity did not change much in the relationship between the engagement and representation dimension of psychological contract breach and employee attributions.

## Appendix V Original Questionnaires

### Study 1

# A Survey of the Employee's Well-being and Attitudes

Conducted by  
Chen Guo  
Dr. David Holman  
Manchester Business School  
June 2013





## Introduction

### What is this survey about?

1. This survey forms part of a doctoral research project, examining employees' expectations about work and employment conditions they believe that organisation should provide.
1. Participation in the survey is voluntary but we need as many people as possible to take part in order to gain a representative view.

### Who will see your answers?

1. The information that you provide on this questionnaire will be kept completely confidential. None of your answers will be divulged to any person outside the Manchester Business School research team.
2. Any reports that we produce will be made available to all participants, but individuals will not be identifiable.

### How do you complete the questionnaire?

1. Please read each question carefully then answer giving your first reaction. Do not spend too much time on any one question - it's the overall pattern of your answers that we are interested in.
  1. Please do not omit any question. If you find a question that does not quite fit your circumstances, simply give the answer that is closest to your views.
- The usefulness of this survey depends on the frankness and honesty with which you answer the questions. There are no right or wrong answers - this is not a test.
  - Most of the questions simply require you to select and tick the appropriate box. However, there is room at the end of the survey for you to write any other comments you may have.

If you have any questions please contact:

Chen Guo, [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**Thank-you for your help!**

## A. Background Details

The first set of questions collects some background details about you.

*Please remember that all your responses will be confidential to the research team.*

1. Your Gender: Male ☐ Female ☐
2. Your Age: years \_\_\_\_\_
3. How long have you worked at this company? years \_\_\_\_\_ months \_\_\_\_\_
4. Are you: Full-time ☐ Part-time ☐
5. If part-time, how many hours do you work per week? hours \_\_\_\_\_
6. Please tick your highest qualification or its equivalent:

Middle School	<input type="checkbox"/>
High School	<input type="checkbox"/>
Secondary Specialised School	<input type="checkbox"/>
Junior College	<input type="checkbox"/>
Undergraduate	<input type="checkbox"/>
Postgraduate	<input type="checkbox"/>
No formal qualifications	<input type="checkbox"/>

## B. Attitudes about the Organisation

**As an employee, you are likely to have certain expectations about the work and employment conditions that should be provided by this organisation. The questions in this section are concerned with the extent to which those expectations have been met by this organisation.**

**To what extent has your organisation provided you with the following:**

	Not provided	Provided a little	Somewhat provided	Provided a lot	Completely provided
<b>Work organisation</b>					
1. Variety in my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A challenging job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. An interesting job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A safe working environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Resources to do the job well (e.g. software, equipment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Wages and payment system</b>					
6. Rewards based on your performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A competitive and fair salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Adequate health care benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Adequate retirement benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Adequate housing benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Security and flexibility</b>					
11. Flexible working hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The opportunity to balance work and family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. An opportunity to decide when I take my vacation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Not working too many hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Protection against being dismissed without good reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Opportunities to develop my career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Training to do the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Constructive feedback on my performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Career guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Engagement</b>					
21. Consultation about changes that may affect my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Opportunities to voice my ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Information on important changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Involvement in decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Recognition of my ideas for improving work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### C. Your Beliefs about the Organisation

**In this section, we would like you to think about the reasons why this organisation has not fulfilled its obligations to provide appropriate work and employment conditions. For example, you may think that the organisation has not fulfilled its obligations because of factors beyond the control of the organisation. Alternatively, you might think that the organisation has deliberately not fulfilled its obligations for some reason.**

**To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because:**

	Strongly disagree	Disagree a little	Neither agree nor disagree	Agree a little	Strongly agree
1. I needed to develop my skills and ability to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I needed to make more effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I was unlucky.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I should grasp the opportunity to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My supervisor <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My supervisor did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. My organisation <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Due to lack of facilities, my organisation could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My organisation did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My organisation tried but unforeseen events prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My organisation tried but the incorrect implementation of the organisation's policies prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Comments

