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Lishan Su
Iowa State University

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Understanding psychological contract breach in the customer-firm relationship

by

Lishan Su

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Russell N. Laczniak, Major Professor
Kevin Blankenship
Terry Childers
Frederick Lorenz
Sekar Raju

Iowa State University

Ames, Iowa

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ABSTRACT

Because of great variation in service performance, service providers cannot avoid situations of service failures, in which customers feel that their consumption goals for services have not been achieved. Information about service attributes obtained through personal selling or online customer reviews may create different levels of psychological contract in customers' minds and result in various customer reactions to service failure. This dissertation explores antecedents, consequences and the psychological process of psychological contract breach through role-playing activities using scenarios in three field experiments. Study 1 explored the role of psychological contract breach on the evolution of customers' feelings of betrayal, anger and evaluation of partner quality. Results of a 2 (high vs. low psychological contract) × 2 (high vs. low service failure) between-subject factorial experiment indicated that psychological contract breach mediated the effect of psychological contract and service failure on feelings of betrayal and anger; participants in the condition of high psychological contract and high service failure reported higher levels of psychological contract breach than did those in the other three conditions; psychological contract breach raised feelings of betrayal and anger and reduced customers' evaluation of the service providers' partner quality. Study 2a suggested that source-of-fault information (source of the mistake directly related to the failure) was one situational antecedent of psychological contract breach. Results of a 2 (high vs. low psychological contract) × 2 (customer fault vs. provider fault) between-subject factorial experiment suggested that participants in the condition of high psychological contract and the provider fault reported higher levels of breach than did those in the other three conditions. Study 2b suggested that social obligation bias was a personal antecedent of psychological contract breach. Results of a 2 (customer fault vs. provider fault) × 2 (self-obligation focus vs. others-obligation focus)

between-subject factorial experiment indicated that participants in the condition of provider fault and others-obligation focus attributed more controllability to the service provider than did those in the other three conditions; attribution of controllability positively influenced psychological contract breach and mediated the influence of source of fault on psychological contract breach. Study 3 explored a situational factor, compensation relevance (i.e., compensation that is relevant to the consumption goal and promotes a perception of fairness), and a personal factor, justice salience (customers' accessibility to their beliefs in a just world), which could influence recovery from negative outcomes brought about by psychological contract breach. Results of a 2 (high vs. relevant compensation) $\times$ 2 (high vs. low justice salience) between-subject factorial experiment indicated that participants in the condition of high relevant compensation and low justice salience perceived higher levels of fairness than did those in the other three conditions; perception of fairness reduced levels of feelings of betrayal and anger and raised evaluation of partner quality; and perception of fairness mediated the interaction effect of compensation relevance and justice salience on feelings of betrayal, anger and partner quality.

Key words: psychological contract breach, attribution, social obligation, feelings of betrayal, anger

CHAPTER 1

INTRODUCTION

The relationship paradigm has received considerable attention from both marketing academics and practitioners in the past several decades. Berry (1983) first defined relationship marketing as "attracting, maintaining, and enhancing customer relationships." Gronroos (1990) indicated that relationship building and maintaining is accomplished through mutual exchanges and fulfillment of promises. The exchange relationship connects a customer's needs and wants with a business' resources and offerings, which is "the fundamental phenomenon to be explained, predicted, and controlled in the dynamics of the marketplace" (Johnson and Selnes 2004, p2). Through mutual exchange, a profit is obtained and the objectives of the parties involved are met (Gronroos 1990). At the most basic level, an exchange relationship occurs when a customer has paid for and received the product (Johnson and Selnes 2004); this process was called a transactional exchange relationship (Cropanzano, R., & Mitchell, M. S. 2005). As relationships develop, the customer and the firm start to "collaborate, share information, socialize, integrate or link activities, and even commit future resources to the relationships" (Johnson and Selnes 2004, p2), and the relational exchange relationship is improved. High quality relationships increase the effectiveness of business activities to achieve economic value (Johnson and Selnes 2004).

Recently, the relationship paradigm has emerged as an explanation for the effects of service failure and recovery on relationship building. Researchers indicated that when customers have high-quality relationships with providers, customers' perception of unfairness, transgressions, or a violation of relational norms will result in unusually strong feelings of betrayal (Gregoire et al 2009) and anger (Gregoire et al 2010), damage their evaluation of the

firm (Wan et al. 2011), and attenuate the strength of the customer-firm relationship (Aaker et al 2004). However, these studies focused on a "love becomes hate" effect. Few, if any, of them paid close attention to those customers who have very basic transactional relationships with the firms.

The cost of customer acquisition is even higher than that of customer retention (Winer 2001), and retention of newly acquired customers is crucial. In some situations, customers who have relatively shallow relationships to firms may also feel betrayed after service failures and react very negatively to service providers. For example, a new customer may perceive a discrepancy between what the firm has promised and what s/he actually receives in a transactional relationship. This discrepancy is referred to as psychological contract breach (PCB) in the organizational behavior literature (Morrison and Robinson 1997). Psychological contract breach, which is associated with unfulfilled obligations in a mutual exchange, can cause negative emotional reactions such as feelings of betrayal, anger and frustration; these in turn can lead can lead to retaliatory behaviors such as venting, revenge, and ending of relationships (Morrison and Robinson 1997).

One study of relationship norms in service failure has tested negative outcomes of service failure related to different types of promises (implicit vs. explicit) (Wan et al. 2011). However, this study did not explain why the service provider's actual breach of explicit promise resulted in more negative outcomes than that of implicit promises. One reason could be that individuals' perception of psychological contract breach increases as the level of explicitness of promises increases (Morrison and Robbison 2000). No studies have explored customers' perception of psychological contract breach as a construct; therefore, questions of the antecedents and psychological process of psychological contract breach remain unanswered in the marketing

literature. Moreover, it has not been determined how a firm may recover from a perceived breach. This dissertation intends to address these questions by establishing a basic model of the construct psychological contract breach, systematically exploring its antecedents and consequences and seeking effective strategies to allow a firm to recover from its negative outcomes.

Study 1 of this dissertation explores basic conditions that may lead to customers' perception of psychological contract breach and possible consequences of a breach in a customer-firm setting. Study 1 explores two basic determinants of psychological contract breach: psychological contract and service transaction failure. The literature of psychological contract breach in organizational behavior (Morrison and Robinson, 1997) defined psychological contract as an individual's beliefs about the reciprocal obligations between her/himself and a firm, in which these obligations are based on the perceived promises made by the firm and the consideration of the exchange offered by the individual. This definition suggests that psychological contract has a promissory focus of obligations that is clearly contractual and mutual and thus is meaningful in relationship building. Types of psychological contract include transactional and relational contracts occurring in either a transactional relationship (shallow relationship) or a social relationship (close relationship). New customers have only very shallow relationships with providers, and business obligations are merely related to transactional contracts. Hence, one focus of the dissertation deals with the very basic stage on a very basic stage on psychological contract, or a transactional contract occurring in a transactional relationship. This dissertation proposes that in the context in which a customer has perceived a psychological contract, psychological contract breach can be perceived when the transaction fails (the customers do not achieve their consumption goals of the transaction).

Moreover, Study 1 investigates consequences of psychological contract breach in the customer-firm relationship with regard to its harmfulness to further relationship evolution. Psychological contract breach is related to a violation of a perceived reciprocal obligation agreement (Rousseau 1989) and infringement of norms of reciprocity (Kingshott 2006) and therefore may lead to negative emotions such as feelings of betrayal and anger (Conway and Briner 2005). Violations of rules in a relationship may also lead to an individual's cognitive evaluation of a firm's capability of being a partner (partner quality) (Aaker et al. 2004). All these negative outcomes predispose to unfavorable behavioral reactions such as revenge (Gregoire and Fisher 2008), weakening of strength of the relationship (Aaker et al. 2004) and withdrawal behavior (Conway and Britner 2005). Therefore, one of the focuses of this dissertation is on both the emotional and the cognitive consequences of breaches: feelings of betrayal and anger, as well as customers' evaluations of the firm's partner quality.

The basic model of psychological contract breach in Study 1 provides a foundation for Study 2 (2a and 2b) to extend the theoretical model by systematically investigating potential antecedents of psychological contract breach, which theoretically will affect breach perceptions. Study 2a focuses on a situational antecedent: source of fault (source of the mistake directly related to the transaction failure). Research suggests that customers will seek underlying causes of a perceived service failure (Magnini et al. 2007). If the failure is perceived as the customer's responsibility, and the service provider appear to be unable to control the failure situation, the customer may react less negatively to the service provider afterwards. When customers have not perceived a psychological contract, they are less likely to perceive a psychological contract breach regardless of who made the mistake. In contrast, when customers have perceived a

psychological contract, the source of fault directly related to the failure becomes important information for customers' causal attribution, which may influence perception of a breach.

Study 2b explores the effect of social obligation bias, a personal factor, on perception of psychological contract breach and further examines the causal attribution processes. Self-serving bias may lead customers to focus more on obligation fulfillment by others and bypass self-obligation. This bias may influence customers' attributional process. Customers who focus on obligation fulfillment by others may tend to attribute the failure to the provider and thus perceive a breach of a psychological contract. Moreover, this dissertation proposes that customers' attribution of providers' controllability (whether the providers have the ability to control the transaction failure situation) could be a mediator of the influence of sources of fault and social obligation bias on psychological contract breach.

Study 3 explores how service provider, can recover from the negative outcomes of psychological contract breach. Research on service recovery suggests that fairness judgments influence customers' perception of betrayal (Gregoire et al. 2009) and anger (Gregoire et al. 2010). Hence, this dissertation proposes that if the recovery strategy can restore the perception of fairness, customers may feel less betrayed and less angry. Financial compensation is often used as a recovery effort to correct service failure problems that cannot be otherwise addressed because of the nature of the services (Levesque and MaDougall 2000). This dissertation further proposes that relevance of compensation (monetary payment) to a consumption goal may increase perception of utility and value and thus promote perception of fairness, promote recovery from feelings of betrayal and anger, and restore high evaluation of partner quality.

However, the effect of compensation relevance on promoting fairness judgment may be contingent on customers' justice beliefs. Social psychology research (Tanaka 1999) suggests that

fairness judgment is difficult because of various biases, such as egocentric fairness bias, which causes one to consider one's own behavior as fair rather than unfair and others' behavior as unfair rather than fair. The effect of egocentric fairness bias can be strengthened by customers' beliefs of a just world. Hence, this dissertation proposes that the influence of relevant compensation in promoting fairness judgment may be attenuated by customers' justice belief salience, and perceived fairness mediates the influence of compensation relevance and justice belief salience on negative outcomes of psychological contract breach.

In sum, this dissertation establishes a comprehensive model of psychological contract breach in the customer-firm relationship to answer the following research questions.

1.   *When and how do customers perceive psychological contract breach?*

2.   *Which types of customers are more likely to perceive psychological contract breach?*

3.   *What are the negative outcomes of psychological contract breach in the customer-firm context?*

4.   *What strategies are effective for recovering from the negative outcomes of psychological contract breach?*

In the remainder of this dissertation, the relevant theoretical background of service failure and recovery and psychological contract breach is reviewed. Then, hypotheses regarding the four questions are developed, and results of four online experimental studies are reported. Through answering the four questions, this dissertation intends to provide marketing researchers and practitioners with a better understanding of customers' psychological processes in service failure and recovery in which customers may perceive a breach of promise by a firm.

CHAPTER 2

LITERATURE REVIEW

Service Failures

"Service encounter" is a term used to describe the moment of interaction between the customer and the service firm (Bitner, Booms and Tetreault 1990). Services, especially those in labor intensive contexts, are inherently heterogeneous: their performance varies from provider to provider, from customer to customer, and from day to day and thus are rarely standardized (Berry 1990). As a result, a variety of things can go wrong in service encounters (Swanson and Kelly 2001). "Any service-related mishaps or problems (real and/or perceived) that occur during a consumer's experience with a provider" are referred to as *service failures* in the marketing literature (Maxham 2001, p.11). Failures may be due to contact employees' unprompted actions (e.g., rudeness, stealing, or ignoring customers), failed responses to customer needs and requests, or failed core service, such as unavailable or unreasonably slow service (Bitner et al. 1990).

Bitner et al. (1990) suggest that the service encounter should be described from customers' point of view: customers interpret their own special needs or requests and make judgments of whether their special needs or requests are being accommodated. Hence, a customer may perceive a service failure during a service encounter, whereas it is not seen as such by the service provider. This is supported by Bagozzi (1978), who concluded that the quality of marketing transactions depends particularly on cognitive congruency/incongruency between consumers and firms. For example, the consumers' perceptions of actual marketing transactions may be incongruent with the expectations evoked in them by advertising messages, personal needs, prior experience (Parasuraman et al. 1985; Zeithaml et al. 1993), promises made by the

service provider (Zeithaml et al. 1993; Gronroos 1984; Wan et al. 2011), or images of the firm (Gronroos 1984).

Consequences of Service Failures

Traditional research in consequences of service failures focuses on customer dissatisfaction, based on the expectancy disconfirmation paradigm. Customers experience negative expectation disconfirmation when services fail to meet customers' initial expectations. This negative disconfirmation decreases customer satisfaction (e.g., Oliver 1981; Churchill et al. 1982; Spreng and Chiou 2002; Darke et al. 2010). Recently, studies have explored consequences of service failures other than dissatisfaction, such as negative emotions (anger, frustration, etc.), low trust (e.g., Nyer 1997; Soscio 2007), renegotiated relationship (Chung and Beverland 2006), feelings of betrayal, and revenge (Gregoire and Fisher, 2008).

Some researchers have investigated customer emotional reactions to service failures from the cognitive appraisal theory perspective (e.g., Nyer 1997; Soscia 2007; Zourrig et al. 2009; Gregoire et al. 2010). According to Lazarus (1974), when people confront an event that causes stress, emotions are developed on the basis of a primary appraisal and a secondary appraisal. A primary appraisal refers to the individual's cognitive appraisal of the event's significance for the individual's well-being, whereas a secondary appraisal refers to the appraisal of the potential to cope with the event. Lazarus (1991) proposes a cognitive model of emotion that specifies the relationships between cognitive appraisals and emotions. Cognitive appraisals of an individual's situation lead to a subjective experience (affect), action tendencies (e.g., the urge to attack when angry), and physiological responses (e.g., increased heartrate, facial expressions); the combination of the three responses leads to the individual's emotional reactions, such as sadness, frustration (Nyer 1997; Soscia 2007), and anger (Nyer 1997; Soscia 2007; Gregoire et al. 2010).

Other researchers have used the relational paradigm in focusing on consequences of service failures (Aaker et al. 2004; Wan et al. 2011; Gregoire et al. 2009). The traditional customer relationship management (CRM) literature would suggest that establishment of a strong relationship with customers will inhibit their negative reactions when they confront service failures, an effect expressed in the saying "love is blind" (e.g., Gregoire and Fisher 2006). Nevertheless, a growing research area of a "love becomes hate" effect suggests that loyal customers will be especially likely to react negatively to unacceptable service (e.g., Gregoire and Fisher, 2008; Wan, 2011).

First, service failures are more likely to triggered negative emotions in loyal customer.. Customers who have high quality relationships with the firm will feel betrayed, angry, and unhappy when they experience service failures (Gregoire and Fisher 2008; Gregoire et al. 2009; Wan et al. 2011). Perceived betrayal is defined as "a customer's belief that a firm has intentionally violated what is normative in the context of their relationship" (Gregoire and Fisher 2008). Betrayal is not synonymous with dissatisfaction. Expectation disconfirmation triggers dissatisfaction, whereas feelings of betrayal involve more extreme cognitions, such as a sense of violation or infringement of normative standards (Oliver 1996; Elangovan and Shapiro 1998; Ward and Ostrom 2006)). Anger, too, is different from feelings of betrayal; anger is an intense and action-driven emotion, whereas betrayal involves formation of beliefs of violation (Gregoire and Fisher 2008).

Second, loyal customers may be more likely than others to engage in extreme behavior after failed service encounters. Customers' behavioral responses to service failures include consideration of reparation and retaliatory behavior. Before engaging in retaliatory behavior, customers may consider first asking for reparation through the recovery process, which is a

positive mechanism for restoring customer satisfaction (Gregoire and Fisher 2006; Gregoire and Fisher 2008). However, the customer who feels betrayed will find it extremely difficult to forgive the provider and may seek to punish and inconvenience the provider. Retaliatory behavior varies from spreading negative word-of-mouth to verbal or physical aggression to abuse of the service provider's employees. Loyal customers can thus become enemies of the service provider (Gregoire and Fisher 2008; Gregoire et al. 2009).

