

ABSTRACT

Psychological Contract in the Information Technology Profession

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Events such as the dot-com bust, economic instability, and organizational streamlining, present challenges to retaining and hiring information technology (IT) professionals. During the last decade, IT professionals were dismissed in large numbers from their organization because technology is often considered a cost center. As the technology field continues to recover, organizations are struggling to retain their remaining IT staff. Those previously dismissed from their organizations approached rehire situations cautiously for fear they would be dismissed again. Current practitioner and academic research continue to investigate methods of recruiting new and retaining IT workers by using incentives and promises. However, prolonged demanding situations can potentially influence IT turnover intention. In this positivistic study, 104 IT professionals identified the conditions that influenced turnover intention through psychological contract breach and psychological contract violation. The results suggest that perceived work exhaustion, salary, job promotion, opportunities and perceived job autonomy influenced psychological contract breach. Psychological contract breach was found to influence psychological contract violation, which also influenced turnover intention.

Psychological contract breach was found to mediate the relationship between job autonomy, emotional dissonance, and perceived work exhaustion to psychological contract violation.

Psychological Contract in the Information Technology Profession

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DEDICATION

To my Angel, Patti Lynn Gillmeister Moquin

CHAPTER ONE

Introduction

At the beginning of the 21st century, Enron was performing well in the energy industry. The stock value for some employees exceeded two million dollars. Many of Enron's employees created nest eggs and dreams of a comfortable retirement lifestyle. However, Enron's operations were seriously flawed. Unethical business practices by its upper management collapsed the organization sending all of their employees to the streets with no severance and no job. Retirement packages vaporized along with the hopes and dreams most had worked so hard to build. In short, Enron's promises of high financial returns in exchange for employee loyalty and dedication were largely fictitious. Many employees are now working at other organizations, including some past the age of retirement. They continue to feel betrayed and bitter about the Enron's broken promises (Armour, 2006).

In the past decade, external and uncontrollable events influenced organizational cutbacks and rightsizing. For example, IBM severed 15,600 IT jobs to reduce costs (CNNMoney, 2002; Williams, 2002) and HP displaced 14,500 IT jobs to restructure operations (CNNMoney, 2005). Siemens announced plans to cut 4,200 IT jobs in reorganization efforts (Associated Press, 2010). Cisco reduced its IT workforce by 1,300 jobs because of organizational restructuring and economic assessments in external markets (Industryweek, 2012). While most assumed these cuts assisted in stabilizing

stock price and organizational operation efficiency, others perceived these cuts as premeditated (Ranganathan & Samant, 2006) and clandestine (CNNMoney, 2002).

Since the 1970's and more importantly the deregulation of the Internet (Sims, 1995), the emergence of the dot-com bubble, in part, escalated the need for skilled IT professionals. Educational institutions experienced a surge of students seeking MIS degrees (Aiken, Garner, Ghosh, & Vanjani, 2008). IT job opportunities were plentiful. The number of skilled IT professionals in the market was high. Many entered the newly founded ecommerce wave that promised a new way to conduct business. However, dot-com bubble's demise was blamed on "the greater fool" theory that refers to poor investments with the thought of selling it later to a greater fool (Penn, 2002). For example, Priceline.com developed their IPO with the security and exchange commission. In their prospectus, statements were included identifying their untested business model and their belief that would not return a profit for an extended timeframe. Yet, investors appeared to ignore these statements (Cassidy, 2002). The dot-com bust displaced many IT professionals (Panko, 2008).

Recessionary events in 2001 and 2007 resulted in major market losses unseen in recent history (Hall, et al., 2001). Multiple organizations filed for bankruptcies such as PG&E, Enron, WorldCom, U.S. Airways, Lehman Brothers, Chrysler, and General Motors. It is important to note that the dismantling of Enron and WorldCom were more about unethical practices and corruption. The poor economic situation prompted some organizations to deactivate their IT projects. Others initiated cost-cutting measures, such as technology budget reductions and IT staff downsizing (Hall, et al., 2001; 24/7 WallST, 2008). Subsequently, the dismissal of skilled IT professionals from their organizations

created increased workloads and demanding situations on the survivors (Ranganathan & Outlay, 2009). In addition, educational enrollment in MIS programs dropped significantly (Saunders & Lockridge, 2011) and, in some cases, universities dropped their MIS programs altogether (George, Valacich, & Valor, 2004).

During the economic resurgence, some organizations began to reactivate previously deactivated IT projects, warranting the need to increase their IT staff resources. The increased need for IT resources motivated some organizations to rehire recently dismissed IT professionals (Raskino & Lopez, 2010). However, IT professionals often approached these rehiring situations cautiously for fear they would be dismissed again (Dubie, 2009). External events influencing organizational actions, such as layoffs, are somewhat uncontrollable (e.g. mergers, takeovers, or a depressed economy). Thus, recruiting, retaining, and developing skilled IT professionals has been and continues to be an important management concern (Luftman & Ben-Zvi, 2011; Chiang, Liao, Jiang, & Klein, 2012; Microsoft, A National Talent Strategy, 2012; Mok & Berry, 2013).