**Do you have any further comments you would like to make?**

**THANK YOU VERY MUCH FOR PARTICIPATING!**

© Chen Guo, David Holman

## Study 2 Employee Questionnaire

# A Survey of the Employee's Well-being and Attitudes

Conducted by

Chen Guo

Dr. David Holman

Manchester Business School

March 2014

## Introduction

### What is this survey about?

- This survey forms part of a doctoral research project, examining employees' expectations about work and employment conditions they believe that organisation should provide.
- Participation in the survey is voluntary but we need as many people as possible to take part in order to gain a representative view.

### Who will see your answers?

- The information that you provide on this questionnaire will be kept completely confidential. None of your answers will be divulged to any person outside the Manchester Business School research team.
- Any reports that we produce will be made available to all participants, but individuals will not be identifiable.

### How do you complete the questionnaire?

- Please read each question carefully then answer giving your first reaction. Do not spend too much time on any one question - it's the overall pattern of your answers that we are interested in.
- Please do not omit any question. If you find a question that does not quite fit your circumstances, simply give the answer that is closest to your views.
- The usefulness of this survey depends on the frankness and honesty with which you answer the questions. There are no right or wrong answers - this is not a test.
- Most of the questions simply require you to select and tick the appropriate box. However, there is room at the end of the survey for you to write any other comments you may have.

If you have any questions please contact:

Chen Guo, [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**Thank-you for your help!**

## A. Background Details

The first set of questions collects some background details about you.

*Please remember that all your responses will be confidential  
to the research team.*

1. Your Employee ID No.: \_\_\_\_\_
2. Your Gender: Male ☐ Female ☐
3. Your Age: \_\_\_\_\_ years \_\_\_\_\_
4. How long have you worked at this company? years \_\_\_\_\_ months \_\_\_\_\_
5. Are you: Full-time ☐ Part-time ☐
6. If part-time, how many hours do you work per week? hours \_\_\_\_\_
7. Please tick your highest qualification or its equivalent:

Middle School	<input type="checkbox"/>
High School	<input type="checkbox"/>
Secondary Specialised School	<input type="checkbox"/>
Junior College	<input type="checkbox"/>
Undergraduate	<input type="checkbox"/>
Postgraduate	<input type="checkbox"/>
No formal qualifications	<input type="checkbox"/>



## B. Attitudes about the Organisation

**As an employee, you are likely to have certain expectations about the work and employment conditions that should be provided by this organisation. The questions in this section are concerned with the extent to which those expectations have been met by this organisation.**

To what extent has your organisation provided you with the following:

	Not provided	Provided a little	Somewhat provided	Provided a lot	Completely provided
<b>Work organisation</b>					
1. Variety in my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A challenging job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. An interesting job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A job in which I can make decisions by myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Opportunities to show what I can do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Wages and payment system</b>					
6. Adequate health care benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Adequate retirement benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Adequate housing benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Attractive pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Financial rewards for exceptional performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Security and flexibility</b>					
11. The opportunity to balance work and family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Protection against being dismissed without good reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. An opportunity to decide when I take my vacation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Respect for my personal and family circumstances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. A relatively secure job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Skills and development</b>					
16. Opportunities to develop my skills and knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Opportunities to develop my career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Constructive feedback on my performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Opportunities for promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Opportunities to grow and develop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Engagement and representation</b>					
21. Consultation about changes that may affect my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Opportunities to voice my ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Information on important changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Good communication among colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Good communication with my team leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## C. Your Beliefs about the Organisation

**In this section, we would like you to think about the reasons why this organisation has not fulfilled its obligations to provide appropriate work and employment conditions. For example, you may think that the organisation has not fulfilled its obligations because of factors beyond the control of the organisation. Alternatively, you might think that the organisation has deliberately not fulfilled its obligations for some reasons.**