Moreover, relationship strength, such as levels of customer trust and commitment, will be damaged by service failures. Aaker et al. (2004) suggests that service failures that cause relational transgressions may hurt customers' evaluation of the service providers' partner quality, depending on the brand personality strategies. In interpersonal communication, relational transgressions refer to *a violation of the implicit or explicit rules guiding relationship evaluation and performance* (Metts 1994). Relational transgressions can damage the stability of a relationship, and if severe, can result in feelings of betrayal and ending of the relationship (Metts 1994). In long-term relationships, transgressions are inevitable. The longer a relationship lasts, the more likely the customer is to experience relational transgressions, which are inherently harmful to the customer's perception of the firm's partner quality. If the brand is a sincere brand, which means its image is more warm and trustable, a transgression will reduce the customer's inference of the brand's partner quality; if the brand is an exciting brand, which means its image is more active and uncertain, a transgression will not be related to its ultimate quality as a partner. As a result, the customer-brand relationship strength will be attenuated by a decrease of the evaluation of the brand's partner quality (Aaker et al. 2004).

Service Recovery Strategies

Service recovery strategies refer to service companies' actions to respond to or rectify service failures (Gronroos 1988; Maxham 2001). Some service recovery efforts may compound the service failure problem (Kelley et al., 1993), while others may restore customer satisfaction (Goodwin and Ross 1992; Hart et al. 1990; Maxham 2001). Thus, not all recovery strategies are effective.

The most commonly used recovery strategies are apology, assistance, and/or compensation (Bitner, Booms, & Tetreault 1990; Hart et al. 1990; Hoffman, Kelley, & Rotasky 1995; Kelley, Hoffman, & Davis 1993). Severity and criticality of the failure, as well as the type of service, may influence the effectiveness of each of these (Levesque and MaDougall 2000). Typically, customers expect gains from recovery strategies to rectify any losses caused by service failures. Apology, because it provides little gain for customers, is the least effective strategy. Assistance, i.e., taking of action to resolve the problem, is usually the most effective recovery strategy and may bring the customer back to his/her original expectation status (Levesque and MaDougall 2000). However, in many cases, assistance is not applicable, and the problem cannot be fixed because of the nature of the service (e.g., no room available in a hotel). In such cases, compensation, which involves monetary payment, is often required to offset the inconvenience the customer experienced (Levesque and MaDougall 2000).

Justice theory has been used to explain customers' reactions to recovery efforts (Kau et al. 2006). Cognitive judgments of justice include judgments of *distributive fairness*, *procedural fairness*, and *interactional fairness* after service recovery (Gregoire and Fisher, 2008). *Distributive fairness* refers to the outcomes or the compensation received by customers (Gregoire and Fisher, 2008). For example, the consumer may evaluate the specific outcome of the recovery effort and compare what the service provider did with what the customer lost (Kau et al. 2006). It

also involves customer knowledge about how other customers were treated in similar situations; customers may feel unhappy if they perceive the firm treated them differently from other customers. Distributive justice significantly affects customers' repatronage and negative word-of-mouth (Blodgett et al. 1997). *Procedural fairness,* which refers to the customer's perceived fairness of the firms' procedures, policies, methods, and criteria to address consumers' complaints (Gregoire and Fisher, 2008), is affected by the firm's management of process control, decision control, accessibility, timing/speed and flexibility (Tax et al. 1998). For example, the customer may be satisfied with the outcome of a service recovery effort but dissatisfied with the slowness of the process. *Interactional fairness* refers to the manner in which frontline employees treat customers (Gregoire and Fisher, 2008). The customer may be satisfied with the fairness of a service recovery outcome but still feel unhappy over being treated unfairly in the interactional process (Bies and Shapiro 1987). For example, contact employees may say something that is not honest, may treat customers impolitely, or may ignore customer interests (Tax et al. 1998). These judgments of fairness in service failure and recovery influence customers' negative emotional reactions, such as feelings of betrayal and anger, as well as their behavioral responses, such as venting and revenge (Gregoire and Fisher, 2008; Gregoire et al. 2009; Gregoire et al. 2010).

In addition, researchers in relationship marketing have used the relationship paradigm to explain consumers' responses to recovery efforts. For example, Morgan and Hunt's (1994) commitment-trust theory of relationship marketing supports the idea that service recovery can increase the customer's confidence that the firm has enough honesty and integrity to amend any errors and thus can affect the customer's trust in the firm (Kelley and Davis 1994; Tax et al. 1998; Morgan and Hunt 1994). In other words, a service recovery strategy provides an opportunity to restore the customer's good opinion of the service and build/maintain the

customer-firm relationship (Levesque and MaDougall 2000). Nevertheless, obtaining customers' forgiveness may be a necessary coping strategy for promoting reconstruction of the relationship (Xie and Peng 2009; Tsarenko and Tojib 2011). Xie and Peng (2009) suggest that customer trust can be repaired through affective repair efforts (apology, remorse, compassion), functional repair efforts (financial compensation, managerial steps to avoid recurrence), and informational repair efforts (the communication of updated information), all of which enhance customers' beliefs in the firm's trustworthiness and help to create customer forgiveness.

Psychological Contract

The term "*psychological contract*" was first coined around 1960 (e.g., March and Simon 1958; Argyris 1960). Initially, psychological contracts were seen as individuals' beliefs about mutual expectations of "give and get" from each other in the relationship (e.g., Levinson et al. 1962; Kotter 1973). This concept was not well developed until Daniel Rousseau revisited the term and redefined it as "an individual's belief regarding the terms and conditions of a reciprocal exchange agreement between the focal person and another party" (Rousseau 1989). A key element of Rousseau's definition is "the belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some sets of reciprocal obligations." Since Rousseau's 1989 article, later studies of psychological contracts, which tend to emphasize beliefs about promises (e.g., Morrison and Robinson 1997), suggest a promissory focus as promises come to be seen as more clearly contractual and stronger than general expectations and obligations. Only those obligations and expectations arising from the individual's perceived promise are considered part of the psychological contract (Conway and Briner 2005), and not necessarily those recognized by the organization (Morrison and Robinson 1997).

Psychological contracts are based on perceived promises. Hence, the promises can be explicit or implicit. Verbal or written agreements made by an organization are usually considered explicit promises. Implicit promises could evoke psychological contracts when they are interpreted by individuals. Therefore, psychological contracts are inherently subjective (Conway and Briner 2005).

Social exchange theory has explanatory value for the role of psychological contracts in relationship building. A social exchange relationship involves a specific type of exchange (transactional exchange or relational exchange) and a specific type of relationship (transactional relationship or social relationship) (Cropanzano and Michell 2005). In other words, relationships can be distinguished from the transaction process, which means the two parties in a transactional relationship (or a social relationship) may have either a transactional or a relational exchange. Social exchange theory involves rules that govern obligations arising from a mutually established social system. Different mutual relationships generate different types of rules.

In the organizational behavior literature, two types of psychological contracts have been observed: transactional and relational (Conway and Briner 2005; Morrison and Robinson 1997). Both types can be viewed as social exchanges – transactional exchanges and relational exchanges – in which promissory obligations are exchanged. Hence, the types of psychological contracts can be extended to transactional contracts in a social (or transactional) relationship, and to relational contracts in a social (or transactional) relationship (See Figure 1) (Morrison and Robinson 1997).

Psychological Contract Breach

The perception that "one's organization has failed to meet one or more obligations within one's psychological contracts in a manner commensurate with one's contributions," labeled as

psychological contract breach (Morrison and Robinson 1997), is a perceived discrepancy between what has been promised and what is actually received in a reciprocal relationship. The discrepancy is based on an evaluation of one's own contribution to acquiring the reward. Hence, psychological contract breach involves both a sense of unfairness and unmet expectations (Conway and Briner 2005).

Psychological contract breach is thought to be perceived in one of two conditions, as follows. First, the organization has actually reneged on a promise and not fulfilled its obligations. Second, the organization has fulfilled its obligation to an individual, yet the individual believes otherwise because of the beliefs s/he holds about a promise or obligations that differ from those held by the organization (Robinson and Morrison 2000; Morrison and Robinson 1997).

Reneging occur "when agents of the organization recognize that an obligation exists but they knowingly fail to follow through on that obligation" (Morrison and Robison 1997). The organization may knowingly break its promises of obligations in two situations. First, the organization may be unable to fulfill the promised obligations because of factors such as low expertise and lack of financial resources. Second, the organization may be unwilling to fulfill its obligations. For example, the organization may want to maximize its profit by minimizing its cost and so may violate its promised obligation. Both of these two situations will lead to unmet promises and consequentially to psychological contract breach.

Incongruence occurs when the two parties in the relationship hold different understandings of a promise (Morrison and Robison 1997). Three conditions may lead to incongruence: divergent cognitive schemata, complexity and ambiguity of obligations, and ineffective communication. Cognitive schemata refers to "organized knowledge about a given concept or type of stimulus" (Taylor and Crocker 1981). Because the two parties in a relationship

may bring different cognitive schemata to the situation, the two parties' interpretations and memories of promises may be different; either their beliefs about the nature of a promise, or their beliefs of whether a promise has been made, could differ.

Whether an individual is able to perceive a discrepancy between what is promised and what s/he actually receives and then perceives a psychological contract breach is contingent on the situation and on individual differences. For example, an individual may not recognize the discrepancy if it is not salient. Salience, the degree to which a discrepancy stands out from its immediate context, may be influenced by the size of the discrepancy, the importance of the promise, and the vividness of the promise in the individual's mind. In addition, customers' motivation to detect the discrepancy is an important factor in perception of psychological contract breach. Individuals typically may or may not be concerned with the organization's ability and willingness to fulfill its obligations (Rousseau and McLean Parks 1993), or may have different levels of energy or vigilance to scan information regarding their situation (Morrison and Robinson 1997). Another important factor in perception of psychological contract breach is the self-serving bias. Individuals with high self-serving bias may have distorted perceptions of how well they and the organization have fulfilled their respective obligations (Morrison and Robinson 1997).

After perceiving a psychological contract breach, an individual is likely to engage in an interpretation process, which involves individuals' cognitive processes of outcome assessment, attributions and fairness judgments. These cognitive appraisals will likely evoke the individual's emotional reactions. These emotional reactions include a combination of negative affective and emotional reactions such as feelings of betrayal (Morrison and Robinson 1997), and anger and frustration (Averill 1985; Ekman, Friesen and Ellsworth 1982), that stem from the perceived failure to receive something that has been perceived as promised (Ortony et al. 1988; Robinson

and Morrison 1995; Robinson and Rousseau 1994). The combination of negative affective and emotional reactions represents a mental readiness for subsequent actions, such as attitudinal and behavioral responses (Morrison and Robinson 1997). In extreme cases, individuals engage in venting, revenge (Morrison and Robinson 1997) and withdrawal behavior such as leaving the organization (Conway and Briner 2005). The underlying reason for the negative outcomes is that individuals who perceive psychological contract breach will view the relationship more negatively than other individuals will (Conway and Briner 2005).

Comparison of Psychological Contract and Expectation

In the consumer expectancy literature, there is no standard definition of expectations. Some view it as general, overall evaluative judgments of the product (e.g., Cardozo, 1965; Cohen and Goldberg, 1970; Olshavsky and Miller, 1972). Others consider it as consumers' desire of what a service provider should do, or normative services (Parasuraman et al. 1985). Olson and Dover (1976) suggest that expectations can be one type of beliefs that is specifically used regarding a "future event or state of affairs." Spreng (1996) agree with Olson and Dover (1979) that expectations are "beliefs about a product's attributes or performance at some time in the future." In the basis of the definitions, psychological contract and expectation are two different concepts.

Psychological contract refers to an individual's belief about reciprocal obligations based promises made by the other party and her/his own consideration (Morrison and Robbison 2000). Beliefs about psychological contract should refer to or imply the other party to the contract, an exchange between two parties, strength of the two parties' motivation to act, and perceived mutual agreement (Conway and Briner 2005). Hence, beliefs about a product's attributes or performance may arise from beliefs about reciprocal obligations based on the firm's promises, but the two are different.

CHAPTER 3

THEORETICAL FRAMEWORK

Overview of the Models and Definitions

This dissertation explores psychological contract breach in the customer-firm relationship through three studies (Figures 2, 3, 4 and 5). Study 1 investigates the basic conditions of perception of psychological contract breach and its outcomes. In Study 2a and Study 2b, it is asserted that information about source of fault and customers' social obligation bias are two important antecedents of perception of psychological contract breach, and customers' attribution of controllability to the service provider is the psychological process that leads to perception of a breach. Study 3 focuses on the potential for service providers to recover from the negative outcomes of perception of psychological contract breach. It suggests that relevant compensation may promote customers' perception of fairness and therefore allow the firm to recover from the negative outcomes. Nevertheless, the effectiveness of relevant compensation may be influenced by customers' beliefs of a just world. Definitions of all concepts involved in the three studies are as follows:

Transaction failure occurs when a customer perceives that her/his consumption goal is not achieved and that the transactional exchange has failed. In contrast to service failure, transaction failures better depict customers' experiences of mishaps in a service encounter in which the customer does not achieve the goal of buying the service even though the service provider may have done nothing wrong.

Psychological contract refers to a customer's beliefs about reciprocal obligations between her/himself and the service provider, with these obligations based on a perceived promise made by a provider for a service transaction and a reciprocal consideration offered by

the customer. Psychological contract binds the two parties to some sets of reciprocal obligations. It is different from expectations, which is defined as internal standards or benchmarks that customers use to evaluate the product or service they receive (McDougall and Levesque 1998). This dissertation starts from the most basic type of psychological contract, a transactional contract in a transactional relationship, to investigate the origin of the development of a customer-firm relationship.

Psychological contract breach in the customer-firm relationship context refers to a customer's perception that a service provider has failed to meet one or more obligations within her/his psychological contracts associated with a service transaction in a manner commensurate with her/his contributions. Obligations of the service provider and the customer to a transaction can be both economic and relational. This dissertation focuses on economic obligations, which are reciprocal obligations associated with a transaction itself, without involvement of any relational norms. Hence, in this dissertation, a psychological contract breach is defined as a violation of a transactional contract in a transactional relationship.

Feelings of betrayal refer to "a customer's belief that a firm has intentionally violated what is normative in the context of their relationship" (Gregoire and Fisher 2008).

Partner quality refers to a customer's evaluation of a service provider's capability to be a trustworthy partner. In a marketing context, such an evaluation can derive from evaluation of such behaviors as "promises are kept, relationship failures are avoided, problems are resolved, and long-term consumer interests are served" (Aaker et al. 2004, p 2). The evaluation results in customers' perceptions of the partner's dependability and reliability, trustworthiness, supportiveness, and accountability, which customers use to gauge partner capabilities, intentions,

and motives in meeting relationship obligations (Aaker et al 2004). Partner quality inferences influence relationship strength and course (Sirdeshmukh et al. 2002; Aaker et al. 2004).

Source of fault refers to information as to which party has made a mistake directly related to a transaction failure. This dissertation focuses on two conditions: in one, information provided indicates that the service provider is at fault; in the other, it indicates that the customer is at fault.

Attribution of controllability of the service provider refers to customers' attributions of whether the service provider has the ability to control the transaction failure situation. Even though the service provider may not be the party that initiated the failure, the customer may still attribute the failure to the fact that it had the ability to control the situation but did not.

Social obligation bias is the customer's tendency to focus on self-obligation fulfillment or others' obligation fulfillment in exchanges in the marketplace. If the customer pays more attention to self-obligation fulfillment in a service encounter, s/he will generate more thoughts about self-obligation fulfillment than about the service provider's obligation fulfillment. In contrast, if the customer pays more attention to others' obligation fulfillment in the service encounter, s/he will generate more thoughts about the service provider's obligation fulfillment than about self-obligation fulfillment.

Compensation relevance is the degree to which the financial or monetary support provided by the service provider to recover the transaction failure is relevant to the consumption goal associated with the transaction. This dissertation considers two types of compensation: Relevant compensation is financial compensation that is perceived as related to the consumption goal; irrelevant compensation is financial compensation that is not perceived as related to the consumption goal.

Perception of fairness refers to a customer's perception of whether the service failure is recovered so that the customer is treated fairly, justly and equitably. Skarlicki and Folger (1997) indicate that a lack of perception of fairness influences thoughts of acts of retaliation.

Justice salience is defined as customers' accessibility to a just world belief (Karrenmans et al. 2005; Lucas et al 2010). When justice beliefs are salient, customers tend to believe that a conflict should be solved in a fair manner (Karrenmans et al. 2005), such that people receive rewards for the good they have done and punishment for the evil they have done (Tanaka 1999).