Similar to a friendship or marriage, employees and organizations work together for the betterment each other. Poor job security, trustworthiness and commitment potentially destabilizes the relationship. Additionally, workers likely maintain idealized mental images of the organization based on knowledge of the company, recruitment interaction, and lived experience. A general work relationship typology is transactional and relational. A *transactional* relationship refers to a short-term engagement with definite start and end dates and includes a well-defined set of deliverables (Rousseau, 1995). For example, network security consultants are often hired to assess an organization's security position. The engagement includes scope, time, and budget

allocations. A *relational* work attachment refers to a long-term engagement with loosely specified performance requirements; all under a give-and-take paradigm (Rousseau, 1995). The employee and organization maintain a cognitive formation of promises each made to the other, whether annotated or connoted. The work relationship refers to a cognitive psychological contract. (Rousseau, 1995; Argyris, 1960; Schein, 1980; Menninger, 1962).

Extant literature on the turbulent IT professions and the effect on IT turnover intention includes the unfolding model of turnover (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999), met expectations (Porter & Steers, 1973), organizational equilibrium (March & Simon, 1958), Job Embeddedness (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001), Linkage Model (Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, Hand, & Meglino, 1979) and psychological contract theory (Rousseau, 1989; Robinson & Morrison, 2000; Riemenschneider & Armstrong, 2012).

The interest of this study focuses on the IT professional, his organization and the relational work attachment as it personifies a give-and-take paradigm present in most long-term work relationships. In addition, in the IT profession, the opposing forces of the relational work attachment are job security, low job satisfaction (Direnzo & Greenhaus, 2011) and career advancement (Wickramasinghe & Weliwitigoda, 2011). While employees generally desire job security, a contemporary societal blurring of the work identity (Ramarajan & Reid, 2013) and the diverse spectrum of the IT profession affords one to consider voluntary turnover to build his skill set for career advancement.

The goal of this study is to extend current turnover literature by applying the lens of psychological contract theory to understanding not only the antecedents that influence

IT workers to leave their organization, but to examine the role that psychological contract breach has in this process. The premise of this study follows two recent IT workforce studies. First, a qualitative study was conducted in a doctoral qualifying paper, which focused on the psychological contract of IT professionals with their employing organization and the IT profession. The results of this study suggest that reciprocity disruption results in potential turnover intentions. Second, an empirical study investigated the influencers to a psychological contract violation between IT professionals and their organization (Riemenschneider & Armstrong, 2012). The overarching goal of this research is to provide the necessary groundwork to explore why IT professionals consider leaving the IT profession. Extant research exists to explain organizational issues recruiting and retaining IT professionals. However, scant research exists examining why IT workers leave the IT profession. One reason for this may be the difficulties in quantifying those IT workers that actually left the profession. To properly study why IT workers potentially leave the profession, it is necessary to examine this phenomenon from the organizational level.¹ Thus, the scope of this research focuses on IT workers leaving the organization. Based on a call for more research in IT turnover from Riemenschneider and Armstrong (2012) and Ahjua et al., (2007), this study considers alternate exogenous constructs influencing the work relationship, including the effect on psychological contract breach. The research question for this dissertation is: what are the set of antecedents influencing IT professionals to experience a psychological contract breach, psychological contract violation, and turnover intention with their organization? A research model is proposed and tested to address this question.

¹ I am grateful to Dr. Leidner who provided this insightful suggestion.

The dissertation proceeds as follows. Chapter Two summarizes the literature on the phenomenon under study by establishing the appropriate theoretical lens and core constructs. Chapter Three presents the psychological contract theory and research hypotheses while Chapter Four describes the research methodology and measurement instruments. Chapter Five presents the results of the collected data and Chapter Six presents the discussion section linking the results to the phenomenon. Chapter Seven presents the limitations and future directions of this research; finally, Chapter Eight presents the conclusion of this study.

CHAPTER TWO

Literature Review

The IT workforce shortage has existed approximately four decades (Wrigley, 1970; Riemenschneider & Armstrong, 2012; Beach, 2013; Charette, 2013). At each stage of the IT field's development, IT workers have left their organization for a myriad of reasons such as perceived work exhaustion, work/family conflict, opportunity barriers, discrimination, and career changes. Economic imbalances created reactive effects such as dismissing IT professionals only to rehire them later when conditions improved (Gilchrist & Weber, 1972; Luftman & Ben-Zvi, 2009). Current employment statistics indicate a resurgence of IT job opportunities by 22 percent for the years covering 2010 to 2020 (Department of Labor, 2014). Moreover, the resurgence in IT hiring interests succeeded the second of two depressed economic events in 2001 and 2007. The educational system experienced a decline of computer information science (CIS) degrees from 59,488 in 2003 to 37,994 in 2008 (National Center For Education Statistics, 2013). However, from 2009 to 2012 the number of degrees increased to 47,384 (National Center For Education Statistics, 2013). Although the number of CIS degrees is deficient compared to 2003 levels, the current trend appears to be positive. Dependency on IT layoffs as a quick resolution to financial issues is waning because organizations are refocusing the efforts of their IT professionals to improve costly business processes (Luftman & Ben-Zvi, 2009).