**To what extent do you agree that your expectations about work and employment conditions have not been fulfilled because:**

	Strongly disagree	Disagree a little	Neither agree nor disagree	Agree a little	Strongly agree
1. I needed to develop my skills and ability to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I needed to make more effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I should speak out my expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I should grasp the opportunity to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. My supervisor <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Due to a lack of leadership skills, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Due to a lack of effective leadership, my supervisor could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. My supervisor did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My organisation <u>would</u> not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My organisation did not fulfil them deliberately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Due to lack of facilities, my organisation could not fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. My organisation did not make the effort to fulfil them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. My supervisor tried but unforeseen events prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My organisation tried but unforeseen events prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. My supervisor tried but circumstances beyond the organisation's control prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. My supervisor tried but the economic environment prevented him/her from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. My organisation tried but the economic environment prevented it from fulfilling them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### D. How You Feel about Your Job

These questions concern how you feel at work.

Thinking about yourself and how you normally feel at work, to what extent do you generally feel:

	Never	Occasion -ally	Some of the time	Most of the time	Always
1. Active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Enthusiastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Determined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Attentive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Inspired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Strong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Interested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Alert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Proud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## E. Your Team Leader's Behaviours

**These questions concern about how your team leader performs from your own perspective.**

**How frequent your team leader performs each of the following behaviours:**

	Never	Occasio- nally	Some of the time	Most of the time	Always
<b>Leading by example</b>					
1. Sets high standards for performance by his/her own behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Works as hard as he/she can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Works as hard as anyone in my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Sets a good example by the way he/she behaves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Leads by example	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Participative decision-making</b>					
6. Encourages work group members to express ideas/suggestions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Listens to my work group's ideas and suggestions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Uses my work group's suggestions to make decisions that affect us	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Gives all work group members a chance to voice their opinions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Makes decisions that are based only on his/her ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Coaching</b>					
11. Encourages work group members to solve problems together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Encourages work group members to exchange information with one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Teaches work group members how to solve problems on their own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Helps my work group focus on our goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Helps develop good relations among work group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Informing</b>					
16. Explains company decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Explains company goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Explains how my work group fits into the company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Explains the purpose of the company's policies to my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Explains his/her decisions and actions to my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Showing concern/interacting with the team</b>					
21. Shows concern for work group members' well-being	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Treats work group members as equals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Gives work group members honest and fair answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Knows what work is being done in my work group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Finds time to chat with work group members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## F. Your Beliefs

These questions concern your beliefs on what is acceptable and important.

To what extent do you agree with the following statements:

	Strongly disagree	Disagree a little	Neither agree nor disagree	Agree a little	Strongly agree
1. An employee should accept the group's decision even when personally he or she has a different opinion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Problem solving by groups gives better results than problem solving by individuals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The needs of people close to me should take priority over my personal needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. In society, people are born into extended families or clans who protect them in shared necessity for loyalty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## G. Your Personality

**Some individuals tend to change things at work in order to accomplish their goals, like they may develop their skills, identify new ideas for improving work processes, and seek to better understand organisation politics. The questions in this section concern about your tendency to identify opportunities to change things at work.**

**To what extent do you agree with the following:**

[illegible]

## Comments

**Do you have any further comments you would like to make?**

**THANK YOU VERY MUCH FOR PARTICIPATING!**

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## Study 2 Supervisor Questionnaire

# A Survey of the Employee's Well-being and Attitudes

Conducted by

Chen Guo

Dr. David Holman

Manchester Business School

March 2014



## Introduction

### What is this survey about?

- This survey forms part of a doctoral research project, examining employees' expectations about work and employment conditions they believe that organisation should provide.
- Participation in the survey is voluntary but we need as many people as possible to take part in order to gain a representative view.

### Who will see your answers?

- The information that you provide on this questionnaire will be kept completely confidential. None of your answers will be divulged to any person outside the Manchester Business School research team.
- Any reports that we produce will be made available to all participants, but individuals will not be identifiable.