Study 1. A Basic Model of Psychological Contract Breach in Customer-Firm Relationships

The literature just discussed suggests that when a transaction failure occurs, an individual might perceive that the other party in the relationship reneged on a promise and therefore might perceive psychological contract breach, regardless of whether it indeed made a formal or written promise (Morrison and Robbinson 2000). Hence, transaction failure is one important condition for perception of psychological contract breach.

In addition, according to the definition of psychological contract breach, customers perceive breach when they found a discrepancy between what they experienced and what are in their psychological contract. Therefore, conceptually, psychological contract is also one important condition for perception of psychological contract breach. An expectation is not necessarily related to a psychological contract breach. For example, when a sales representative makes verbal promises, the customer may very likely perceive a psychological contract that obligates the service firm to fulfill the promised terms. In contrast, when similar terms are described in online customer reviews, the customer who reads them may be less likely to perceive a psychological contract and less likely to hold the belief that the service provider has an obligation regarding certain terms. Although similar levels of expectations could be evoked

by both sales messages (psychological contract) and online customer reviews (no psychological contract), the customer will perceive a psychological contract breach only if terms are in the sales messages, for example, and not in the online customer reviews.

Second, when a transaction failure does not occur, the customer who holds a belief regarding a psychological contract about the service provider's obligations will not perceive a psychological contract breach. When the consumption goal is included in the terms of a psychological contract, the customer will perceive a psychological contract breach when the consumption goal is not achieved and the transaction fails. Thus, a transaction failure and a psychological contract are the two basic conditions for a psychological contract breach.

H_1: When both psychological contract and transaction failure are high, the customer will be more likely to perceive a psychological contract breach than under conditions in which psychological contract and/or transaction failure are low.

The literature also suggests some possible consequences of a psychological contract breach. One important consequence is *feelings of violation*, which is a negative emotional blend or a combination of emotions, such as anger, frustration, resentment, indignation, and even outrage (Morrison and Robison, 1997). However, the marketing literature on service failures distinguishes feelings of betrayal from other negative emotions, such as anger. This dissertation argues that when reciprocal obligations are involved in a violation, both feelings of betrayal and other negative emotions may be triggered, whereas reciprocal obligations are not involved in a violation, customers may experience some negative emotions but not feelings of betrayal. Hence, this dissertation is consistent with the marketing literature and distinguishes feelings of betrayal from other emotional factors in the concept of feelings of violation. If the customer does not perceive a psychological contract breach, the customer may feel dissatisfied because of stresses

brought on by unmet expectations (Oliver 1981) but not feel angry and betrayed. In contrast, the organizational behavior literature suggests that a breach will evoke feelings of violation, a combination of feelings of betrayal and other negative emotions, such as anger. If the customer perceives a psychological contract breach, s/he experiences stresses brought on by perceived unmet obligations promised by the service provider. Failures of fulfillment of the reciprocal obligations/agreement violate norms of reciprocity, which will trigger not only anger but also feelings of betrayal (Morrison and Robinson 1997). Hence, a psychological contract breach may lead to feelings of both betrayal and anger in the customer.

H_{2a}: *Perception of psychological contract breach increases feelings of betrayal.*

H_{2b}: *Perception of psychological contract breach increasse levels of anger.*

Service exchange failures may lead to customers' cognitive evaluation of service providers and result in customers' inferences of the providers' partner quality. Evaluations of partner capabilities and efforts in managing promises provide a foundation for partner quality inferences that affect relationship evolution (Aaker et al 2004). For example, if the customer perceived that a promise was made by a salesperson of a provider, but the provider did not later fulfill that promise and caused a transaction failure, the customer will tend to make a negative inference of the provider's partner quality, such as "it is a provider with low capability to be a trustworthy partner because it broke the promise." In contrast, if the customer holds an expectation of a service outcome based on an online customer review, a transaction failure may not lead to customers' negative inference of the provider's partner quality, because the provider made no promise; the service outcome was suggested by other customers, and the provider had no obligation regarding the suggested service outcome. Thus, the customer's evaluation of the provider's partner quality will be made not on the basis of an unsatisfied service outcome, but on

the basis of trustworthy behaviors, such as fulfillment of promises and solving of problems. Hence, customer perception of psychological contract breach can be one important factor in partner quality inferences.

   H_{2c}: Perception of psychological contract breach decreases customer evaluation of partner quality.

The marketing literature suggests that service failures lead to customers' negative reactions, such as low levels of partner quality evaluation and feelings of betrayal (Aaker et al. 2004; Gregoire et al. 2009; Wan et al. 2011). One possible psychological process could be perception of psychological contract breach. As just discussed, transaction failure and psychological contract are the two conditions of perception of psychological contract breach, which in turn leads to customers' negative reactions. Hence, this dissertation proposes that perception of psychological contract breach is a mediator of the influence of transaction failure and psychological contract on customers' negative reactions.

   H_3: Perception of psychological contract breach mediates the interaction effect of transaction failure and psychological contract on feelings of betrayal.

   H_{3a}: Transaction failure positively affects feelings of betrayal through the mediation of perception of psychological contract breach.

   H_{3b}: Psychological contract positively affects feelings of betrayal through the mediation of perception of psychological contract breach.

H_4: Perception of psychological contract breach mediates the interaction effect of transaction failure and psychological contract on anger.

   H_{4a}: Transaction failure positively affects anger through the mediation of perception of psychological contract breach.

H₄b: Psychological contract positively affects anger through the mediation of perception of psychological contract breach.

H₅: Perception of psychological contract breach mediates the interaction effect of transaction failure and psychological contract on partner quality.

H₅a: Transaction failure negatively affects partner quality through the mediation of perception of psychological contract breach.

H₅b: Psychological contract negatively affects partner quality through the mediation of perception of psychological contract breach.

Study 2. Antecedents of Psychological Contract Breach

Given that perception of psychological contract breach may lead to many negative outcomes, exploration of possible antecedents of psychological contract breach becomes important. From study 1, we may determine that when transaction failures occur, the customer will perceive psychological contract breach when s/he perceives a psychological contract about obligations of the service provider. However, situations of transaction failures vary, and customers' diverse characteristics may influence their perception of a breach. This dissertation intends to systematically explore situational and personal antecedents of psychological contract breach when transaction failures occur.

Study 2a. Source of fault

Customers typically attempt to determine who was responsible for a perceived transaction failure and whether the responsible party had control over the cause of the failure; such actions are labeled the process of causal attribution (Magnini et al. 2007; Folkes 1988; Maxham III and Netemeyer 2002). The customers may attribute the failures during transactions to mistakes made by the firm or by themselves. Information about who has made the mistake

may influence customers' causal attribution. This dissertation suggests that in the absence of
other information, the customer tends to attribute the failure to the party who is seen as the direct
source of fault. If customers attribute the failure to themselves, they are less likely to perceive
providers' reneging on the promise and thus do not perceive a breach even though they have a
psychological contract. Customers having a perceived psychological contract may perceive a
breach only when they attribute the failure to the firm, not to themselves. Moreover, customers
who have no psychological contract are unlikely to perceive a breach regardless of source of
fault. Hence, study 2a explores a situational antecedent of psychological contract breach, the
source of fault, and expects an interaction effect of source of fault and psychological contract.

*H_6: In the context of transaction failure, when psychological contract is high and the
provider is the source of fault in the provided information, the customer perceives a higher
level of psychological contract breach than under conditions in which psychological
contract is low and/or the customer is the source of fault.*

Study 2b. Social obligation bias

As suggested in Study 2a, customers may be engaged in causal attribution after
experiencing transaction failures. Study 2b continues to explore the attributional process that
leads to psychological contract breach. According to the organizational behavior literature,
individuals will perceive a breach when the firm reneged on its promises; either the firm was
unable to fulfill the obligations it promised to fulfill, or it was able to fulfill its obligations but
did not. In both cases, the firm was able to control the occurrence of the failure; it could have
avoided promising something it could not do or it could have fulfilled the obligations it could
fulfill (Morrison and Robinson 1997). Though the content of promises in a customer-firm setting
may be different from that in an employee-firm setting, individuals' reaction to violated norms of
fulfillment of a promised obligation may be similar. Hence, if the customer believes that the firm

was able to control but did not control the situation and allowed the failure to occur, s/he tends to perceive a breach.

H₇: Attribution of controllability positively affects perception of psychological contract breach.

Self-serving bias influences attribution such that individuals tend to attribute failure to others and success to self (Folkers 1984). One self-serving bias factor suggested by the literature of service failure and recovery is social obligation bias (Wan et al. 2011). Whether the customer focuses on self-obligation fulfillment or others' obligation fulfillment may trigger her/his self serving attributional bias. If the customer tends to focus on others' obligation fulfillment and bypass self-obligation fulfillment in the marketplace, s/he may tend to attribute controllability to the firm even though s/he made the mistake in the situation. In contrast, if the customer tends to focus on self-obligation fulfillment in the marketplace, s/he may attribute controllability according to her/his perception of source of fault. Study 2b explores a personal factor, social obligation bias, as one antecedent of psychological contract breach in the context in which customers have a perceived psychological contract when a transaction failure occurs.

H₈: In the context of psychological contract and transaction failure, when the provider is the source of fault and the customer's focus is on the service provider's obligation fulfillment, the customer tends to attribute a higher level of controllability to the service provider than under conditions in which the customer is the source of fault and/or the customer's focus is on self-obligation fulfillment.

The organizational behavior literature suggests that self-serving bias increases the perception of psychological contract breach even though the individual notices that the organization has fulfilled its promises (Morrison and Robinson 1997). This effect can be

explained by the attributional process already explored, that social obligation bias may influence attribution of controllability of the provider over the situation and thus perception of a breach. Moreover, when the firm made a mistake directly related to the failure during the transaction, the customer may tend to see the firm as having control during the failure and hence to perceive a breach. Therefore, attribution of controllability is a psychological process in formation by customers of perception of psychological contract breach.

H9: In the context of psychological contract and transaction failure, attribution of controllability mediates the interaction effect of source of fault and social obligation bias on perception of psychological contract breach.

H9a: In the context of psychological contract and transaction failure, the customer perceives a higher level of psychological contract breach when the service provider is the source of fault than when the customer is the source of fault; this effect is mediated by attribution of controllability.

H9b: In the context of psychological contract and transaction failure, the customer perceives a higher level of psychological contract breach when the customer's focus is on others' obligation fulfillment than when it is on self-obligation fulfillment; this effect is mediated by attribution of controllability.

Study 3. Recovering from the Negative Outcomes of Psychological Contract Breach: Compensation Relevance, Justice Beliefs, and Fairness Judgment

As Study 1 hypothesizes, psychological contract breach increases customers' feelings of betrayal and other negative emotions and damages the customer's evaluation of the service provider's quality as a partner, which will damage customer-firm relationship evolution. Recovery from such failures could be extremely difficult unless the service provider completely

resolves the problem and facilitates the customer's achievement of the initial consumption goal. However, many service problems cannot be fixed completely because of the nature of the services. Managers often rely on monetary compensation to correct problems (Levesque and MaDougall 2000). Will such compensation help a firm recover from negative outcomes associated with breach? And how will compensation offset those negative outcomes? Research indicates that consumers' fairness judgments influence perceived betrayal and anger emotions (Gregoire et al. 2009; Gregoire et al. 2010). This dissertation argues that compensation can be an effective way to recover from the negative outcomes of psychological contract breach and repair customer evaluation of the service provider's partner quality only if it can restore customers' perception of fairness of the transactions.

> *$H_{10a:}$ The customer's perception of fairness of a recovery attempt lessens feelings of betrayal after psychological contract breach has been perceived.*
>
> *$H_{10b:}$ The customer's perception of fairness of a recovery attempt lessens anger after psychological contract breach has been perceived.*
>
> *$H_{10c:}$ The customer's perception of fairness of a recovery attempt increases customer evaluation of partner quality after psychological contract breach has been perceived.*

This dissertation suggests that one way to increase perception of fairness is to provide relevant compensation. According to equity theory, individuals compare input (what they contribute) and outcome (what they receive) to determine whether equity exists (Pritchard 1969). Hence, only recovery strategy that induces customer perception of high value of what they receive may increase customer judgment of fairness. Relevant compensation provides the customer not only tangible but also psychological support to achieve her/his consumption goal and hence is superior to irrelevant compensation, which tends to provide merely tangible

support. On the one hand, although relevant and irrelevant compensations might have similar monetary values, relevant compensation is more related to consumption goals than irrelevant compensation and therefore may be more likely to be perceived as something that can resolve the problem to some degree. On the other hand, relevant compensation is more likely to provide psychological support (showing empathy or benevolence) and thus signal the firm's trustworthy characteristics. Hence, consumers may perceive more utility or value and thus more fairness from relevant compensation than from irrelevant compensation; therefore, relevant compensation may eventually reduce feelings of betrayal and other negative emotions and repair/improve customer evaluation of the service provider. Therefore, this study explores compensation relevance as one factor that is related to effective recovery strategy.

However, individuals may perceive different levels of fairness when receiving recovery offers because of their individual differences in fairness judgment. For example, individuals differ with regard to their levels of belief of a just world. The link between an individual's accessibility to justice belief (i.e., justice salience) and her/his perception of fairness has been supported by social psychology research (Tanaka 1999). In judgments of fair behaviors of oneself and of another person, individuals exhibit an egocentric fairness bias – they tend to consider their own behaviors as fair and other people's as unfair. Justice salience may strengthen the egocentric fairness bias, in that strong justice believers tend to perceive their own behaviors as more fair and those of others as less fair, compared with weak justice believers (Tanaka 1999). Can justice salience influence the effectiveness of relevance of compensation on service recovery? This dissertation argues that strong justice believers, compared with weak justice believers, are less likely to perceive fairness when receiving relevant compensation even though it provides utility or value to resolve the problem. On the other hand, when compensation is

irrelevant to consumption goals, both strong and weak justice believers may not perceive fairness because they neither can perceive utility and value brought about by the recovery strategy.

H_{11}: When compensation relevance is high and justice salience is low, the customer tends to perceive a higher level of fairness than under conditions in which compensation relevance is low and/or justice salience is high after psychological contract breach has been perceived.

As just discussed, compensation relevance and justice salience are two factors that influence customers' perception of fairness, which in turn affects recovery from the negative outcomes of perception of psychological contract breach. These explanations suggest that perception of fairness could be a mediator of the influence of recovery strategies and customers' justice salience on the negative outcomes.

H_{12}: The customer's perception of fairness mediates the interaction effect of compensation relevance and justice salience on feelings of betrayal.

H_{12a}: Compensation relevance decreases feelings of betrayal through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

H_{12b}: Justice salience increases feelings of betrayal through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

H_{13}: The customer's perception of fairness mediates the interaction effect of compensation relevance and justice salience on a negative emotional blend.

H_{13a}: Compensation relevance decreases anger through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

H_{13b}: Justice salience increases anger through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

H_{14}: The customer's perception of fairness mediates the interaction effect of compensation relevance and justice salience on customer inference of partner quality.

H_{14a}: Compensation relevance increases customer evaluation of partner quality through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

H_{14b}: Justice salience decreases customer evaluation of partner quality through the mediation of the customer's perception of fairness after psychological contract breach has been perceived.

CHAPTER 4

METHODS

Study 1

Participants and Design

The objective of Study 1 was to test the basic theoretical model of psychological contract breach. The Amazon Mechanical Turk (MTurk.com) used to recruit participants is a crowdsourcing Internet marketplace that provides quick, easy and inexpensive access to online research participants. Recently, use of Mturk.com in behavioral research has grown. Researchers found that MTurk.com participants produced reliable results with almost no significant differences from traditional samples like student samples and community samples. Therefore, it is suitable for a wide range of behavioral research (Goodman, Cryder & Cheema 2012; Shapiro, Chandler & Mueller 2013).

One hundred and eighty participants from Mturk.com's worker pool, who live in the U.S., were recruited to Study 1. Six responses have missing data and were excluded, which left one hundred and seventy-four responses in the data analysis (53.1% female; 95.4% from the U.S.; 98.3% with English as the first language). Each participant received 50 cents as compensation. They were randomly assigned to one of four groups of a 2 (High psychological contract vs. Low psychological contract) $\times$ 2 (High transaction failure vs. Low transaction failure) between-subject factorial design. Scenarios were used in the online experiment to manipulate these two factors (Scenario I-1 or I-2, and Scenario II-1 or II-2, see Appendix A). The hospitality industry has great variability in service quality and thus sees a high rate of service failure (Smith and Bolton 1998). Travel website TripAdvisor.com recently surveyed more than 1,000 U.S. travelers and 600 hotel staff and found airport/local shuttle service is one

of the five most important hotel amenities (examiner.com 2012). Hence, a free shuttle service in a hotel serves as the context of scenarios for the study.