In light of the improving IT field, turnover is perceived as an occupational inevitability (Whitaker, 1999; Thatcher, Stepina, & Boyle, 2002; Ignaria & Wormley,

1992; Lucas, 1979). The economic feast and famine conditions potentially create expectations among IT professionals that their jobs are only permanent until the next disruption. Moore and Burke (2002) refer to the propensity of IT professionals to leave their organization as a *turnover culture* such that dissatisfied IT workers consider turnover intentions over perseverance. Furthermore, current generation IT workers are perceived as less committed to their organization, and seek alternative employment when they are bored or receive offers from different organizations (TechRepublic, n.d.).

IT turnover literature explicates a grappling with IT recruitment and retention (Wrigley, 1970; Gilchrist & Weber, 1972; Jiang & Klein, 2002; Joseph, Ng, Koh, & Ang, 2007; Lucas, 1979; Microsoft, 2012; Mourmant, Gallivan, & Kalika, 2009; Ang & Slaughter, 2004). Some organizations “...*place the blame on the nature of the industry*”, “*the green-grass syndrome*”, the “*skyrocketing pay scales*”, “*immaturity*”, or just plain *greed*” (Wrigley, 1970, p. 144).

Examining IT turnover is essential to explain the reasons for the IT skills shortage (Beach, 2013; Charette, 2013), the decline of women in IT (Armstrong, Riemenschneider, Nelms, & Reid, 2012; Quesenberry & Trauth, 2012), and the perception of IT as a turnover culture (Moore & Burke, 2002). What is so important about IT professionals in relation to non-IT workers? IT workers are different from non-IT workers in several respects. First, many industries undergo regulatory changes related to the generally accepted accounting practices (GAAP), the health insurance portability and accountability act (HIPAA), Sarbanes-Oxley (SOX), and the statement of auditing standards (SAS). While these changes are disruptive, homeostasis soon returns. However, IT professionals routinely experience changes in innovations, skill sets, competition,

economic perturbations, and resource fluctuations apart from other fields. For example, the emergence of big data and cloud-based solutions has changed management models and created IT resource re-alignments. Second, the dot-com bust and economic downturns in 2001 and 2007 (The National Bureau of Economic Research, 2012) prompted IT staff reductions. IT is perceived as a cost-center (Informationweek, 2004; Gray, 2010). As a result, some IT professionals continually update their skill set to remain marketable. Third, IT workers are now tasked with boundary-spanning roles (Levina & Vaast, 2005), referring to an IT worker's involvement in diverse groups. Finally, IT workers regularly work non-standard schedules (Wittmer & Martin, 2010), and often must do more with less (Rutner, Hardgrave, & McKnight, 2008; Dubie, 2009). There exist potentially many differences between IT and non-IT workers. At a basic level, the pace at which the IT industry changes is significant and different from other professions.

This study addresses a gap in the IT literature, which involves the role of psychological contract breach in IT turnover intentions. Specifically, the overarching goal of this study is to lay the foundation to conduct future research into how psychological contract theory can be used as a lens to investigate IT worker turnover from their profession. To investigate this properly, the exogenous and endogenous constructs influencing turnover intentions of IT workers from the organizational level are examined.

The outline of this chapter consists of examining the relevant articles on the instabilities between IT workers and their organization. The concern for skilled IT professionals continues to exist, and it is reasonable that additional research is needed to disentangle disenfranchisement from turnover intentions. Specifically, this study

presents, defines, and attaches the relevant literature for the following concepts: psychological contract, perceived supervisor support, perceived work exhaustion, perceived emotional dissonance, psychological contract breach, psychological contract violation, and turnover intention.

Definition of Terms

The research model appears in Appendix A. Its structure was derived from previous exploratory qualitative and quantitative research on the psychological contract of IT professionals. Research on psychological contract, psychological contract breach, psychological contract violation, and turnover intention was conducted to support the model (Clinton & Guest, 2014; Shahnawaz & Goswami, 2011; Blomme, van Rheede, & Tromp, 2010; Restubog, Zagenczyk, Bordia, & Tang, 2013; Chin & Hung, 2013; Montes & Zweig, 2009; Robinson & Morrison, 2000; Rousseau, 1989).

In the following sections, a formal definition of each construct is presented. Examples are provided to support and clarify for each definition. The associated seminal work is tied to the appropriate term establishing its source. Succeeding the term definitions is the literature review. The literature review established previous research conducted on IT turnover intention leading up to this study.

Psychological Contract

Psychological contract (PC) refers to the internalization of perceptual, subjective, and implied promises, and their reciprocation between two or more agents (Rousseau, 1989). Menninger (1963), Argyris (1960), Schein (1980), and Rousseau (1989) each focused on work relationships from the perspective of perceived obligations and

promises. The current research focuses on the obligations that IT professionals believe their organization promised them and which of these, when unreciprocated, influences psychological contract breach. PC is a multi-dimensional construct where individuals formulate a unique set of non-unitary expectancies. Salary, promotion, and opportunity can be considered separate fundamental objects of the work relationship. The psychological contract is considered unique and subjective, and contents are driven by beliefs, values and goals (Rousseau, 1995). Therefore, salary, job promotion and opportunity are foundational obligatory items that are common among all workers and thus encompass a single dimension of the psychological contract.