### How do you complete the questionnaire?

- Please read each question carefully then answer giving your first reaction. Do not spend too much time on any one question - it's the overall pattern of your answers that we are interested in.
- Please do not omit any question. If you find a question that does not quite fit your circumstances, simply give the answer that is closest to your views.
- The usefulness of this survey depends on the frankness and honesty with which you answer the questions. There are no right or wrong answers - this is not a test.
- Most of the questions simply require you to select and tick the appropriate box. However, there is room at the end of the survey for you to write any other comments you may have.

If you have any questions please contact:

Chen Guo, [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**Thank-you for your help!**

## A. Background Details

The first set of questions collects some background details about you.

*Please remember that all your responses will be confidential  
to the research team.*

1. Your Employee ID No.: \_\_\_\_\_
2. Your Gender: Male ☐ Female ☐
3. Your Age: \_\_\_\_\_ years \_\_\_\_\_
4. How long have you worked at this company? years \_\_\_\_\_ months \_\_\_\_\_
5. Are you: Full-time ☐ Part-time ☐
6. If part-time, how many hours do you work per week? hours \_\_\_\_\_
7. Please tick your highest qualification or its equivalent:

Middle School	<input type="checkbox"/>
High School	<input type="checkbox"/>
Secondary Specialised School	<input type="checkbox"/>
Junior College	<input type="checkbox"/>
Undergraduate	<input type="checkbox"/>
Postgraduate	<input type="checkbox"/>
No formal qualifications	<input type="checkbox"/>

## Attitudes of Employees' Performance

As a supervisor, you are likely to have certain expectations about each employee's performance of your team. The questions in this section are concerned with the extent to which those expectations have been met by each employee.

1. Write the names of employees in the spaces above A to J.
2. Then answer the following questions for each employee of your team: please fill in a score for each person and each question.
3. Please rate the person according to each question on a level of 1-7:

1	2	3	4	5	6	7
Strongly disagree	Disagree a lot	Disagree a little	Neither agree nor disagree	Agree a little	Agree a lot	Strongly agree

1. An example of how to do this is shown on the next page.

**To what extent do you agree with the following:**

	<i>Chen Guo (Example)</i>
1. This employee performs tasks that are expected of him/her.	4
2. This employee meets formal performance requirements of the job.	4
3. This employee demonstrates expertise in all job-related tasks.	3
4. This employee performs well in the overall job by carrying out tasks as expected.	2
5. This employee plans and organises to achieve objectives of the job and meet deadlines.	1
6. This employee helps others who have been absent.	4
7. This employee assists me with my work (when not asked).	3
8. This employee goes out of way to help new employees.	2
9. This employee takes a personal interest in other employees.	2
10. This employee passes along information to co-workers.	2
11. This employee conserves and protects organisational property.	5
12. This employee does not take underserved work breaks.	4
13. This employee does not spend great deal of time with personal phone conversations.	4
14. This employee performs tasks that are expected of him/her.	4
15. This employee meets formal performance requirements of the job.	2
16. This employee demonstrates expertise in all job-related tasks.	2
17. This employee performs well in the overall job by carrying out tasks as expected.	3

## Comments

**Do you have any further comments you would like to make?**

**THANK YOU VERY MUCH FOR PARTICIPATING!**

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## Appendix VI Translated Questionnaires

### Study 1

# 员工的幸福与心态 调查问卷

调研者

郭 晨

大卫•霍尔曼 博士

曼彻斯特商学院

二〇一三年六月



## 引言

### 该问卷调查什么？

- 作为博士科研项目的一个组成部分，该问卷旨在调查员工对企业应提供的工作和雇用条件的期望。
- 该问卷的参与者是自愿的，但我们需要尽可能多的参与者，以获得有代表性的观点。

### 谁将看到您的回答？

2. 您在该问卷上所填写的信息将受到绝对保密，绝不会泄露给该课题组以外的任何人。
3. 调查结束后，我们撰写的研究报告将供参与者阅览，但报告中绝不会提及任何个人。