Procedure

To reduce the demand effect, participants were not informed of the real purpose of the study. During recruitment, participants were told that a new online travel magazine was pilot-testing some prototypical stories that it might feature in its initial edition and were invited to evaluate the stories.

Multiple steps were conducted in the procedure through three parts of the questionnaire. In Part I of the questionnaire, participants were presented with three travel stories (See Appendix A).

In Part II, participants were told that they were randomly assigned to evaluate Story 3, which dealt with a customer experience with a hotel chain. Each participant was asked to create a personalized story and play the role of a customer as if the story had happened to her/him in order to better evaluate it. The procedure used by DeCarlo and Leigh (1996) was adapted and used in this part. First, participants were asked to type in the name of a well-known hotel chain that they had never patronized and then write four descriptive sentences with the hotel chain as the subject. Second, they were asked to type in the name of a city they wanted to visit in the future and then write down four descriptive sentences with the city as the subject. Finally, they were asked to type in a must-go place in the city and then write down four descriptive sentences with the place as the subject. These steps were designed to make the role-playing exercise an active one (Gardner and Siomkos 1985; Geller 1978). Role playing is a common experimental method and is appropriate for studies like ours (Forward, Cantor, and Kirsch 1976; Mowen et al.

1985). These steps, suggested by DeCarlo and Leigh (1996), were intended to strengthen manipulations and enhance realism.

In Part III of the questionnaire, the information on names of a city, a hotel, and a must-go place collected from each participant was used to automatically create a personalized story by the survey software as the context of the experimental scenarios. Each participant was randomly assigned to one of four groups to read a scenario of high/low psychological contract (Scenario I-1/-2, Appendix B) and a scenario of high/low transaction failure (Scenario II-1/-2, Appendix B) (sample size: Low failure & low contract=40; Low failure & high contract=49; High failure & low contract=45; High failure & high contract=40). Each scenario was automatically personalized by the survey software so as to correspond to the information of the hotel chain, the city and the must-go place that each participant had provided. After the participants had read the scenarios, a questionnaire of the manipulation check and measures of variables were administered. Participants were asked to immerse themselves in the scenario while reading it, as if the scenario had happened to them, and they were told they needed to answer every question in order to receive payment.

Participants were asked to write down their thoughts while they read the scenarios. No comment provided by any participant questioned the realism of the scenarios. Some participants indicated that they had the similar experiences in their own life.

Manipulation check

The manipulation of psychological contract was checked by a three-item, seven-point scale adapted from Rousseau (2000) and Robinson, Kraatz and Rousseau (1994). Participants were asked, if they had chosen the hotel chain, whether the hotel was obligated to provide free shuttle services when they wanted it if they had reserved it one day before. Cronbach's alpha of the

scale was acceptable (α=0.88). In addition, a single-item, seven-point scale was used to check the manipulation of transaction failure. The participants were asked if they agreed that the hotel chain did not provide free shuttle services to them when they wanted to use it. The expectation of the free shuttle services was also measured by a single-item, seven-point bipolar scale adapted from Darley and Smith (1993). Participants were also asked to rate their expectation of how likely it was that they would receive the free shuttle service (See Appendix D).

MANOVA analysis was used to check the manipulations of psychological contract and transaction failure. Results indicated that the main effects were significant, which suggested that participants could differentiate the two levels of psychological contract (5.56 vs. 6.25, $F(1, 165)=8.41$, Wilks' Lambda =0.90, $p<0.01$, Partial eta squared = 0.06) and the two levels of transaction failure (1.54 vs. 6.10, $F(1,165)=402.46$, Wilks' Lambda = 0.26, $p<0.01$, Partial eta squared = 0.71). The main effect of psychological contract on transaction failure, the main effect of transaction failure on psychological contract, and the interaction effects of both on psychological contract and transaction failure were all not significant, which suggested a lack of confounding effect (Perdue and Summers, 1986).

No significant main effect of psychological contract manipulation on expectation was found in the data analysis ($F(1,165)=1.32$, $p>0.10$). This result suggested that the participants could identify different levels of psychological contract and yet had the same levels of expectations about the free shuttle service. Hence, data tended to support the conclusion of no confounding effect of expectations.

Measures

Dependent Variables (See Appendix D). Psychological contract breach was measured with a five-item, seven-point scale adapted from Robinson and Morrison (2000) and feelings of

betrayal with a three-item, seven-point scale adapted from Gregoire and Fisher (2008). Anger was measured with a six-item, seven-point scale adapted from Robinson and Morrison (2000) and partner quality with a six-item, seven-point scale adapted from Aaker et al. (2004). Cronbach's alpha (α) was used to check the reliability of these measures. All of these measures had acceptable alpha (psychological contract breach =0.99; feelings of betrayal=0.98; anger=0.99; and partner quality=0.92).

Confirmative Factory Analysis (CFA) was used to check whether psychological contract breach, feelings of betrayal, and anger are three independent constructs. In model 1 (Figure 6), items were loaded under the three factors to which they theoretically belonged. In model 2 (Figure 7), all items loaded under one factor. In model 3 (Figure 8), items of feelings of betrayal and psychological contract breach loaded under one single factor and items of anger under another single factor. In model 4 (Figure 9), items of feelings of betrayal and anger were loaded under one single factor and items of psychological contract breach under another single factor. Results indicated that although the fit of model 1 (χ^2/df =4.71, CFI=0.96, NFI=0.95, RMSEA=0.15) is marginal, it still showed a better fit than model 2 (χ^2/df=19.35, CFI=0.79, NFI=0.78, RMSEA=0.33), model 3 (χ^2/df=12.30, CFI=0.87, NFI=0.86, RMSEA=0.25) and model 4 (χ^2/df= 6.72, CFI=0.94, NFI=0.93, RMSEA=0.18). Therefore, data tended to support the assumption that psychological contract breach, feelings of betrayal and anger were three independent constructs.

Covariate variables. Importance of the free shuttle service was measured with a single-item, ten-point bipolar scale adapted from Darley and Smith (1993). Brand strength was measured with two scales adapted from Laczniak, DeCarlo and Ramaswami (2001): brand familiarity (a four-item seven-point scale) and brand effect (a three-item seven-point scale). Task

involvement was measured with a two-item, five-point scale adapted from Chaiken and Maheswaran (1994). Source trustworthiness was measured by a three-item, seven-point scale adapted from Chaiken and Maheswaran (1994). Cronbach's alpha of the multiple-item measures were all acceptable (brand strength=0.89; source of trustworthiness=0.92).

Demand effect. Data on the Perceived Awareness of the Research Hypotheses (PARH) scale were analyzed to investigate the demand effect of scenarios. PARH was measured by a four-item seven-point Likert scale from Rubin et al. (2010). The PARH items had good internal consistency (α=0.84). Item scores were averaged to produce an index for which the higher the score, the more participants believed that they were aware of the research hypotheses during the experiment. A one-sample t-test showed that participants' mean PARH score was significantly lower than the scale's midpoint of 4.00 (M=2.94, SD=1.36; t(173)=-10.32, p<0.01). In addition, the PARH did not correlate significantly with any of the dependent variables (p>0.10 in all cases). Hence, no evidence indicated that the results could be explained by the artifact of the participants' expectations.

Hypothesis testing

ANOVA analysis and contrast analysis of group comparisons were used to analyze the interaction effect of psychological contract and transaction failure on perception of psychological contract breach and on feelings of betrayal, anger, and partner quality. ANOVA analysis results indicated that psychological contract and transaction failure have an interaction effect on psychological contract breach (F(1,165)=10.74, p<0.01, Partial eta squared = 0.06). Contrast testing was conducted to examine differences among experimental groups: for the two groups compared, the coefficient for one was 1 and for the other was -1; the coefficients for the rest groups were 0. Results of contrast testing strongly supported the assumption of the interaction

effect. Participants in the high transaction failure and high psychological contract condition reported higher perception of breach than did those in the high transaction failure and low psychological contract condition (6.24 vs. 5.08, t(171)=3.68, p<0.01), those in the low transaction failure and high psychological contract condition (6.24 vs. 1.72, t(171)=14.86, p<0.01), and those in low transaction failure and low psychological contract condition (6.24 vs. 1.96, t(171)=13.42, p<0.01) (See Table 1 and Figure 10). H_1 was supported.

The mediation testing procedure suggested by Baron and Kenny (1986) was conducted to test the mediation effect of psychological contract breach on feelings of betrayal, anger and partner quality (See Table 2). First, psychological contract, transaction failure and the interaction term (psychological contract × transaction failure) were regressed on feelings of betrayal, anger and partner quality. The regression results indicated that transaction failure had significant main effects on feelings of betrayal (β=2.65, p<0.01), anger (β=2.43, p<0.01), and partner quality (β=-1.41, p<0.01). Psychological contract × transaction failure has a significant effect on feelings of betrayal (β=1.30, p<0.01) and anger (β=1.06, p<0.05), but not on partner quality. Psychological contract had no significant main effects on any of the three dependent variables. Second, psychological contract, transaction failure and psychological contract × transaction failure were regressed on psychological contract breach. The regression result indicated that transaction failure had a significant main effect on psychological contract breach (β=3.09, p<0.01). The interaction effect of psychological contract and transaction on psychological contract breach was also significant (β=1.47, p<0.01). No significant main effect of psychological contract on psychological contract breach was found. Finally, psychological contract, transaction failure, psychological contract × transaction failure and psychological contract breach were regressed on feelings of betrayal, anger, and partner quality. Regression results indicated that psychological

contact breach had significant direct influences on feelings of betrayal ($\beta=0.83$, $p<0.01$), anger ($\beta=0.76$, $p<0.01$), and partner quality ($\beta=-0.33$, $p<0.01$). Thus, H_{2a}, H_{2b}, and H_{2c} were all supported. By including breach as an independent variable, the significant main effect of transaction failure and interaction effect of psychological contract and transaction failure all disappeared, which suggested that breach mediated the two disappeared effects. The sobel-z test results (See Table 3) confirmed that psychological contract breach was a mediator of the interaction effect of psychological contract and transaction failure on feelings of betrayal ($z=3.20$, $p<0.01$) and anger ($z=3.26$, $p<0.01$). H_3 and H_4 were supported. Psychological contract breach was also a mediator of the main effect of transaction failure on feelings of betrayal ($z=8.23$, $p<0.01$), anger ($z=7.77$, $p<0.01$), and partner quality ($z=-4.87$, $p<0.01$). H_{3a}, H_{4a} and H_{5a} were supported.

Discussion

Study 1 aimed to test a basic model of psychological contract breach, which explored antecedents and consequences of breach and the role of breach in building customer-firm relationships. Findings suggested that when customers perceived psychological contract breach, they felt the service provider had betrayed them and were angry, and their evaluation of the service provider's partner quality was lowered. Feelings of betrayal and anger are strong negative emotions that could lead to customer revenge such as negative word-of-mouth (Grégoire & Fisher 2008). Low evaluation of partner quality could be an obstacle to building a close customer-firm relationship (Aaker et al. 2004). These negative consequences indicate that customer perception of psychological contract breach is harmful to building beneficial customer-firm relationships to achieve firms' financial goals. Thus, understanding antecedents of psychological contract breach becomes important to both researchers and managers.

Findings suggested that transaction failure is the main antecedent of customer perception of beach. Customers who perceived high levels of transaction failure and high levels of psychological contract may perceive higher levels of breach than other customers. To impress and attract customers, service providers may make written or verbal promises during their sales efforts. Customers may buy the service because of these promises and believe that the service providers have an obligation to provide the service as promised. Hence, customers may perceive certain levels of psychological contract about what they should do and what the service provider should do. Customers who perceive high levels of psychological contract may be likely to buy the service. However, when the customers do not subsequently reach their consumption goals, a high perception of psychological contract will lead to a high perception of breach and therefore more negative outcomes. Hence, service providers need to be careful to present terms of services accurately during interactions with customers. If they are not sure about their ability to provide certain services, it is unwise to make a promise or induce a customer to believe that a promise has been made about those services.

Findings also suggested that psychological contract breach fully mediated the main effect of transaction failure on feelings of betrayal, anger and partner quality; it also fully mediated the interaction effect of psychological contract and transaction failure on feelings of betrayal and anger. These findings demonstrate the important role of psychological contract breach in customer-firm relationships. Transaction failure can make customers unhappy, but a more harmful consequence could occur when the transaction failure leads to customer perception of psychological contract breach as occurs in some circumstances, such as when customers perceive that the firm had made promises and had the obligations to fulfill, but did not fulfill, those obligations.

Study 2a

Participants and design

The objective of Study 2a was to test the influence of psychological contract and source of fault on perception of psychological contract breach. Another two hundred and eighty-two participants from Mturk.com's worker pool were recruited to Study 2a. Two of them participated Study 1 and seven of them did not answer every question and therefore were excluded from the data analysis, which left two hundred and seventy-three participants (56.5% female; 76.1% educated above college level; 99.4% from the U.S.; 97.2% with English as the first language; 62.7% 26 to 55 years old). Each participant received 50 cents as compensation. They were randomly assigned into one of four groups of a 2 (high psychological contract vs. low psychological contract) × 2 (customer fault vs. provider fault) between-subject factorial design. Scenarios with a free shuttle service in a hotel were used in the online experiment to manipulate the two factors (see Appendix B).

Procedure

The procedure of the experiment was similar to that in Study 1, except in Part III of the questionnaire, the conditions in the scenarios were different. Each participant was randomly assigned to one of four groups to read a scenario of high/low psychological contract (Scenario I-1/-2, Appendix B) and a scenario of customer/provider fault (Scenario III-1/-2, Appendix B) (Sample size: Low fault & low contract=71; Low fault & high contract=72; High fault & low contract=64; High fault & high contract=66). After reading the scenarios, a questionnaire of the manipulation check and measures of variables were administered.

Manipulation check

The manipulation of psychological contract was checked by a three-item, seven-point scale adapted from Rousseau (2000) and Robinson, Kraatz and Rousseau (1994), as in Study 1. Cronbach's alpha of the scale was acceptable ($\alpha=0.85$). In addition, a single-item seven-point bipolar scale was used to check the manipulation of source of fault, which asked participants to rate whether the mistake directly related to the failure outcome had been made by the customer or the hotel.

MANOVA analysis was used to check the manipulations of psychological contract and source of fault. The main effects were significant, which suggested that participants could significantly differentiate the two levels of psychological contract (5.57 vs. 6.18, $F(1,264)=6.92$, Wilks' Lambda = 0.97, Partial eta squared = 0.03, $p<0.01$) and the two levels of source of fault (2.68 vs. 6.40, $F(1,264)=290.71$, Wilks' Lambda = 0.46, Partial eta squared = 0.53, $p<0.01$). The main effect of psychological contract on source of fault, the main effect of source of fault on psychological contract, and the interaction effects of both on the psychological contract and source of fault were all not significant, which suggested no confounding effect (Perdue and Summers, 1986). Data supported the conclusion that the manipulations of psychological contract and transaction failure both worked successfully.

Measures

Dependent variables. Psychological contract breach was measured by a five-item, seven-point scale adapted from Robinson and Morrison (2000) as in Study 1 and Study 2a. Cronbach's alpha for psychological contract breach was acceptable ($\alpha =0.98$).

Covariate variables. Importance of the free shuttle services, brand strength, task involvement, and source trustworthiness were all measured by items as in Study 1. Cronbach's

alpha (α) was used to check the reliability of all multiple-item measures. The results showed that all of these measures had acceptable alpha (Brand strength=0.91; source trustworthiness=0.94).

Demand effect. The demand effect was tested using the Perceived Awareness of the Research Hypotheses (PARH) scale as in Study 1. Data showed that the PARH items had good internal consistency (α=0.88). Item scores were averaged to produce an index. A one-sample t-test showed that participants' mean of PARH score was significantly lower than the scale's midpoint of 4.00 (M=3.42, SD=1.42, t(272)=-6.8, p<0.01). In addition, the PARH did not correlate significantly with the dependent variable (p>0.10). Hence, no evidence indicated that the results could be explained by the artifact of the participants' expectations.

Realism. Realism of the scenarios was measured by a single-item, seven-point scale suggested by Wan et al. (2011). Participants were asked to rate their agreement with the statement, "The above mentioned situation at the hotel could be true in life." A one-sample t-test showed that participants' mean realism score was significantly higher than the scales' midpoint of 4.00 (M=5.58, SD=1.26, t(272)=20.69, p<0.01). In addition, the score of realism did not correlate significantly with the dependent variable (p>0.10). Hence, data supported the conclusion that the realism of the scenarios was acceptable.