The construction of the PC involves expectancies that stem from considering positive pathways distal from undesirable situations (Vroom, 1964). Moreover, career motivations are unique (Rousseau, 1995) and geared toward rewards, opportunities, and the maximization of positive reinforcements (Vroom, 1964). For example, in a recruitment situation, the potential employee and organization engage in a social interaction exchanging skills and experience with organizational benefits such as pay, promotion, and opportunity. Each uniquely interprets the interaction and formulates assumptions of the other such as presupposing responses with their idealistic job image, and forming associations from what each perceived the other to say (Rousseau, 1995). These items are mentally stored and ordered by their importance. This schema is the foundation that drives the health of the organization and IT professional relationship.

Perceived Supervisor Support

Perceived supervisor support (PSS) refers to the interest, concern, and care management has for its employees (Blau, 1964; Eisenberger, Huntington, Hutchinson, & Sowa, 1986). The value of the PC to the employee and organization relies on reciprocity (Gouldner, 1960). The organization addresses socio-emotional needs (e.g. self-efficacy, worthiness, caring, interest, approval) and socio-economical needs such as pay, benefits, and opportunity by social exchange and reciprocity (Blau, 1964; Gouldner, 1960). Social interaction between the employee and organization occurs at the micro-level through organizational members. The organization is essentially a collective of individuals with a common purpose, ideal, and culture (Lune, 2010). The immediate and salient organizational member proximal to the employee is the supervisor (Kozlowski & Doherty, 1989). Supervisors have significant influence on behavioral outcomes (O'Driscoll & Beehr, 1994). Positive supervisor support reduces work-family conflict (Hsu, 2011), increases affective commitment (Newman, Thanacoody, & Hui, 2012) and in-role and extra-role performance (Shanock & Eisenberger, 2006). Moreover, perceived supervisor support is closely concomitant to relational convivial exchanges (Pazy & Ganzach, 2009). Employees who perceive supervisor support asymmetries likely influence malcontent work attitudes (Folkman, 2012). Thus, poor supervisor support potentially deteriorates the worker and organizational relationship.

Perceived Job Autonomy

Perceived job autonomy (AUT) refers to the level of freedom individuals have on how they conduct their work, such as scheduling, pace, and sequence (Dodd & Ganster, 1996). While organizations are concerned with performance, employees maintain only a

certain amount of control over their environment (Jex & Britt, 2008). For example, in the software industry, application developers work in accordance with project tasks and timelines. Each task is assigned a deadline and is, therefore bound to time, scope, and cost constraints (Project Management Institute (PMI), 2004). Failure to adhere to these constraints results in product delays and cost overruns. Behavioral studies suggest that supplementary control over one's environment, even if imagined, fosters increased efficiency, self-efficacy, and stress reduction (Averill, 1973; Chung-Yan, 2010). In long-term work relationships, employees desire to be a part of the organization and have a hand in its successes. Individuals have a need to belong, whether in a personal or group relationship (Maslow, 1943). Participative decision-making refers to the ability of an individual to have a say in the formation and implementation of organizational actions (Lowin, 1968). Organizations encourage extra-role behaviors because of the effect on organizational efficiency (Organ & Podsakoff, 2006). Extant research suggests that job autonomy positively influences employee attitudes, performance, and job satisfaction (Dodd & Ganster, 1996).

Perceived Work Exhaustion

Perceived work exhaustion (PWE) refers to the depletion of physical, emotional, and mental fatigue based by continuous demanding situations such as excessive workload, poor social interaction, and insufficient support (Pines, Aronson, & Kafry, 1981; Moore J. E., 2000). These conditions likely promote emotional exhaustion, cynicism and decrease professional self-efficacy. Work overload requires individuals to invest substantial physical and mental energy into adaptive behaviors (Jex & Britt, 2008). For example, IT workers are often responsible for on-call duty (Ahuja M. , 2002)

referring to work hours outside the typical workday. On-call duty occurs when the IT worker is not physically at the organization but must still be accessible to the organization. “*Strain occurs when the workers feel they no longer have sufficient emotional resources to handle the interpersonal stressors*” (Lee & Ashforth, 1996, p. 130). For example, prolonged interaction with difficult customers and unreasonable deadlines deplete personal energy reserves. Abrogating experiences and incommensurate support potentially brings about counterproductive workplace behaviors (Sammani, Salamon, & Singh, 2014). Prolonged exposure to demanding situations without comparable positive experiences exhausts one’s emotional, physical and cognitive fortitude (Moore J. E., 2000).