### 您应如何完成该问卷？

2. 请仔细阅读每一个问题，然后根据您的第一反应作出回答。我们关注的是您的整体回答，因此请不要在任何一个问题上花费过多的时间。
3. 请不要遗漏任何一个问题。如果您发现某一个问题的回答并不十分符合您自身的情况，那么只用给出与您的观点最为接近的回答即可。
4. 该问卷的有效性取决于您回答问题时的坦白与诚实。这不是一场测试，因此回答没有对错之分。
5. 多数问题只需要您做出选择并在相应的方框内打钩。同时，该问卷的末尾处为您提供书写任何其它建议的空间。

如果您有任何问题请联系：

郭 晨 [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**感谢您的帮助！**

## 第一部分 相关背景

该部分旨在统计您的相关背景资料。

请记住您的所有回答将受到该课题组的绝对保密。

1. 您的性别: 男 ☐ 女 ☐
2. 您的年龄: \_\_\_\_\_ 岁
3. 您在该企业工作了多长时间? \_\_\_\_\_ 年 \_\_\_\_\_ 月
4. 您是 全职 ☐ 兼职 ☐
5. 如果是兼职, 您每周工作多少小时? \_\_\_\_\_ 小时
6. 请勾出您的最高学历:  

初中	<input type="checkbox"/>
高中	<input type="checkbox"/>
中专	<input type="checkbox"/>
大专	<input type="checkbox"/>
本科	<input type="checkbox"/>
研究生	<input type="checkbox"/>
无正式学历	<input type="checkbox"/>



## 第二部分 对企业的看法

作为一名员工，您或许对企业应提供的工作和雇用条件有一定的期望。该部分旨在调查那些期望在多大程度上得到了满足。

在多大程度上您的企业为您提供了：

	未提供	提供了一点	提供了一部分	提供了许多	完全提供
<b>工作构架</b>					
1. 多样性的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 有挑战性的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 让人感兴趣的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 安全的工作环境	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 做好工作所需的资源（例如：软件、设备）	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>薪酬体系</b>					
6. 根据绩效而定的薪水	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 有竞争性且公平的薪水	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 充足的医疗补助金	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 充足的退休金	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 充足的住房补贴	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>安稳性与灵活性</b>					
11. 灵活的工作时长	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 平衡工作与家庭过生活的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 自己决定何时休假的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 工作时间不过多	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 防止被无故开除的保护	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>技能与发展</b>					
16. 增强我的技能与学识的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 发展我的事业的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 工作培训	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 对我绩效的建设性反馈	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 职业规划指导	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>雇佣</b>					
21. 做出可能会影响到我的工作的调整时询问我	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 表达想法的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 企业做出重大调整时通知我	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 参与决策的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 对我的想法的赏识	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 第三部分 对企业的信念

在该部分,我们希望您能思考企业未能履行它的职责为您提供合适的工作与聘用条件的原因。例如,您或许认为是企业不可控制的因素导致了您的期望未得到实现,或者您可能认为是出于某些原因企业故意不履行它的职责。

在多大程度上您同意您对工作与雇用条件的期望未能得到满足,原因是:

	非常 不同意	不同 意	既不 同意 也不 反对	同意	非常 同意
1. 我需要提升自身的技能去实现我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 我需要付出更多的努力去实现我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 我运气不佳	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 我应该把握住实现期望的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 我的组长不想满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 我的组长由于缺乏领导才干而无法满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 我的组长没有付出相应的努力去满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 企业不想满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 企业由于缺乏设备而无法满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 企业没有付出相应的努力去满足我的期望	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 我的组长试着满足我的期望但由于未预见的事件以致未能满足	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 企业试着满足我的期望但由于未预见的事件以致未能满足	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 企业试着满足我的期望但由于企业不可控的外部环境以致未能满足	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 企业试着满足我的期望但由于企业政策的不正确实施以致未能满足	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 建议或意见