Hypothesis testing

ANOVA analysis and contrast analysis of group comparisons were used to analyze the interaction effect of psychological contract and source of fault on perception of psychological contract breach. Results of ANOVA analysis indicated that psychological contract and source of fault had an interaction effect on psychological contract breach (F(1, 264)=6.94, Partial eta squared = 0.03, p<0.01). Results of contrast testing strongly supported the assumption of the interaction effect. Participants in the provider fault and high psychological contract condition

reported a higher level of perception of breach than did those in the provider fault and low psychological contract condition (6.34 vs. 5.71, t(269)=2.88, p<0.01), those in the customer fault and high psychological contract condition (6.34 vs. 2.96, t(269)=12.28, p<0.01) and those in the customer fault and low psychological contract condition (6.34 vs. 3.34, t(269)=13.16, p<0.01) (See Table 4 and Figure 11). H_6 was supported.

Discussion

Findings of Study 2a indicated that source of fault is an important antecedent of customer perception of psychological contract breach. Findings in Study 2a also suggested that although psychological contract might increase participants' report of perception of psychological contract breach in the high transaction failure condition, its effect might be reduced when participants were informed that they were the source of fault that led directly to the failure. In contrast, when participants in the psychological contract condition were told that the service provider was the source of fault, they reported the highest level of psychological contract breach.

<div align="center">Study 2b</div>

Participants and design

The objective of Study 2b was to test whether the influence of social obligation bias and source of fault on psychological contract breach can be mediated by attribution of controllability. Two hundred and thirty-five participants from Mturk.com's worker pool were recruited to Study 2b. Eleven of them participated study 1 or 2a and nineteen of them did not complete every question and therefore were excluded, which left two hundred and five responses in the data analysis (61.5% female; 81.5% educated above college level; 99.0% from the U.S.; 98.5% with English as the first language; 62.5% 26 to 55 years old). Since the number of tasks was greater in Study 2b than in Study 1 and 2a, each participant received 60 cents as compensation. However,

some participants might give up in the middle of the study due to increasing tasks. Other participants might exit the study because they already participated the study. Participants were randomly assigned to one of four groups of a 2 (Self-obligation focus vs. Others-obligation focus) × 2 (Customer fault vs. Provider fault) between-subject factorial design. Before reading scenarios, participants received a priming of self/other obligation focus. Scenarios with free shuttle service in a hotel were used in the online experiment to create two levels for the factor of source of fault (see Appendix B).

Procedure

The procedure of the experiment was similar to that in Study 1 and Study 2a, except that in Part III of the questionnaire, each participant was randomly assigned to one of four groups to receive priming of self/others obligation focus (See Appendix C) and then read a scenario of high psychological contract (Scenario I-1, See Appendix B) and a scenario of customer/provider fault (Scenario III-1/-2, See Appendix B) (Sample size: Low fault & self obligation focus=54; Low fault & others obligation focus=48; High fault & self obligation focus =47; High fault & others obligation focus =56).

The priming procedure of self/others obligation focus was adapted from Wan et al. (2011). Before reading the scenarios, participants were asked to write down their thoughts about either self-obligation as a responsible citizen in a city or the city administrator's obligation to a city. After the scenarios had been read, a questionnaire of the manipulation check and measures of variables was administered.

Manipulation check

The manipulation of social obligation bias was checked by coding the number of self-obligation thoughts and the number of city administrator-obligation thoughts. Two coders coded

the number of thoughts independently. The intercoder agreement was 93.7% for self-obligation

thoughts and was 97.1% for others-obligation thoughts. Disagreements were resolved by coders'

discussion. In addition, a single-item, seven-point bipolar scale was used to check the

manipulation of source of fault as in Study 2a.

MANOVA analysis was used to check the manipulation of social obligation bias and

source of fault. The main effects were significant, which suggested that participants were primed

different levels of focus on self-obligation (3.62 vs. 0, $F(1,201)=345.72$, Wilks' Lambda = 0.19,

Partial eta squared = 0.63, $p<0.01$) and city-administrator obligation (0 vs. 2.86,

$F(1,201)=472.03$, Wilks' Lambda = 0.19, Partial eta squared = 0.70, $p<0.01$) and could

differentiate the two levels of source of fault (4.00 vs. 4.73, $F(1,201)=590.79$, Wilks' Lambda =

0.25, Partial eta squared = 0.75, $p<0.01$). The main effect of social-obligation bias on source of

fault, the main effect of source of fault on self-obligation thoughts and other-obligation thoughts,

and the interaction effects of both on self-obligation thoughts and others-obligation thoughts and

source of fault were all not significant, which suggested a lack of confounding effects (Perdue

and Summers, 1986).

Measures

Dependent variables. Psychological contract breach was measured by a five-item, seven-

point scale adapted from Robinson and Morrison (2000), as in Study 1 and Study 2a. Attribution

of controllability was measured by a three-item, seven-point scale adapted from Wagner et al.

(2009). Cronbach's alpha for the two scales were all acceptable (Psychological contract

breach=0.98; Attribution of controllability=0.84).

Covariate variables. Importance of the free shuttle service, brand strength and task

involvement were all measured by scales as in Study 1 and Study 2a. Cronbach's alpha (α) was

used to check the reliability of the multiple-item scale, brand strength. The results showed an acceptable alpha (α=0.91).

Demand effect. The demand effect was tested using the Perceived Awareness of the Research Hypotheses (PARH) scale as in Study 1, Study 2a and Study 2b. The PARH items had good internal consistency (α=0.88). Item scores were averaged to produce an index. A one-sample t-test showed that participants' mean PARH score was significantly lower than the scale's midpoint of 4.00 (M=3.32, SD=1.35, t(204)=-7.15, p<0.01). In addition, the PARH did not correlate significantly with any of the dependent variables (p>0.10 in all cases). Hence, no evidence showed that the results could be explained by the artifact of the participants' expectations.

Realism. Realism of the scenarios was measured by a single-item, seven-point scale suggested by Wan et al. (2011), as in Study 2a. A one-sample t-test showed that participants' mean of realism score was significantly higher than the scales' midpoint of 4.00 (M=5.70, SD=1.25, t(204)=19.49, p<0.01). In addition, the score of realism did not correlate significantly with the dependent variables (p>0.05 in all cases). Hence, data supported that the realism of the scenarios was acceptable.

Hypothesis testing

ANOVA analysis and contrast analysis of group comparisons were used to analyze the interaction effect of social obligation bias and source of fault on attribution of controllability. Results indicated that social obligation bias and source of fault have no interaction effect on attribution of controllability (F(1,201) =0.117, Partial eta squared = 0.001, p>0.10). However, results of contrast testing indicated that participants in the others-obligation focus and provider-fault condition reported a higher level of controllability than those did in the self-obligation focus

and provider fault condition (6.42 vs. 5.87, t(201)=2.43,p<0.05), those in the others-obligation focus and consumer fault condition (6.42 vs. 4.49, t(201)=8.69, p<0.01), and those in the self-obligation focus and consumer fault condition (6.42 vs. 4.07, t(201)=10.80, p<0.01) (See Table 5 and Figure 12). H_8 was supported, although the interaction effect of social obligation bias and source of fault was missing.

The mediation testing procedure suggested by Baron and Kenny (1986) was conducted to test the mediation effect of attribution of controllability on perception of psychological contract breach (See Table 6). First, social obligation bias, source of fault and the interaction term (social obligation bias × source of fault) were regressed on perception of psychological contract breach. The regression results indicated that source of fault had a significant main effect on perception of psychological contract breach (β=3.37, p<0.01). Social obligation bias × source of fault had no significant effect on breach. Social obligation bias had no significant main effect on breach. Second, social obligation bias, source of fault and the interaction term (social obligation bias × source of fault) were regressed on attribution of controllability. The regression results indicated that only source of fault had a significant main effect on attribution of controllability (β=1.82, p<0.01). The interaction effect of social obligation bias × source of fault and the main effect of social obligation bias on controllability were not significant. Finally, social obligation bias, source of fault, the interaction term (social obligation bias × source of fault) and attribution of controllability were regressed on perception of psychological contract breach. The regression results indicated that controllability had a significant direct influence on perception of psychological contact breach (β=0.448, p<0.01). H_7 was supported. By including controllability as an independent variable, the main effect of source of fault was still significant (β=2.55, p<0.01), but the value of β was reduced from 3.37 to 2.55, which suggested that controllability

could mediate the main effect of source of fault on breach. Sobel-z test results confirmed that controllability is a mediator of the main effect of source of fault on breach (z=4.74, p<0.01). H_{9a} was supported. Since the data provided no evidence to support the contention that controllability could mediate the main effect of social obligation bias and the interaction effect of social obligation bias and source of fault on breach, neither H_{9b} nor H_9 was supported.

Discussion

Study 2b provided evidence that attribution of the service provider's controllability over the failure situation may positively influence participants' perception of psychological contract breach. If participants attribute more controllability to the service provider, they may perceive higher levels of breach.

Experimental results indicated that information about who is the source of fault directly related to the transaction failure influences participants' attribution of the service provider's controllability. When participants were told that the service provider was the source of fault, they tended to attribute higher controllability of the failure situation to the service provider; when they were told that the customer was the source of fault, they tended to attribute low controllability of the failure situation to the service provider. Hence, attribution of controllability mediated the influence of source of fault on breach.

Results of Study 2b did not indicate an interaction effect of source of fault and social obligation bias on attribution of controllability. However, when participants were told that the service provider was the source of fault and were primed others-obligation focus, they were more likely than participants in the other three conditions to attribute high controllability to the service provider and thus reported the highest level of perception of breach in all groups.

Study 3

Participants and design

The objective of Study 3 was to test whether the influence of compensation relevance and justice belief salience on recovery of negative outcomes brought about by psychological contract breach—feelings of betrayal and anger, and evaluation of partner quality— can be mediated by customers' perception of fairness. Two hundred and fifty-nine participants from Mturk.com's worker pool were recruited to Study 3. Fifteen of them participated Study 1, 2a or 2b and fifty-three of them did not answered all questions, and therefore were exclude, which left one hundred and ninety-two (58.3% female; 76.1% educated above college level; 98.0% from the U.S.; 97.4% with English as the first language; 65.6% 26 to 55 years old). Each participant received 60 cents as compensation. Again, the increasing missing data could be due to the increasing tasks. Moreover, some participants might find they already participated the study in the middle of the experiment. Participants were randomly assigned to one of four groups of a 2 (high relevance vs. low relevance) $\times$ 2 (high justice salience vs. low justice salience) between-subject factorial design. Before reading scenarios, participants received priming low/high justice belief salience (see Appendix C). Scenarios with free shuttle service in a hotel were used in the online experiment to create the context of a high level of psychological contract breach (see Appendix B). After reading scenarios, participants were shown a gift card provided by the hotel in the scenarios, which manipulated two levels of compensation relevance (see Appendix C).

Procedure

The procedure of the experiment was similar to that in Study 1, Study 2a and Study 2b, except that in Part III of the questionnaire, each participant was randomly assigned to one of four groups to receive priming of high/low justice salience and to read a scenario of high psychological contract (Scenario I-1, See Appendix B) and a scenario of provider fault (Scenario

III-2, See Appendix B), after which each was shown a gift card with relevant/irrelevant compensation (Sample size: low justice salience & low relevance=48; low justice salience & high relevance=47; high justice salience & low relevance =52; high justice salience & high relevance =45).

The priming of justice salience was adapted from Karremans and Van Lange (2005). Before reading the scenarios, participants received a task of evaluating a picture of Justitia (high justice salience), the Roman goddess of justice, (a woman, blindfolded, holding scales in one hand), or a garden (low justice salience) (see Appendix C). In the high justice salience condition, participants were asked to write down the sentence of the definition of justice in a blank ("The world is a just world. People will be rewarded for the good they have done and will be punished for the evil they have done"). Then, participants in both high/low justice salience conditions were asked to write down their thoughts about the picture shown to them.

After reading the scenarios, participants were shown a gift card as compensation that either highly or lowly relevant to their consumption goals in the scenarios. In the high compensation relevance condition, the gift card was a $30 coupon from a taxi company. In the low compensation condition, the gift card was a $30 coupon for downloading movies online. After the participants were shown the gift card, a questionnaire of manipulation check and measures of variables were administered.

Manipulation check

The priming of justice salience was checked by coding the number of thoughts about justice in participants' thoughts regarding the picture they had viewed. Two coders coded the number of thoughts independently. Intercoder agreement for justice thoughts was 89.6%. Coders resolved disagreements through discussion. In addition, a single-item, seven-point bipolar scale

was used to check the manipulation of compensation relevance, which asked participants to rate the relevance of the gift card to their goal of using the free shuttle service in the scenarios.

MANOVA analysis was used to check the manipulations of compensation relevance and justice belief salience. Results indicate that the main effects are significant, which suggest that participants were primed different levels of justice salience (0.02 vs. 1.68, $F(1,184)=76.14$, Wilks' Lambda = 0.99), Partial eta squared = 0.29, $p<0.01$) and could differentiate the two levels of compensation relevance (2.51 vs. 5.77, $F(1,184)=167.84$, Wilks' Lambda = 0.52, Partial eta squared = 0.48, $p<0.01$) (See Table 5). The main effect of justice belief salience on compensation relevance, the main effect of compensation relevance on justice salience, and the interaction effects of both on justice salience and compensation relevance are all not significant, which suggested absence of confounding effects (Perdue and Summers, 1986). Data tended to support the conclusion that the manipulations of justice belief salience and compensation relevance both have worked successfully.

Measures

Dependent variables. Perception of fairness was measured with a three-item, seven-point bipolar scale adapted from Gregoire et al. (2006) ("Given the hotel's response, the situation you experienced in the hotel was: fair vs. unfair, just vs. unjust, equal vs. unequal"). Feelings of betrayal and anger and evaluation of partner quality were measured with the same scales as in Study 1. Cronbach's alpha (α) was used to check the reliability of the multiple-item measures. The results showed that they all have acceptable alpha (perception of fairness=0.96; feelings of betrayal=0.92; anger=0.93, partner quality=0.86).

Covariate variables. Importance of the free shuttle service, brand strength and task involvement were all measured by scales similar to those used in Study 1, Study 2a and Study

2b. Cronbach's alpha (α) was used to check the reliability of the multiple-item measure, brand strength. The results showed that it has acceptable alpha (α =0.91).

Demand effect. The demand effect was tested using the Perceived Awareness of the Research Hypotheses (PARH) scale as in Study 1, Study 2a and Study 2b. Data showed that the PARH items had good internal consistency (α=0.88). Item scores were averaged to produce an index in which the higher the score, the more participants believed that they were aware of the research hypotheses during the experiment. A one-sample t-test showed that participants' mean PARH score was significantly lower than the scale's midpoint of 4.00 (M=3.15, SD=1.22, t(191)=-9.62, p<0.01). In addition, the PARH did not correlate significantly with any of the dependent variables (p>0.10 in all cases). Hence, no evidence showed that the results could be explained by the artifact of the participants' expectations.

Realism. Realism of the scenarios was measured by a single-item, seven-point scale suggested by Wan et al. (2011), as in Study 2a and Study 2b. A one-sample t-test showed that participants' mean realism score was significantly higher than the scale's midpoint of 4.00 (M=5.32, SD=1.41, t(191)=13.03, p<0.01). In addition, the score of realism did not correlate significantly with the dependent variables (p>0.10 in all cases). Hence, data indicated that the realism of the scenarios is acceptable.

Hypothesis testing

ANOVA analysis and contrast analysis of group comparisons were used to analyze the interaction effect of compensation relevance and justice belief salience on perception of fairness. ANOVA analysis results indicated that compensation relevance and justice salience have an interaction effect on perception of fairness (F(1,184)=13.93, Partial eta squared = 0.07, p<0.01). Results of contrast testing indicated that participants in the condition of high relevance and low

justice salience reported higher perception of fairness than those in the high relevance and high justice salience condition (5.63 vs. 4.51, t(188)=3.28, p<0.01), those in the low relevance and high justice salience condition (5.63 vs. 3.28, t(188)=7.95, p<0.01), and those in low relevance and low justice salience condition (5.63 vs. 2.61, t(188)=9.74, p<0.01) did (See Table 7 and Figure 13). H_{11} was significantly supported.