Emotional Dissonance

Emotional dissonance (ED) refers to the intrapersonal emulation to adhere to emotional display norms over felt affect (Rutner, Hardgrave, & McKnight, 2008). IT professionals have traditionally faced undesirable conditions such as salary cuts, layoffs, extended remote projects, non-standard work schedules, and role ambiguity. A complicating factor in the IT identity includes boundary-spanning roles (Tushman, 1977), such as working with diverse business units on process automation efforts. Historically, IT workers are generally stereotyped as introverted, socially inept and quirky (García-Crespo, Colomo-Palacios, Miguel-Gómez, & Tovar-Caro, 2008). Once confined to the data center basement, the current state of the IT profession has IT workers socially interacting with customers and organizational members. In situations such as call centers and the internal organization, IT workers find it difficult to maintain display norms; in fact, phrases such as “*the angry IT user*” (Rutner, Riemenschneider, O’Leary-Kelly, &

Hardgrave, 2011) and “*suits and techies are going to mix about as well as oil and water*” (Bruzzese, 2012) are common.

Organizational policy requires employees to present a pleasant and helpful attitude to both customers and teammates (Rutner, Hardgrave, & McKnight, 2008). For example, waiters, customer service representatives, and flight attendants must present a helpful attitude toward their customers even during undesirable conditions. Grandey (2003) suggests that social interactions are expected to be pleasant to maintain positive experiences. Moreover, there exist two acting methodologies individuals potentially use during social interactions: surface and deep (Grandey, 2003). Surface acting is a pseudo-emotional display with little to no emotional investment and refers to acting in bad faith (Grandey, 2003). Deep acting refers to the modification of internal emotions to fit the situation and refers to acting in good faith (Grandey, 2003). Negative social interactions potentially create a personal dilemma about which display method to use. For example, call center employees often interact with many emotionally charged customers. Employees may perceive they are providing good customer service, much to the disagreement from a disgruntled customer’s perspective. In a multi-method study on IT emotional labor, emotional control is stressful (Rutner, Hardgrave, & McKnight, 2008). As one interviewee stated, “*You have to internalize a whole lot. And, it adds to your stress because you know they’re angry and, being human nature, the first thing you want to do is lash back. You can’t do that in this business*” (Rutner et al., 2011). The intrapersonal conflict of maintaining organizationally mandated display norms intensifies in demanding situations, especially when many customer interactions are negative.

Psychological Contract Breach

Psychological contract breach (PCB) refers to the complex cognitive juxtaposition of one's idealized and realized expectations (Robinson & Morrison, 2000). The existence of a psychological contract inevitability means that it will be broken (Rousseau, 1995). Reciprocity is considered central to the work relationship such that obligatory disequilibria weaken social stability and cohesion (Gouldner, 1960). The organization and employee each monitor their PC (Morrison & Robinson, 1997; Rousseau, 1995). The awareness of inequalities likely leads one to consider possible actions for re-establishing equilibrium, depending on the salience of the missed promise (Blau, 1964). For example, IT professionals may believe that their contributions such as working non-standard schedules, investing in extra-role behaviors, and attaining technical certifications are sufficient for increased responsibility. An individual potentially assesses missed reciprocations based on how much they will lose and whether their relationship with the organization is important (Rousseau, 1995).

Rousseau (1995) suggests the psychological contract can act as a self-fulfilling prophesy. Moreover, individuals formulate a plan of action to satisfy their PC (Rousseau, 1995). Examination of the PCB measurement items indicate the construct can exist as two separate subcomponents: *Unfulfilled promises* and *Lack of reciprocation*. Scant research on the separation of PCB; however, extant research exists that reasonably addresses these two items. *Unfulfilled promises* refer to the perception of a missed promise from the organization (Rousseau, 1989; Morrison & Robinson, 1997; Fu & Cheng, 2014). Extant behavioral research suggests that promises are highly salient and can lead to strong negative outcomes when unfulfilled. Moreover, unfulfilled promises

escalated the likelihood of turnover intention (Fu & Cheng, 2014). Based on social exchange (Blau, 1964) and equity theory (Adams J. S., 1965), *lack of reciprocity* refers to the perception of an inequality between one's investment of time and energy into a social situation and the undesirable outcome. Extant research suggests that the experiences of one's job role (e.g. System administrator, call center representative, helpdesk) is normative; however, a high investment in social situations may not result in a comparable outcome (Bakker, Schaufeli, Sixma, & Van Dierendonck, 2000).

Psychological Contract Violation

Psychological contract violation (PCV) refers to feelings of anger, distress, injustice, and mistrust from the realization that an individual's organization has not reciprocated a perceived obligation (Rousseau, 1989; Robinson & Rousseau, 1994). A PCB detection likely activates a sense-making process to determine its cause. According to Morrison and Robinson (1997), the transcendence of breach to violation signifies a cognitive process of interpretation to affectation. Further, Frijda (1988, p.349) suggests, *"Input some event with its particular kind of meaning; out comes an emotion of a particular kind. That is the law of situational meaning. In goes loss, and out comes grief. In goes a frustration or an offense, and out comes anger."* The interpretation of a missed salient promise can elicit recalcitrant affect while on the contrary, fewer salient promises can generate little or no emotional outcome. Thus, some promises are potentially unreciprocated without detection (Rousseau, 1995; Robinson, 1996). For example, mass IT layoffs during the dot-com bust sent several IT professionals to the street, and many had difficulties putting their lives back in order (Hoffman, 2006). As a side-effect, anger and resentment toward their previous situation are likely superimposed on their new firm,

increasing one's PC vigilance (Kim & Choi, 2010; Robinson & Morrison, 2000). On the other hand, an organization suffering from a poor year may be financially unable to honor its promise of an employee bonus. It is possible that employees understand the organization's position and, for this reason, mitigate emotion.