请问您有任何其它的建议或是意见吗？

**非常感谢您的参与！**

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## Study 2 Employee Questionnaire

# 员工的幸福与心态 调查问卷

调研者

郭 晨

大卫·霍尔曼 博士

曼彻斯特商学院

二〇一四年三月



## 引言

### 该问卷调查什么？

- 作为博士科研项目的一个组成部分，该问卷旨在调查员工对企业应提供的工作和雇用条件的期望。
- 该问卷的参与者是自愿的，但我们需要尽可能多的参与者，以获得有代表性的观点。

### 谁将看到您的回答？

4. 您在该问卷上所填写的信息将受到绝对保密，绝不会泄露给该课题组以外的任何人。
5. 调查结束后，我们撰写的研究报告将供参与者阅览，但报告中绝不会提及任何个人。

### 您应如何完成该问卷？

6. 请仔细阅读每一个问题，然后根据您的第一反应作出回答。我们关注的是您的整体回答，因此请不要在任何一个问题上花费过多的时间。
7. 请不要遗漏任何一个问题。如果您发现某一个问题的回答并不十分符合您自身的情况，那么只用给出与您的观点最为接近的回答即可。
8. 该问卷的有效性取决于您回答问题时的坦白与诚实。这不是一场测试，因此回答没有对错之分。
9. 多数问题只需要您做出选择并在相应的方框内打钩。同时，该问卷的末尾处为您提供书写任何其它建议的空间。

如果您有任何问题请联系：

郭 晨 [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**感谢您的帮助！**

## 第一部分 相关背景

该部分旨在统计您的相关背景资料。

请记住您的所有回答将受到该课题组的绝对保密。

1. 您的员工号: \_\_\_\_\_
2. 您的性别: 男 ☐ 女 ☐
3. 您的年龄: \_\_\_\_\_ 岁
4. 您在该企业工作了多长时间? \_\_\_\_\_ 年 \_\_\_\_\_ 月
5. 您是 全职 ☐ 兼职 ☐
6. 如果是兼职, 您每周工作多少小时? \_\_\_\_\_ 小时
7. 请勾出您的最高学历:  

初中	<input type="checkbox"/>
高中	<input type="checkbox"/>
中专	<input type="checkbox"/>
大专	<input type="checkbox"/>
本科	<input type="checkbox"/>
研究生	<input type="checkbox"/>
无正式学历	<input type="checkbox"/>

## 第二部分 对企业的看法

作为一名员工，您或许对企业应提供的工作和雇用条件有一定的期望。该部分旨在调查那些期望在多大程度上得到了满足。

在多大程度上您的企业为您提供了：

	未提供	提供了一点	提供了一部分	提供了许多	完全提供
<b>工作构架</b>					
1. 多样性的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 有挑战性的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 让人感兴趣的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 我可以自己做决定的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 展示我能做什么的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>薪酬体系</b>					
6. 充足的医疗补助金	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 充足的退休金	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 充足的住房补贴	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 有吸引力的薪水	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 针对突出绩效的金钱奖励	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>安稳性与灵活性</b>					
11. 平衡工作与家庭生活的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 防止被无故开除的保护	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 自己决定何时休假的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 对我个人和家庭情况的尊重	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 相对有保障的工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>技能与发展</b>					
16. 增强我的技能与学识的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 发展我的事业的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 对我绩效的建设性反馈	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 升职的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 成长和发展的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>雇佣</b>					
21. 做出可能会影响到我的工作的调整时询问我	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 表达想法的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 企业做出重大调整时通知我	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 同事之间良好的沟通	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 与上司之间良好的沟通	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 第三部分 对企业的信念

在该部分,我们希望您能思考企业未能履行它的职责为您提供合适的工作与聘用条件的原因。例如,您或许认为是企业不可控制的因素导致了您的期望未得到实现,或者您可能认为是出于某些原因企业故意不履行它的职责。