The mediation testing procedure suggested by Baron and Kenny (1986) was conducted to test the mediation effect of perception of fairness on feelings of betrayal, anger and partner quality (See Table 8). First, feelings of betrayal and anger and evaluation of partner quality were regressed on compensation relevance, justice salience and the interaction term (compensation relevance × justice salience). The regression results indicated that compensation relevance had significant main effects on feelings of betrayal (β=-1.64, p<0.01), anger(β=-1.55, p<0.01), and partner quality (β=1.13, p<0.01). Compensation relevance × justice salience likewise had a significant effect on feelings of betrayal (β=1.26, p<0.01), anger (β=1.18, p<0.05), and partner quality (β=-0.62, p<0.05). Justice salience had no significant main effects on any of the three dependent variables. Second, perception of fairness was regressed on compensation relevance, justice salience and the interaction term (compensation relevance × justice salience). The regression result indicated that compensation relevance has a significant main effect on perception of fairness (β=2.92, p<0.01). Justice salience likewise had a significant main effect on perception of fairness (β=0.73, p<0.05). The interaction effect of psychological contract and transaction on psychological contract breach was also significant (β=-1.77, p<0.01). Finally, feelings of betrayal, anger, and partner quality were regressed on compensation relevance, justice salience, the interaction term (compensation relevance × justice salience) and perception of fairness. The regression results indicated that perception of fairness had a significant direct

influence on feelings of betrayal (β=-0.49, p<0.01), anger (β=-0.43, p<0.01), and partner quality (β=0.33, p<0.01). H_{10a}, H_{10b}, and H_{10c} are all supported. When perception of fairness was included as an independent variable, the significant main effect of compensation relevance and interaction effect of compensation relevance and justice salience all disappeared, which suggested that perception of fairness could mediated the two disappeared effects. Sobel-z test results (See Table 4) confirmed that perception of fairness was a mediator of the interaction effect of compensation relevance and justice belief salience on feelings of betrayal (z=3.38, p<0.01), anger (z=3.39, p<0.01), and partner quality (z=-3.36, p<0.01). Thus, H_{12}, H_{13} and H_{14} were supported. Perception of fairness was also a mediator of the main effect of compensation fairness on feelings of betrayal (z=-5.90, p<0.01), anger (z=-5.93, p<0.01), and partner quality (z=5.79, p<0.01). H_{12a}, H_{13a} and H_{14a} were supported.

Discussion

Study 3 provided a clear picture of how a recovery attempt may offset negative outcomes brought about by customers' perception of psychological contract breach. When the service provider provided compensation that is highly relevant to the customer's goal of using the service (e.g., a $30 gift card for a taxi service), participants were more likely to perceive fairness of the recovery attempt than they were when low-relevance compensation was provided (a $30 gift card for downloading movies). The more fairness perceived, the less negative were the responses participants developed. If participants perceived high levels of fairness in the recovery attempt, they reported low levels of feeling of betrayal and anger and inferred high capabilities of the service provider to be a good partner. In contrast, if participants perceived low levels of fairness, they reported high levels of feelings of betrayal and anger and inferred that the service provider was not capable of being a good partner. Hence, perception of fairness mediated the

influence of compensation relevance on negative outcomes caused by psychological contract breach.

However, when participants received priming of high justice salience, they exhibited a tendency toward egocentric fairness bias, perceiving lower levels of fairness than those not received priming of justice salience when the relevant compensation was provided. In other words, the effectiveness of relevant compensation was reduced when participants had high levels of justice salience. In contrast, participants who did not receive priming of justice belief did not exhibit a tendency toward egocentric fairness bias, and therefore, when provided with relevant compensation, they reported higher levels of perception of fairness than did those in all other conditions (high justice salience & high relevance, low justice salience & low relevance, and low justice salience& high relevance). Consequently, they reported fewer feelings of betrayal, less anger, and a higher evaluation of partner quality than other participants did. In sum, perception of fairness mediated the interaction effect of justice belief salience and compensation relevance on recovering negative outcomes of customers' perception of psychological contract breach.

Chapter 5

General Discussion

Limitations

Some considerations should be taken for generalizing the findings and conclusions of this research. First, though realism of scenarios was examined and was acceptable in this research, some cautions should be taken because of the inherent limitation of scenario studies. First, the PARH scale may assess whether participants felt they might know the hypothesis of the research, but not whether they actually did know. Second, participants' responses were in the basis of their thoughts regarding the scenarios not of their real experiences. The strength of their responses may be different between laboratory experiments and real experiences. A field study may be conducted in future research.

Second, though MTurk.com was demonstrated as one reliable source to collect data, previous research also cautions future researchers when using it for studies requiring high attention on study materials and instruction (Goodman et al. 2012). MTurk participants may be not as motivated as student samples in cognitive processing. Hence, it is important to encourage them to be attentive.

Finally, the correlations between psychological contract breach, feelings of betrayal, and anger were high in this research, which may cause problems of collinearity. This problem may be resolved when using structural equation modeling in future analysis.

Discussion

Study 1 introduced a theoretical process for investigating the influence of psychological contract on customers' reaction to service failure. Service providers' marketing strategies intended to attract customers may strengthen customers' psychological contract. If customers

find that perceived promises in promotions, advertising or personal selling are not fulfilled during the actual consumption experience, they may perceive psychological contract breach. This study demonstrated that perceived psychological contract breach might have a negative impact on building of customer-firm relationships by leading to customers' negative reactions, such as feelings of betrayal and anger as well as a negative evaluation of partner quality.

However, customers who perceive a strong psychological contract may not always perceive a high level of psychological contract breach in the event of a transaction failure. Study 2a indicated that information about who was the source of fault might mitigate the influence of psychological contract on a perceived breach. Some service providers may believe that following the adage of "the customers is always right" will earn customers' trust and reduce negative reactions. However, this study finds that when customers have strong perceived psychological contract, those who believe that the service provider was the source of fault perceived a higher level of breach than those who believe that the customer was the source of fault during a transaction failure. Hence, service providers must exercise caution in giving customers information about who is at fault in the failure. When customers make mistakes, they must be informed the truth, to prevent customers' negative reactions.

Study 2b demonstrated the important role of attribution of controllability in customers' perceptions of psychological contract breach. Study 2b did not find strong evidence that social obligation bias was a predictor of either attribution of controllability or psychological contract breach. However, it provided evidence that when customers with strong psychological contract focused mostly on others-obligations and believed that the service provider was at fault, they attributed more controllability to the service provider and therefore perceived a higher level of breach than did other customers. Hence, when service providers make mistakes, they need to be

aware that customers who tend to focus on others-obligations may react more negatively than those who tend to focus on self-obligations. When service providers acknowledge that a service failure has occurred, it may be more effective to emphasize customers' own obligations than service providers' obligations, to avoid attribution of controllability to service providers and perception of high levels of psychological contract breach.

Negative outcomes brought about by perception of psychological contract breach may be mitigated by service providers' recovery attempt. Study 3 delivered a clear picture of how compensation that was relevant to customers' consumption goals raises participants' perception of fairness and thereby reduces feelings of betrayal and anger and boosts their evaluation of partner quality. Study 3 reemphasized the important role of perception of fairness in service recovery. However, emphasizing justice and fairness may not be wise during service recovery. Relevant compensation may be effective only in customers with low justice belief salience. When customers believe that the world is just, their egocentric fairness bias may more likely be activated so that they may perceive less fairness and react more negatively than they otherwise would. Hence, service providers need to not only make an effort to design an effective recovery strategy but also understand that their strategy may not work because of customers' accessibility to justice belief. A service environment and/or an interpersonal communication that can ease customers' tension and focus on justice may be useful for increasing the effectiveness of recovery attempts.

In general, this dissertation demonstrates that psychological contract breach is an important construct for understanding customers' negative reactions during service failure. Outcomes brought about by psychological contract breach can be even more negative than those brought about by other service failure situations, such as when customers find that their actual

consumption experience does not match their expectations. Hence, psychological contract breach may hinder development of a good relationship with new customers and lower the probability that they will revisit.

The literature of service failure revealed that acts of betrayal are extremely difficult to forgive and forget (Finkel et al. 2002). The research described in this dissertation found that service providers might recover from negative outcomes through promoting customers' perception of fairness. Only one kind of recovery strategy, relevant versus irrelevant compensation, was tested. Further research may explore other kinds of recovery strategy. Many individual factors may constrain or enhance effectiveness of recovery attempts. This dissertation only explored one of them, justice salience. Further research may test additional individual factors.

Future Research

Many situational factors and individual factors may influence customers' perception of psychological contract breach. This dissertation explored only one situational factor, source of fault, and one individual factor, social obligation bias. It thus leaves numerous opportunities for further research. First, customers may react differently in terms of different types or severity of failures. For example, service failures could be outcome failure (e.g., the customer does not achieve consumption goals) or process failure (e.g., slow services) (Sivakumar, Li and Dong 2014). Second, customers may also react differently to the situations that the service provider has inability to fulfill its promises and that it is unwilling to fulfill them. For example, the service provider may not be able to act as promised because of its poor management; it may also refuse to act as promised on purpose in order to reduce cost. Third, customers may react differently because of strength of customer-firm relationships (Gregoire et al., 2009; Morrison and Robison

2000). Fourth, customers may be have different levels of vigilance to recognize a discrepancy between his or her perceptions of what was promised and of what he or she actually received (Morrison and Robinson 2000). Fifth, customers may vary in terms of their equity sensitivity. Finally, brand strength could also influence customer reactions. These are some examples of interesting future research (Morrison and Robinson 2000).

Moreover, this dissertation focused only on perception of fairness as a process during recovery of negative outcomes brought about by psychological contract breach. The literature also suggested the possibility of recovering from service failures through the trust-recovery mechanism and the justice-forgiveness association. To repair a relationship and restore trust, one party must develop forgiveness toward the party that committed transgressions, betrayals, or other harmful actions (Xie and Peng 2010). Research suggests that a process of reevaluation of trustworthiness can drive the development of consumer forgiveness, which provides a foundation for relationship restoration (Xie and Peng 2010). Future research may investigate processes of customers' development of forgiveness and its effects on recovering from negative outcomes brought about by psychological contract breach.

Finally, this dissertation only explores the situations of perception of high versus low psychological contract breach. In real life, it is possible that customers perceive a moderate level of breach. For example, the free shuttle may not be provided at the time the customer request it but will be available two hours later. It will be interesting to study different extents of breach.

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APPENDIX A

STORIES

Please read the three stories about hotel services from a magazine:

Story 1:

      A couple from the United States traveled to Beijing with their six-month-old baby girl. This was the couple's first child and they were understandably nervous about traveling with her on a 16-hour flight. They called the hotel before their trip to inquire about babysitting services and the hotel's facilities. When they arrived in Beijing, the hotel gave them a warm welcome to put them at ease. The family was escorted to their room, where the hotel had set up a baby tub with rubber ducks, a baby bottle steamer, milk warmer and a night light for the guests. The hotel also placed a humidifier in the room since the family might not be used to the extremely dry conditions in Beijing. The family was overwhelmed by the hotel's attention to detail.

Story 2:

      From John Updike to Alice Walker, many famous authors have rested their imaginative heads on The Heathman's pillows and thrown back whiskeys at the hotel bar. It's no surprise, then, that the property's on-site library, which holds more than 2,000 catalogued works by the register of authors who have stayed at the hotel, is one of the few of its kind in the country. Guests are free to browse the stacks and enjoy signed first editions in the library's well-loved plush chairs. Or, they can take a book back to their room if they just can't put it down.

Story 3:
The following story came from Ellen Smith –

      I was going to San Francisco for a two-day holiday vacation with friends to celebrate my birthday in the following week and looking for some place to stay. My budget was tight and did not allow me to find an expensive nice hotel. When I was searching online, the name of Valley View hotel popped up on the computer. Valley View is a well-known, high quality hotel chain and not expensive. However, I found later that this Valley View hotel is in a suburban area and it might take you 30 minutes to get to the beaches. I hesitated to reserve the Valley View hotel, but I was busy and did not want to spend too much time to find a comparable alternative at the same price level. Finally, I decided to call the Valley View hotel to find out if they offer transportation.

APPENDIX B

SCENARIOS

I-1. High Psychological Contract

I was going to _____ (a city) for a two-day holiday vacation with friends to celebrate my birthday in the following week and looking for some place to stay. My budget was tight and did not allow me to find an expensive nice hotel. When I was searching online, the name of Valley View hotel popped up on the computer. Valley View is a well-known, high quality hotel chain and not expensive. However, I found later that this _____ hotel is in a suburban area and it might take you 30 minutes to get to the beaches. I hesitated to reserve the Valley View hotel, but I was busy and did not want to spend too much time to find a comparable alternative at the same price level. Finally, I decided to call the _____ hotel to find out if they offer transportation.

After listening to my concern, the receptionist kindly said, "Don't worry. We offer free shuttle services. You may contact us one day before when you want to use it, and we promise we will be ready to take you to beaches and anywhere else in town."

I was glad to hear this news and reserved a room immediately.

I-2. Low Psychological Contract

I was going to _____ (a city) for a two-day holiday vacation with friends to celebrate my birthday in the following week and looking for some place to stay. My budget was tight and did not allow me to find an expensive nice hotel. When I was searching online, the name of Valley View hotel popped up on the computer. Valley View is a well-known, high quality hotel chain and not expensive. However, I found later that this _____ hotel is in a suburban area and it might take you 30 minutes to get to the beaches. I hesitated to reserve the Valley View hotel, but I was busy and did not want to spend too much time to find a comparable alternative at the same price level. Finally, I decided to call the _____ hotel to find out if they offer transportation.

I found a customer review from a popular travelling website that said, "The _____ hotel is located in a suburban area and is far from beaches. But don't worry, they have free shuttle services. I used it to go to beaches, Fisherman's Wharf and Union Square." 38 of 41 people found this review helpful.

I was glad to hear this news and reserved a room immediately.

II-1. High Transaction Failure

You arrived at the _____hotel with friends at noon and planned to celebrate your birthday in the hotel for the rest of the day and then go to the beaches the following day. The room was beautiful and clean. The beds were super comfortable. The next day, you went to the front desk to make a reservation for the shuttle service to ____ (a must-go place). The manager said, "I am sorry, but we are not able to provide free shuttle services today."

II-2. Low Transaction Failure
You arrived at the _____hotel with friends at noon and planned to celebrate your birthday in the hotel for the rest of the day and then go to ____ (a must-go place) the following day. The room was beautiful and clean. The beds were super comfortable. The next day, you went to the front desk to make a reservation for the shuttle service to ____ (a must-go place). The manager said, "Sure. The free shuttle will be ready for you anytime you are ready."

III-1. Service Provider fault
You arrived at the _____ hotel with friends at noon and planned to celebrate your birthday at the hotel for the rest of the day and then go to ____ (a must-go place) the following day. The room was beautiful and clean. The beds were super comfortable. You went to the front desk to make a reservation for the shuttle service to ____ (a must-go place) for the next day. The manager said, "I am sorry, but we are not able to provide free shuttle services for you today. We forgot to renew the contract with the shuttle company for this year. The new contract will start from next month."

III-2. Customer fault
You arrived at the _____ hotel with friends at noon and planned to celebrate your birthday at the hotel for the rest of the day and then go to ____ (a must-go place) the following day. The room was beautiful and clean. The beds were super comfortable. You forgot to reserve the free shuttle. The next day, you went to the front desk to ask for the free shuttle service to ____ (a must-go place). The manager said, "I am sorry, but we are not able to provide free shuttle services for you today. The free shuttle services should be reserved one day before you want to use it."

APPENDIX C

MANIPULATIONS

Justice Salience

This is part of the study. Please follow the instruction as below.
Strong justice salience
Please evaluate the picture of Justitia, the Roman goddess of justice, shown below. It will be used as the cover for a new book. This book is about justice in the service industry.

Please type the following sentence in the box as below. These words are from the new book. You need to read and type each word in the box.
"The world is a just world. People will be rewarded for the good they have done and will be punished for the evil they have done."

Please evaluate the picture. Is it appropriate for the new book?

Weak justice salience
Please evaluate the picture of a garden shown you as below. It will be used as the cover for a new book. This book is about garden design for hotels.

The image shown to you is
1. Beautiful
2. Nice
3. Recognizable
(7-point scales from 1=not at all to 7=very much)

Compensation Relevance

The manager then handed you a gift card and says that it is a compensation for you for the inconvenience. The cost from the ___ hotel to ___ (must-go place) is around $30 - $35.

Compensation-1: Relevant Compensation

Compensation-2: Irrelevant

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$30

Code: Valleyview233
Gift card expires on 12/31/2013

Compensation

Please rate the **relevance** of the gift card with your goal to use the free shuttle services
Not at all __ __ __ __ __ __ __ Very much

APPENDIX D

MEASURES

1. Psychological contract:
Imagine you are in the above mentioned situation at the ___ hotel and answer the following questions.
Please indicate to what extent you agree with each of the statements.
- If you reserve free shuttle services, the ___ hotel is committed to provide it for you.
- The ___ hotel made the commitment or obligation to you that free shuttle services will be ready for you when you reserve it.
- The ___ hotel is obligated to provide free shuttle services for you when you reserve it.

2. Service transaction failure
Imagine you are in the above mentioned situation at the ___ hotel and answer the following questions.
Please indicate to what extent you agree with each of the statements.
- The _____ hotel did not provide free shuttle services to you when you wanted to use it.