Turnover Intention

Turnover intention (TI) refers to the conscious and deliberate consideration of leaving the organization. Extant research suggests that disengagement is a form of job dissatisfaction. However, Mobley, Horner, & Hollingsworth (1978) suggest job satisfaction has less of a direct influence on turnover intention. However, the availability of reasonable employment alternatives likely escalates the turnover intention process. Job options likely include different positions within or outside the organization. Morrison and Robinson (1997) suggest that one's awareness of a breach starts the sense-making process to search for potential causes and assignment of responsibility. Repeated reciprocity failures potentially result in diminished trustworthiness, reduced performance, and organizational commitment. In addition, the weakening work relationship is potentially irreparable. An individual's exposure to abusive management may not immediately translate into a degraded work relationship. However, repeated abuse may manifest itself in aberrant behavior such as absenteeism, sabotage (O'Brien, 2008), and turnover intentions. An organizational tactic suspending a perceived breach or violation may resemble the following: *"Please do this for the company, and we'll consider your goals afterward."* These circumventions often confirm an individual's suspicion that upward mobility is futile.

Literature Review

In the literature review, 406 articles were considered. Of these, 12 percent examined the PC, eight percent examined PCB, four percent examined PCV, and 14 percent examined turnover intention. Table 1 below presents descriptive statistics of the literature review analysis. In the following sections, the attachment of the appropriate documentation to the stated concepts above is presented.

Table 1. Literature Review Descriptive Statistics

Results	Freq	%
Psychological contract breach	34	8%
Psychological contract violation	16	4%
Psychological contract	50	12%
Emotional dissonance	6	1%
Autonomy	12	3%
Turnover	58	14%
Burnout	9	2%
Supervisor	12	3%
Exhaustion	11	3%
Other	208	51%
Total	406	100%

Psychological Contract

The work relationship signifies an agreement between agents as a foundational give-and-take paradigm. Perceived promises are maintained cognitively in an ordinal representation (Rousseau, 1995; Kotter, 1973). The majority of literature surrounds IT professionals' PC and centers on obligation and fulfillment, compensation and promotion, and training.

Obligation and fulfillment. An obligation refers to a formal contract, a promise, or the demands of conscience or custom that obligates one to a course of action (Webster, 1983). Fulfillment is the act or process of delivering a product to a customer (Webster,

1983). Agarwal, (2011), Blau (1964), and Gouldner (1960) suggest that obligation and fulfillment are central to the work relationship. Newman & Robey (1992) examined interactions between obligations and reciprocations, including their effect on organizational citizenship behavior (OCB) and innovative work behaviors of their IT professionals. Their results suggest that supervisors and IT professionals may not interpret the PC similarly. Supervisors expect their IT staff to work long hours and, at times, to band together to resolve critical issues. IT professionals may not hold a higher view of OCB than their supervisors and may be less willing to invest in such behavior. Therefore, as the organization fulfills the PC, IT professionals increased their organizational citizenship and innovative work behaviors (Newman & Robey, 1992).

Second, Parzefall and Hakanen (2008) examined the health-enhancing properties of the work relationship, such as affective commitment, work engagement, and the reduction of turnover intentions. Additional items such as autonomy and training appear as health-enhancing items. In addition, work engagement and emotional commitment are positively influenced by reciprocated actions. Turnover intention is negatively associated with fulfillment, work engagement, and affective commitment. The implications for reciprocating psychological contract obligations supports the perception of PC fulfillment.

Finally, Newton, Blanton, and Will (2008) examined the positive outcomes on IT professionals when their psychological contracts were fulfilled. Two significant differences exist between contract and permanent IT workers: innovativeness and citizenship behaviors. Contract and non-IT workers were found to have higher innovativeness and exhibit better citizenship behaviors than permanent IT workers.

Newton et al., (2008) suggest that psychological contract fulfillment improves and sustains innovative work and citizenship behavior.

Compensation and promotion. Employee compensation is considered critical and often axiomatic to job satisfaction. It is likely that while compensation initially satisfies one's safety needs it is not a determinant in reaching the upper echelons of Maslow's (1943) model. For example, the contemporary technology industry quickly changes and contains multiple field specialties. Skills can transfer from one specialty to another. Thus, IT workers unhappy in their current setting can consider moving into another area of IT either in the same or different organization. The ability to change quickly from one area to another appears to have created a turnover culture (Moore & Burke, 2002). These changes, coupled with multiple instances of a depressed economy, potentially result in organizational cost-cutting measures. The recent global economic downturn of 2007 found IT professionals experiencing increased workloads, job losses, lower salaries and decreased job satisfaction. The danger is not simply the reduction of employment benefits, but the potential that IT professionals will seek alternate employment. Joseph, Ng, Koh, & Ang (2007) conducted a meta-analytic study on IT professional turnover. Job performance, role ambiguity, demographics, and human capital (e.g. education and tenure), suggest that perceived organizational factors (i.e. pay and promotion) had an adverse effect on turnover intentions. In addition, Ghapanchi & Aurum (2011) conducted a systematic literature review of research focusing on IT turnover suggesting that salary was the most frequently cited factor for turnover intention. In addition, fairness of rewards and promotions appear to a lesser extent (Ghapanchi & Aurum, 2011).