在多大程度上您同意您对工作与雇用条件的期望未能得到实现,原因是:

	非常不同意	不同意	既不同意也不反对	同意	非常同意
1. 我需要提升自身的技能去实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 我需要付出更多的努力去实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 我应该毫无保留地说出我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 我应该把握住实现期望的机会。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 上司不想实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 由于管理技能不足,上司无法实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 由于缺乏有效的领导力,上司无法实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 上司没有付出相应的努力去实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 企业不想实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 企业故意不实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 由于设备不足,企业无法实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 企业没有付出相应的努力去实现我的期望。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 上司试着实现我的期望但被未预见的事件阻止了。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 企业试着实现我的期望但被未预见的事件阻止了。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 上司试着实现我的期望但被企业不可控的外部环境阻止了。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. 上司试着实现我的期望但被经济环境阻止了。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 企业试着实现我的期望但被经济环境阻止了。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



第四部分 您的工作情绪

以下问题旨在调查工作中您的情绪。

请回顾您平时在工作中的情绪，通常在多大程度上您感到：

	从未	偶尔	经常	大 多 数 时 候	一 直
1. 积极的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 热情的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 有决心的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 留意的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 受鼓舞的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 坚强的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 感兴趣的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 警觉的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 兴奋的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 自豪的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 第五部分 您上司的行为

该部分旨在调查您如何看待您上司的表现。

您的上司做出以下行为的频率是：

	从未	偶尔	经常	大多数时候	一直
<b>以身作则</b>					
1. 通过他/她自身的行为来设定高绩效标准	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 尽他/她所能的努力工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 同团队中的任何人一样努力工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 通过他/她自身的行为来树立榜样	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 以身作则	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>参与决策</b>					
6. 鼓励团队成员表达想法/建议	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 倾听团队的想法和建议	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 做会影响到我们的决定时采纳团队的建议	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 给所有团队成员表达想法的机会	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 仅根据他/她的想法做决定	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>辅导</b>					
11. 鼓励团队成员一同解决问题	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 鼓励团队成员之间相互交流信息	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 教团队成员如何自己解决问题	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 帮助团队锁定目标	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 帮助发展团队成员间的良好关系	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>通知</b>					
16. 解释公司的决定	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 解释公司的目标	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 解释我所在的团队是如何与公司融为一体的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 向团队解释公司各项政策的目的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 向团队解释他/她的决定和行动	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>向团队表示关心/互动</b>					
21. 对团队成员的幸福表示关心	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 平等对待团队成员	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 给团队成员诚实、公平的答案	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 知道团队正在做哪些工作	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 找时间与团队成员聊天	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 第六部分 您的信念

以下问题旨在调查在您看来什么是可接受的、重要的。

在多大程度上您同意以下表达：

	非常不同意	不同意	既不同意也不反对	同意	非常同意
1. 员工应该接受团队的决定，即使他/她有自己的不同意见。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 比起独自解决问题，集体解决会产生更好的结果。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 比起我的个人需求，应该优先考虑我身边人的需求。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 在社会上，人生来处于大家庭或集体中，并在忠诚共享的基础上受到大家庭和集体的保护。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 第七部分 您的性格

有一些人倾向于调整工作情形以便实现他们的目标，例如他们或许会提升他们的技能，找到改善工作流程的新思路，以及寻求对企业政策更好的理解。该部分的问题旨在调查您对于找机会调整工作情形的倾向性。

在多大程度上您同意以下表达：

	非常不同意	很不同意	不同意	既不同意也不反对	同意	很同意	非常同意
1. 如果我看到我不喜欢的东西，我会去改变它。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 如果是我坚信的事我就会做到，无论几率有多大。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 我喜欢做我的主意的捍卫者，甚至不顾他人的反对。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 我一直在找寻处理事情更好的方法。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 如果我坚信一个想法，没有任何障碍能阻止我实现它。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. 我擅长找出机遇。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 建议或意见