3. Psychological contract breach
Imagine you are in the above mentioned situation at the Valley View hotel and answer the following questions.
- The ___ hotel broke their promise of providing free shuttle services after I chose the hotel.
- The ___hotel has, to a large extent, failed to meet their commitments to me, i.e., free shuttle services, after I chose the hotel.
- The promise made by the ___hotel in our transaction that free shuttle services would be available in anytime has been broken so far.
- I feel that the ___hotel has NOT come through in fulfilling the promise of providing free shuttle services in our transaction.
- So far the ___hotel has done an excellent job of fulfilling its promise of providing free shuttle services.

4. Feelings of betrayal
If I were the customer in the situation, I would feel that
- the ___ hotel has cheated me.
- the ___ hotel has betrayed me.
- the ___ hotel has lied to me.

5. Anger
If I were the customer in the situation, I would feel
- outraged;
- resentful;
- indignant;
- very angry toward the ___ hotel.

6. **Partner quality**

Imagine you are in the above mentioned situation at the Valley View hotel and indicate how much you agree with the following statements.

- I can always count on the _____hotel to do what's best.
- If the _____hotel makes a mistake, it will try its best to make up for it.
- I know I can hold the _____hotel accountable for its actions.
- The firm is reliable.
- Given my image of the _____hotel, letting me down would surprise me.
- A service failure would be inconsistent with my expectations.

7. **Controllability**

I feel that the situation in the _____ hotel

- was controllable by the _____ hotel;
- was something the _____ hotel had power over
- could not have been regulated by the _____ company (reversed).

8. **Source of fault**

Who made the mistake that was directly related to the outcome for the customer in the ____hotel?

The customer __ __ __ __ __ __ __ The ____hotel

9. **Perception of fairness**

Given the ___hotel's response, the situation you experiences in the hotel was

unfair __ __ __ __ __ __ __ fair

inequitable __ __ __ __ __ __ __ equitable

unjust __ __ __ __ __ __ __ just

10. **Importance of the free shuttle service**

Please indicate how **important** the free shuttle service is if you stay in the Valley View hotel.

Not at all important__ __ __ __ __ __ __ __ __ __ Extremely important

11. **Expectation of the free shuttle service**

How likely do you think it is that the ___ hotel will provide free shuttle services in the future?

Zero likelihood __ __ __ __ __ __ __ Certain

12. Trustworthiness of the information source

Please rate trustworthiness of the source of the information related to free shuttle services in the scenario

Very incredible__ __ __ __ __Very credible

Very unreliable__ __ __ __ __Very reliable

Very untrustworthy__ __ __ __ __Very trustworthy

13. Task Involvement

Please rate your motivation to read the story of the _____ hotel.

I am not interested__ __ __ __ __I am highly interested

I am not involved__ __ __ __ __I am highly involved

14. The Perceived Awareness of the Research Hypothesis (PARH) Scale

<u>Your Thoughts About the Research</u>

Please indicate how much you agree or disagree with each of the following statements:

- I knew what the researchers were investigating in this research.
- I wasn't sure what the researchers were trying to demonstrate in this research.
- I had a good idea about what the hypotheses were in this research.
- I was unclear about exactly what the researchers were aiming to prove in this research.

15. Brand strength

Please indicate to what extend that you agree/disagree with the following statements about the ___hotel.

- My overall opinion about this brand of hotel chain is very favorable.
- I have positive feelings about this brand.
- I really like this brand of hotel chain.
- Using this brand of hotel chain makes me feel good about myself.
- If I had to name a single brand to represent all hotel chains, it would be this one.
- When I think of hotel chains, this is the brand that comes to mind.
- This brand is a very good example of my image of what a hotel chain is.

APPENDIX E

CODING SHEETS

I. Social Obligation Bias Coding Sheet

Social obligation bias is the customer's tendency to focus on self-obligation fulfillment or others' obligation fulfillment in exchanges in the marketplace.

a) In the condition of self-obligation focus, we asked participants to write down their thoughts about their own obligations to the city where they lived. Below is the task that we asked participants to do.

*Please write down all of your thoughts of your own obligations to live as a responsible citizen as a resident of the city where you live. Please begin a new line for each new <u>thought.</u> Try to list as many thoughts as you can (at least three). You will have two minutes for this task.

As a resident of the city, I am obligated to-

We code the number of these thoughts as self-obligation focus thoughts.

b) In the condition of other-obligation focus, we asked participants to write down their thoughts about the city administrator's obligations to the city where they lived. Below is the task that we asked participants to do.

*Please write down all of your thoughts of obligations that a city administrator might have to the city where you live. Please begin a new line for each new <u>thought.</u> Try to list as many thoughts as you can (at least three). You will have two minutes for this task.

The city administrator is obligated to--

We code the number of these thoughts as other obligation focus thoughts.

We asked participants to begin a new line for each new thought. So, the number of thoughts is usually the number of lines. However, some participants may squeeze all thoughts into one line, some participants may not finish writing a thought in a line, and some participants may not write things that are related to the task.

Your duty is to
1) count the number of lines of each participant's thought of self obligation or other ;
2) distinguish different thoughts in a line;
3) identify an unfinished thought, which cannot be added to the total number;
4) identify thoughts that are not related to the question, which cannot be added to the total number.
5) identify repeated thoughts, which cannot be added to the total number.

The total number of thoughts for each participant about self obligations or others obligations are based on all the four items listed above.

II. Justice Salience Coding Sheet

Justice belief salience is defined as customers' accessibility to a just world belief.

1) A presence of one of any of the words listed below can be counted one.
2) If one word presences twice, it can be counted two…
3) Some participants may have thoughts related to justice that don't use any words listed, you may count the number of this kind of thoughts and add it to the total number.
4) Some participants may use the words listed below but the meaning of the word is not related to justice. You need to identify them and not add them to the total number.

____ Just
____ Justice
____ Court
____ Law
____ lawyer
____ Fairness
____ fair
____ Equality
____ Order
____ Judge
____ Jury
____ Trail
____ Balance
____ Honest
____ Truth
____ Moral
____ Human right
____ Democracy
____ Freedom
____ Punishment (punish)
____ Government

TABLES

Table 1. The impact of psychological contract and transaction failure

Dependent Variables	Low Failure	High Failure
Psychological Contract Breach:	Mean (SD)	Mean (SD)
Low Psychological Contract	1.96 (1.55)	5.08 (1.79)
High Psychological Contract	1.72 (1.22)	6.24 (1.03)
Feelings of Betrayal:		
Low Psychological Contract	1.85 (1.40)	4.41 (1.96)
High Psychological Contract	1.84 (1.40)	5.83 (1.29)
Anger:		
Low Psychological Contract	2.02 (1.59)	4.34 (1.88)
High Psychological Contract	1.83 (1.40)	5.42 (1.28)
Partner Quality:		
Low Psychological Contract	5.58 (1.09)	4.02 (1.22)
High Psychological Contract	5.59 (1.14)	3.99 (1.38)

Table 2. The mediation effects of Psychological Contract Breach

Predictor	Psychological contract breach		Feelings of Betrayal				Anger				Partner Quality			
	Step 1		Step 2		Step 3		Step 2		Step 3		Step 2		Step 3	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Psychological contract	-0.39	0.31	-0.104	0.333	0.214	0.219	-0.236	0.337	0.056	0.246	0.14	0.252	0.012	0.233
Transaction failure	3.09**	0.31	2.645**	0.342	0.091	0.281	2.427**	0.345	0.085	0.317	-1.409**	0.259	-0.385	0.299
Psychological contract*Transaction failure	1.47**	0.45	1.296**	0.489	0.08	0.33	1.058*	0.494	-0.057	0.371	-0.416	0.37	0.072	0.351
Psychological contract breach	NA	NA	NA	NA	0.827**	0.055	NA	NA	0.758**	0.062	NA	NA	-0.332**	0.059
ΔR^2	0.68		0.58		0.82		0.52		0.75		0.38		0.48	

Dependent Variables

Pearson correlations:

Breach & Feelings of betrayal: 0.89**

Breach & Anger: 0.86**

Breach & Partner quality: -0.61**

Feelings of betrayal & Anger: 0.95**

Feelings of betrayal & Partner quality: -0.58**

Anger & Partner quality: -0.57**

Note:

**: $p < 0.01$

*: $p < 0.05$

Table 3. Sobel-z test of the mediation effect of Psychological Contract Breach

Predictor	Dependent Variables		
	Feelings of Betrayal	Anger	Partner Quality
Psychological contract	NA	NA	NA
Transaction failure	8.23	7.77	−4.88
Psychological contract*Transaction failure	3.2	3.26	NA

Table 4. The impact of psychological contract and source of fault

Dependent Variables	Customer Fault	Provider Fault
Psychological Contract Breach:	Mean (SD)	Mean (SD)
Low Psychological Contract	3.34 (1.75)	5.71 (1.40)
High Psychological Contract	2.96 (1.89)	6.34 (1.05)

Table 5. The impact of source of fault and social obligation bias

Dependent Variables	Customer fault	Provider fault
Controllability:	Mean (SD)	Mean (SD)
Self obligation focus	4.07 (1.39)	5.87 (1.37)
Others obligation focus	4.49 (1.38)	6.42 (0.76)
Breach:		
Self obligation focus	2.77 (1.53)	6.15 (1.06)
Others obligation focus	3.09 (1.90)	6.60 (0.59)

Table 6. The mediation effects of attribution of controllability

Predictor	Dependent Variables					
	Step 1		Step 2		Step 3	
	controllability		breach		breach	
	β	S. E.	β	S. E.	β	S. E.
Source of fault	**1.82****	**0.253**	**3.37****	**0.275**	**2.554****	**0.283**
Obligation bias	0.433	0.255	0.152	0.278	0.117	0.256
Source of fault*Obligation bias	0.12	0.358	0.311	0.389	0.098	0.356
controllability	NA	NA	NA	NA	**0.448****	**0.071**
ΔR^2	0.37		0.619		0.682	

Pearson correlation:

Breach & controllability: 0.68**

Note:

**: $p < 0.01$

*: $p < 0.05$

Table 7. The impact of compensation relevance and justice belief salience

Dependent Variables	Low compensation relevance	High compensation relevance
Fairness:	Mean (SD)	Mean (SD)
Low justice belief	2.61 (1.66)	5.63 (1.34)
High justice belief	3.28 (1.60)	4.51 (1.91)
Betrayal:		
Low justice belief	5.04 (1.54)	3.27 (1.66)
High justice belief	4.64 (1.46)	4.08 (1.75)
Anger:		
Low justice belief	5.16 (1.30)	3.42 (1.44)
High justice belief	4.75 (1.31)	4.20 (1.71)
Quality:		
Low justice belief	3.89 (1.18)	4.98 (0.88)
High justice belief	4.14 (1.19)	4.62 (1.25)

Table 8. The mediation effects of Perception of Fairness

	Dependent Variables													
Predictor	Perception of fairness		Feelings of Betrayal				Anger				Partner Quality			
	Step 1		Step 2		Step 3		Step 2		Step 3		Step 2		Step 3	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Justice salience	.729*	0.326	0.497	0.312	-0.14	0.272	-0.475	0.273	-0.162	0.238	0.327	0.214	0.09	0.188
Compensation relevance	2.918**	0.335	-1.641**	0.32	-0.215	0.327	-1.547**	0.28	-0.295	0.286	1.125**	0.219	-0.177	0.227
Justice salience * Compensation relevance	1.765**	0.473	1.255**	0.452	0.392	0.404	1.181**	0.395	0.424	0.353	-0.623*	0.309	-0.049	0.279
Perception of fairness	NA	NA	NA	NA	-.489**	0.061	NA	NA	.429**	0.053	NA	NA	0.325**	0.042
ΔR^2	0.35		0.2		0.41		0.27		0.46		0.24		0.42	

Pearson correlations:
Fairness & Betrayal: -0.63**
Fairness & Anger: -0.60**
Fairness & Partner quality: 0.59**

Note:
**: p<0.01; *: p<0.05

Table 9. Sobel-z test of the mediation effect of Perception of Fairness

Predictor	Dependent Variables		
	Feelings of Betrayal	Anger	Partner Quality
Justice salience	NA	NA	NA
Compensation relevance	-5.898	-5.929	5.785
Justice salience * Compensation relevance	3.383	3.389	-3.361

FIGURES

	Relational contracts	Transactional contracts
Social relationship	Relational contracts in a social relationship	Transactional contracts in a social relationship
Transactional relationship	Relational contracts in a transactional relationship	Transactional contracts in a transactional relationship