The perception of job promotion as a way to increase job satisfaction reduces the tendency to consider turnover intentions. Kosteas (2011) suggests that promotions are an element in an individual's work and life experience that influences his attitudes about work. In addition, organizations appear to use promotability as a method to maintain and increase productivity, sustaining the individual's belief that promotion is possible. However, promotion frequency can also generate diminishing returns as one adapts to the new situation, thus creating a need for more promotions.

Training. Extant literature suggests that one's interest in IT stems from math, challenges, field complexity, salary, and prestige (Zhang, 2007; McInerney, DiDonato, Giagnacova, & O'Donnell, 2006). During the last 15 years, technology innovations have addressed many problems that without technology would have taken years to resolve (Wadhwa, 2012). The technology field is replete with complexities, changes, and challenges. For example, Moore's law suggests that the doubling of electronic components occurs approximately every two years (Moore G. E., 1965). Changes in decision-making elicit higher orders of cognitive processing and require increased convergence of diverse and coherently organized data to ensure accurate interpretation. In a recent survey on IT professionals' job concerns, 78 percent indicated interesting work was more important than salary and other factors (McCafferty, 2011). Sixty-six percent of those surveyed under the age of 45 indicated that skill development was a critical factor. For those workers older than 45, 33 percent indicated skill development is important. It is reasonable that those over 45 are at a different life stage than their younger colleagues. At the current rate of technology change, skill sets from prior years

become outdated quickly. For this reason, IT professional marketability hinges, in some respects, on skill set currency.

The rapidly changing technology field necessitates an investigation into the importance of training involving skill specificity, formal and informal workplace training, and the influence training has on stress reduction. First, Gabberty (2013) suggests the IT industry is experiencing a deluge of technological and skill specificity. For example, education centers routinely advertise courses for security certifications such as the Certified Information Systems Security Professional (CISSP) and Global Information Assurance Certification (GIAC). According to Gabberty (2013), graduates with IT degrees seek to enhance their employability by embellishing their skill set with professional certifications, such as information security and Microsoft's certified systems engineer program. In addition, many organizations consider professional certifications as a baseline requirement. Thus, for IT professionals to be marketable and experience career opportunities, organizational support in skill development is important.

Second, workplace training was researched as a coping mechanism to demanding situations and its effect on job satisfaction among small to midsize businesses (Rowden, 2002). The research focus is placed on informal and formal learning events in small to midsize businesses such that two surveys in the *Wall Street Journal and Small Business Economic Trends* suggest employees in small businesses are happier than those working in large organizations. Rowden (2002) also suggests that the bulk of research exists for the larger organization and is less applicable to smaller organizations. Moreover, the increase in global competition provides the increased focus on skill set improvement. The results indicate that out of 794 responses from small to medium-sized organizations,

workplace training, whether formal or unofficial, produced a positive influence on job satisfaction (Rowden, 2002).

Finally, based on a perception of the IT hiring shortage, and retaining IT professionals, workplace training had a positive effect on job satisfaction and an adverse effect on stress (Raghavan, Sakaguchi, & Mahaney, 2008). The organization's ability to regulate the work environment for their IT professionals addresses the reduction of recruiting and retention problems.

In sum, individuals formulate their life events as a series of wants and needs in accordance with the formations of their social identity (Tajfel, 1982). A person's needs are unitary objects and are non-negotiable such as air, food, and water. However, wants are selectable and malleable (Maslow, 1943), such as becoming president of Microsoft and earning an advanced degree. IT professionals and people in general, have a propensity to establish goals and the steps necessary for their achievement (Carver, 2010). For this reason, an individual's arrangement of wants and needs exists according to their saliency. In addition, both IT and non-IT workers alike are concerned with compensation (e.g. salary and benefits), promotability, and training. Reciprocation of these salient items increases individual job satisfaction (Kotter, 1973).

It is important to note that when IT neophytes enter the IT profession, they often do so with unrealistic expectations that increase the chances of failed reciprocations. A missed expectation can trigger heightened monitoring of future reciprocations (Riemenschneider & Armstrong, 2012; Robinson & Morrison, 2000). In the next section, emotional influences to PC breach are discussed.