请问您有任何其它的建议或是意见吗？

**非常感谢您的参与！**

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## Study 2 Supervisor Questionnaire

### 员工的幸福与心态 调查问卷

调研者

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二〇一四年三月



## 引言

### 该问卷调查什么？

- 作为博士科研项目的一个组成部分，该问卷旨在调查员工对企业应提供的工作和雇用条件的期望。
- 该问卷的参与者是自愿的，但我们需要尽可能多的参与者，以获得有代表性的观点。

### 谁将看到您的回答？

6. 您在该问卷上所填写的信息将受到绝对保密，绝不会泄露给该课题组以外的任何人。
7. 调查结束后，我们撰写的研究报告将供参与者阅览，但报告中绝不会提及任何个人。

### 您应如何完成该问卷？

10. 请仔细阅读每一个问题，然后根据您的第一反应作出回答。我们关注的是您的整体回答，因此请不要在任何一个问题上花费过多的时间。
11. 请不要遗漏任何一个问题。如果您发现某一个问题的回答并不十分符合您自身的情况，那么只用给出与您的观点最为接近的回答即可。
12. 该问卷的有效性取决于您回答问题时的坦白与诚实。这不是一场测试，因此回答没有对错之分。
13. 多数问题只需要您做出选择并在相应的方框内打钩。同时，该问卷的末尾处为您提供书写任何其它建议的空间。

如果您有任何问题请联系：

郭 晨 [chen.guo@postgrad.mbs.ac.uk](mailto:chen.guo@postgrad.mbs.ac.uk)

**感谢您的帮助！**

## 第一部分 相关背景

该部分旨在统计您的相关背景资料。

请记住您的所有回答将受到该课题组的绝对保密。

1. 您的员工号: \_\_\_\_\_
2. 您的性别: 男 ☐ 女 ☐
3. 您的年龄: \_\_\_\_\_ 岁
4. 您在该企业工作了多长时间? \_\_\_\_\_ 年 \_\_\_\_\_ 月
5. 您是 全职 ☐ 兼职 ☐
6. 如果是兼职, 您每周工作多少小时? \_\_\_\_\_ 小时
7. 请勾出您的最高学历:  

初中	<input type="checkbox"/>
高中	<input type="checkbox"/>
中专	<input type="checkbox"/>
大专	<input type="checkbox"/>
本科	<input type="checkbox"/>
研究生	<input type="checkbox"/>
无正式学历	<input type="checkbox"/>

### 第三部分 对您的员工的绩效的看法

作为一位管理者，您或许对您小组内的每一位员工的绩效都有一定的期望。该部分旨在调查您小组内的每一位员工在多大程度上满足了那些期望。

- 请将您的员工的名字填入下表 A 至 J 上方的空白处。
- 接着请分别针对您的每一位员工做出相应回答，即请根据每一个问题为每一位员工打分。
- 请用下面的 1-7 分标准进行打分。

1	2	3	4	5	6	7
非常不同意	很不同意	不同意	既不同意也不反对	同意	很同意	非常同意

- 下表中给出了一个如何填写的例子。

在多大程度上您同意以下表达：

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	(例子)
1. 该员工充分完成了分配给他（她）的任务	5
2. 该员工达到了工作对他（她）绩效上的要求	4
3. 该员工在所有与工作相关的任务中都展现出了他（她）的专业性	3
4. 该员工完成了交给他（她）的任务，因而总的来说表现优秀	2
5. 该员工对工作目标的达成和完成任务的按时有规划	1
6. 该员工帮助那些缺勤的同事	1
7. 该在未被要求时）该员工帮助我完成我的工作	4
8. 该员工不辞辛劳地去帮助新同事	4
9. 该员工关注其他员工	2
10. 该员工向同事传递信息	3
11. 该员工爱惜企业财产	2
12. 该员工不开展影响工作的休息	5
13. 该员工不花大量时间打私人电话	3



## 建议或意见

请问您有任何其它的建议或是意见吗？

**非常感谢您的参与！**

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