Figure 1. Typology of psychological contracts
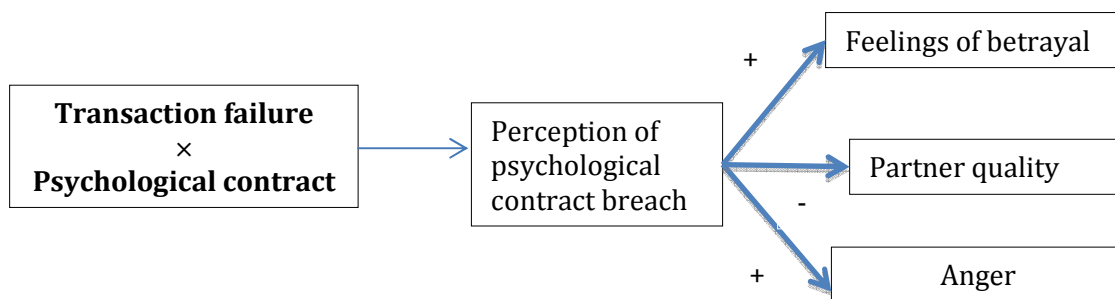
Figure 2. A basic model of psychological contract breach (Study 1)
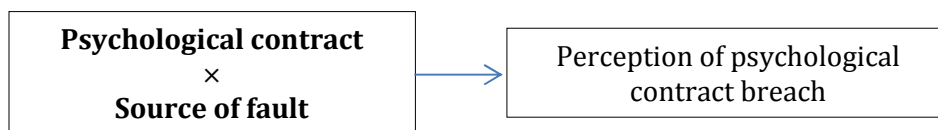
Figure 3. The interaction of source of fault and psychological contract on PCB (Study 2a)
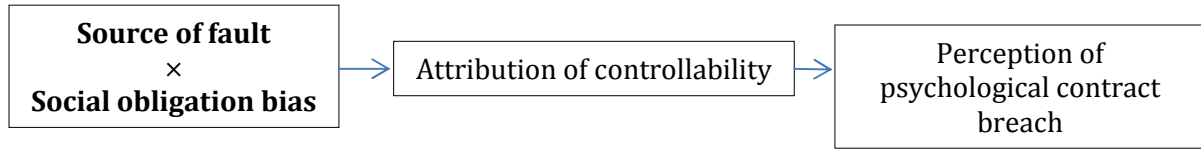
Figure 4. The interaction of source of fault and social obligation bias (Study 2b)
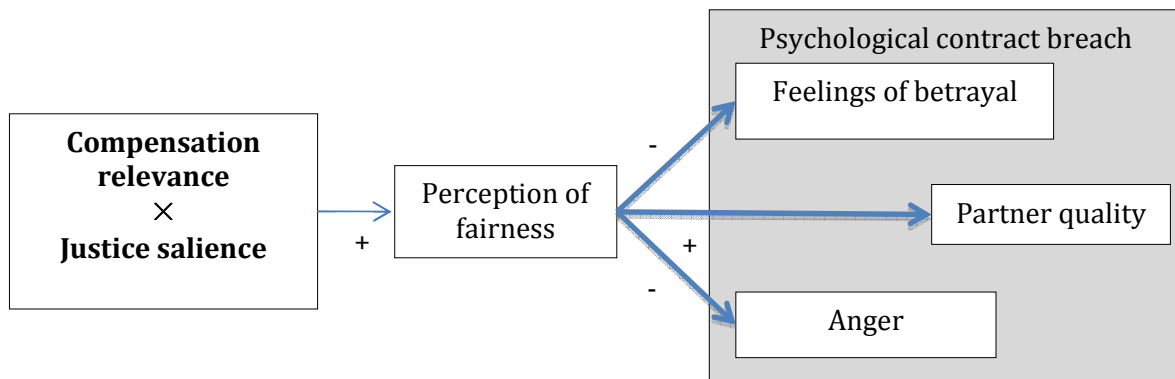
Figure 5. The role of compensation relevance, justice salience, and perception of fairness in recovering the negative outcomes of psychological contract breach (Study 3)
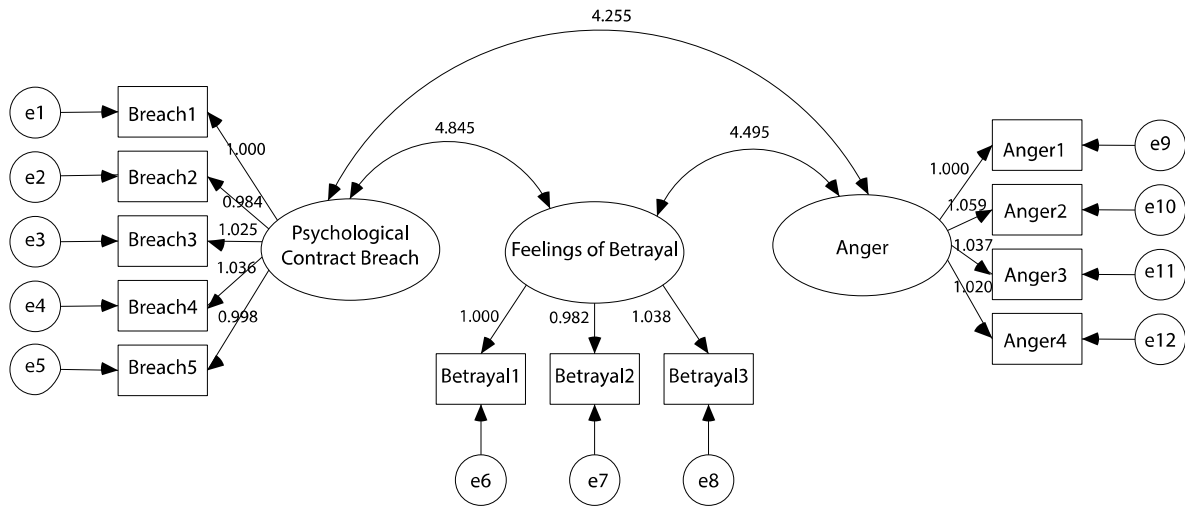
Figure 6. Model 1 of CFA analysis of discriminant validity
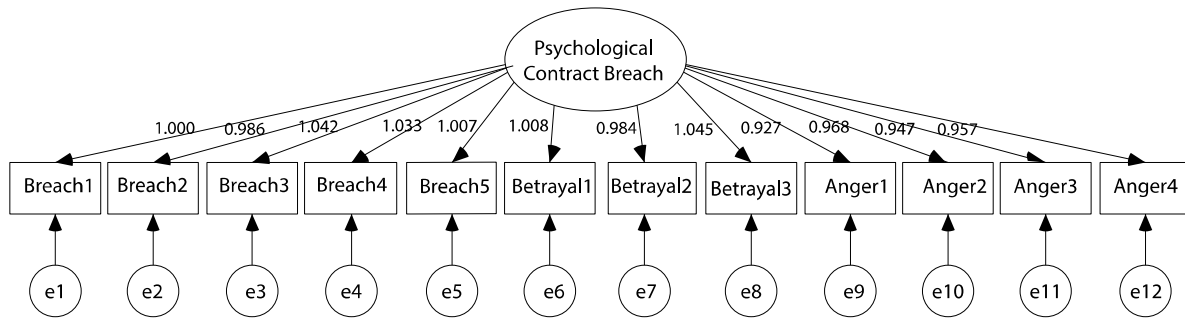
Figure 7. Model 2 of CFA analysis of discriminant validity
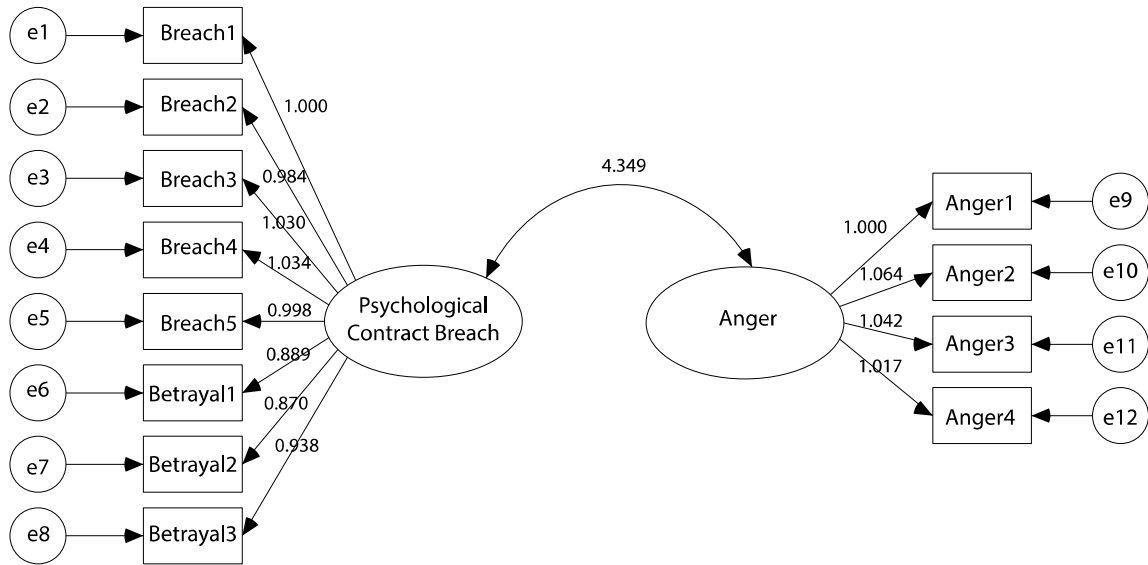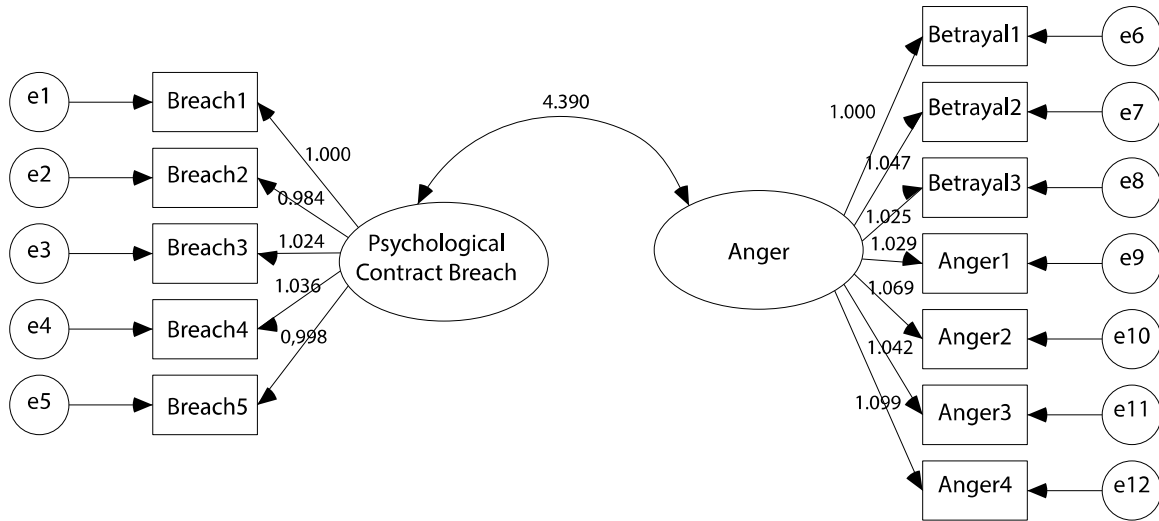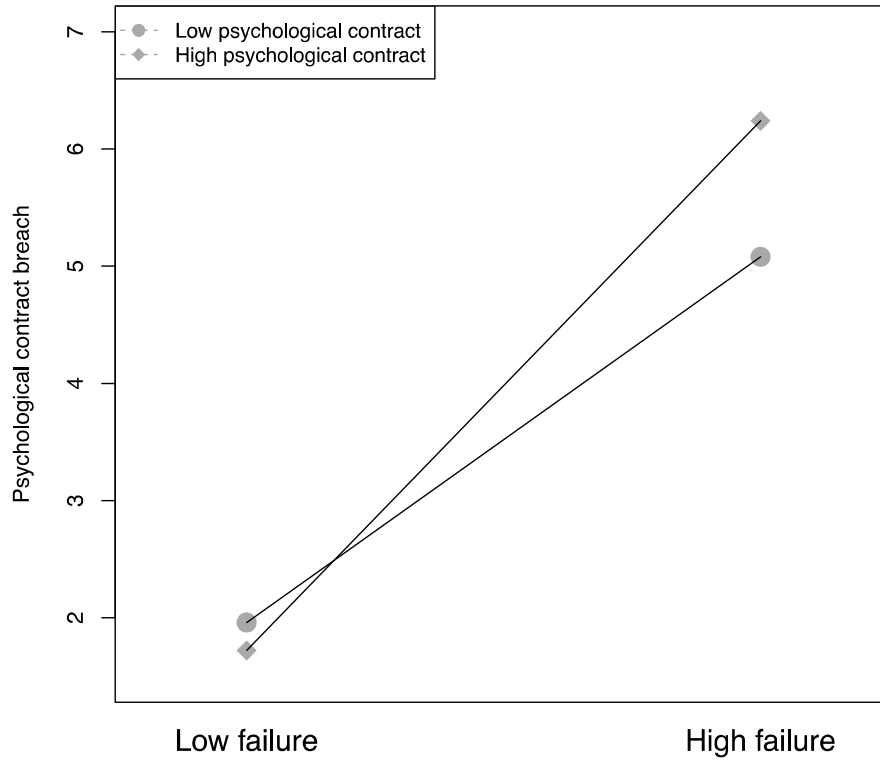
Figure 8. Model 3 of CFA analysis of discriminant validity

Figure 9. Model 4 of CFA analysis of discriminant validity

Figure 10. The interaction effect of psychological contract and transaction failure on breach
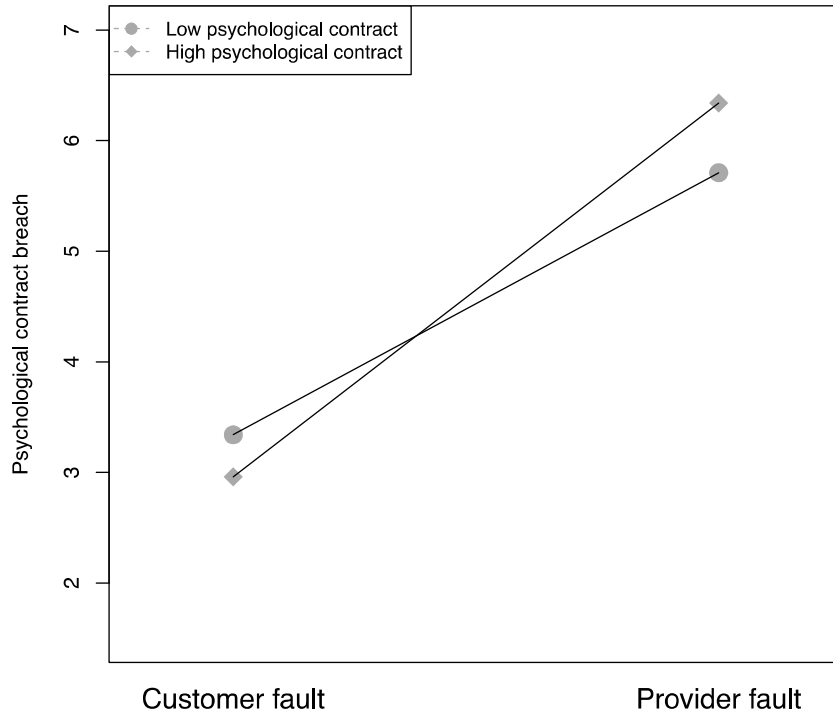
Figure 11. The interaction effect of psychological contract and source of fault on psychological contract breach
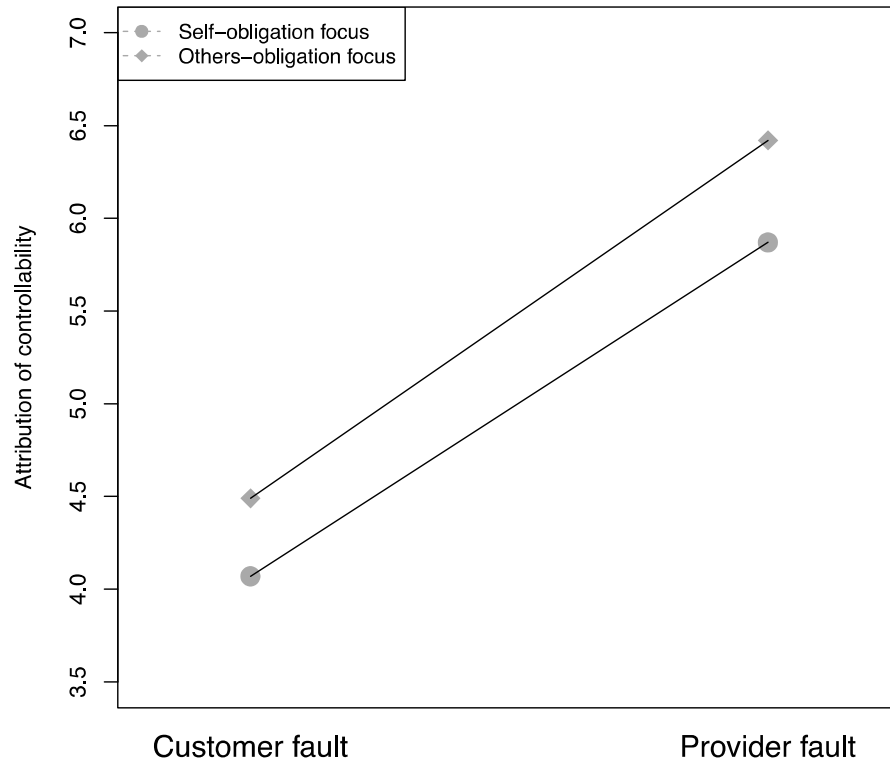
Figure 12. The interaction effect of social obligation bias and source of fault on attribution of controllability
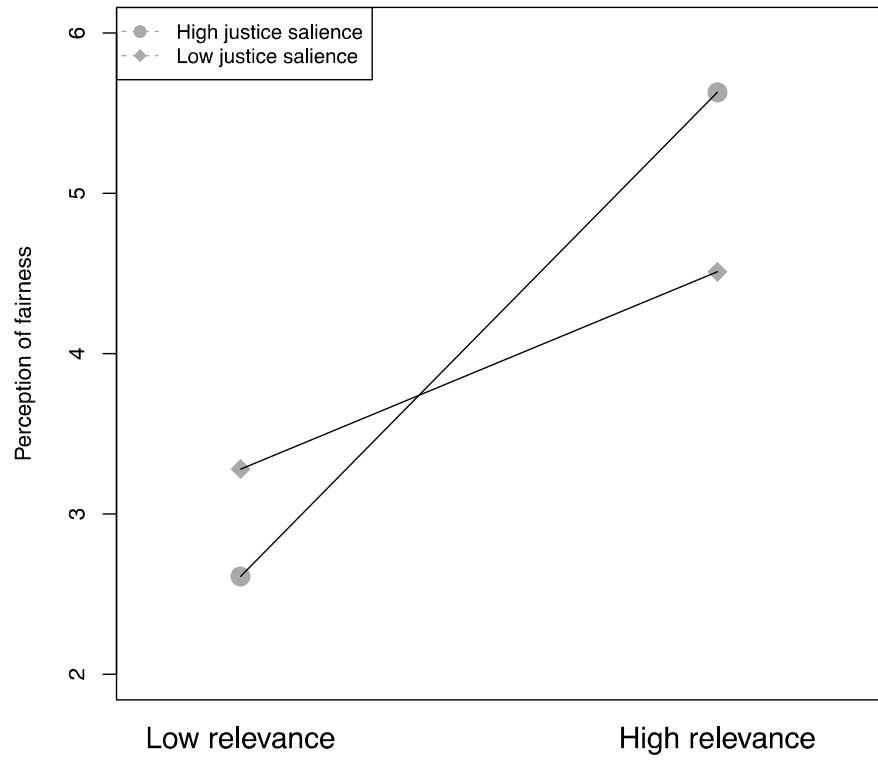
Figure 13. The interaction effect of compensation relevance and justice belief salience on perception of fairness

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When I was young, I dreamed to be a writer. Later, I became a journalist. When I came to Iowa State and learned what science is, I began to dream about being a scholar. The completion of my dissertation and the PhD study has been such a long and challenging journey. However, like Forrest Gump said, "life is like a box of chocolates. You never know what you're gonna get." It could be hard to challenge your confidence when the "perfect-design" experiments turned out to be failing; it could also be so pleased that hypotheses were perfectly supported by experimental data. That is the beauty of being a researcher - "The more difficulties one has to encounter, within and without, the more significant and the higher in inspiration his life will be."

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