Emotional Dissonance

The current progression of business-IT alignment (Tarafdar & Qrunfleh, 2009) and the entanglement of IT in the organizational structure (Bruzzese, 2012), necessitates active social interactions. IT professionals are required to improve their personal skills to understand the organization's functionality from a business perspective, as well as understand the people around them. Organizational normative display rules dictate appropriate display responses (Diefendorff & Richard, 2003; Deery, Iverson, & Walsh, 2002; Grandey, 2003). For instance, IT professionals and their users/customers work together to resolve issues. However, a perceived time crunch and user emotional states often complicate these interactions. In addition, users have perceived service expectations. For example, a Chief Executive Officer (CEO) may expect instantaneous service because of his organizational position and work complexities. Other users may be perceived as over-demanding, pushy, discontent, and abrasive, often referring to IT as a utility, further justifying negative emotions of IT professionals. The following excerpt (a fictitious company) appeared in a trade publication outlining the emotional stress IT workers experience:

“Dear colleagues, The MIS Group has had enough. We have tried for years to answer your questions (no matter how bizarre or irrelevant), fix your equipment (no matter how you abuse it), and correct your software problems (no matter how deranged your actions may have been). We almost always smile and try to be kind, and never, ever swear (at least not until we get back to our offices). But, ladies and gentlemen, MIS is going to change...We cannot afford to support stupidity, subsidize ignorance, or fix things that should not be broken” (Gibbs, 1996, p. 58).

These frequent unproductive social interactions influence perceived work exhaustion (Rutner, Hardgrave, & McKnight, 2008; Rutner, Riemenschneider, O'Leary-Kelly, & Hardgrave, 2011), emotional labor (Goussinsky, 2011), job satisfaction (Wegge,

Dick, & Bernstorff, 2010) and turnover intentions (Mishra & Bhatnagar, 2009). Each of these variables is addressed in detail in the following section.

Perceived Work Exhaustion

Rutner et al., (2008) researched IT work exhaustion vis-à-vis emotional exhaustion by extending Moore's (2000) model to include the effects of emotional dissonance on job satisfaction and turnover intention. Specifically, organizations govern normative displays. For example, customer service representatives are trained to present a positive and helpful attitude toward co-workers and clients. Often, negative social interaction requires a regulated response; unchecked zealousness likely develops into ambivalence thus increasing mental energy to respond appropriately (Grandey, 2000). Rutner et al., (2008) found a positive relationship between emotional dissonance and perceived work exhaustion. Both negative and positive emotional dissonance constructs associated positively with second-order emotional dissonance and perceived work exhaustion constructs (Rutner et al., 2008). Negative emotional dissonance refers to the replacement of a felt emotion with an appropriate response. Positive emotional dissonance is the mental labor of display conformance and is perceived as a job requirement (Rutner, et al., 2008).

Emotional labor. Gossinsky (2011) examined call center employees dealing with aggressive customers. The multi-study method included two separate data sets. The first study examined emotional dissonance as a mediator between customer aggression and job-induced tension. Emotional dissonance appeared to fully mediate customer aggression and job-induced tension. In the second study, job autonomy was used as a

moderator of the relationship between emotional dissonance and employee well-being, and it was found that higher job autonomy improves one's well-being. Low job autonomy was positively correlated to emotional dissonance and job-induced tension suggesting a somewhat axiomatic relationship between aggressive customers and job stress, thus leading to emotional labor (Goussinsky, 2011).

Job satisfaction. Cheung and Tang (2010) adopted the stress-strain-outcome model (Koeske & Koeske, 1993) and investigated the mediating influence of emotional dissonance on work characteristics (e.g. display rules) and its effect on the work relationship. Work strain was then examined as a mediator of the emotional dissonance and job satisfaction relationship. The results supported full mediational effects of emotional dissonance to work strain and job satisfaction. The results suggest that those in the human service's personnel sector experience workplace stressors (e.g. display rules, performance monitoring, and a service-oriented culture) that potentially foster negative attitudinal outcomes thus ultimately affecting job satisfaction.

Turnover intention. Mishra & Bhatnagar (2009) tested the effects of emotional dissonance on medical representatives in a pharmaceutical context. The research premise addresses employee performance from an organizational identification perspective. The results suggest that emotional dissonance positively relates to turnover intention. In addition, emotional dissonance also acts as a partial mediator of organizational identification and turnover intention (Mishra & Bhatnagar, 2009). Properly implemented human resource programs have a dissipating effect on emotional dissonance and turnover intentions (Mishra & Bhatnagar, 2009).

Summary. Unproductive interactions can have an inverse effect on one's well-being. It is reasonable that prolonged unproductive social interactions erode emotional fortitude. In addition, workers identifying with their organization may not immediately identify crippled social interactions as a breach of their psychological contract.

Perceived Supervisor Support

Employees and their organizations work together to ensure a prosperous well-being. Both exhibit dedication, high performance, low absenteeism, and loyalty (Rhoades & Eisenberger, 2002; Mathieu, 1990; Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982). Organizations value dedicated employees (Rhoades & Eisenberger, 2002), and each invests physical and emotional energy to ensure a successful relationship. For example, some motivated IT professionals enjoy challenges and opportunities geared to boost their skill level and the intrinsic gratification they receive from their career. Supervisors failing to support employee growth influence a relationship imbalance. For example, Jokisaari and Nurmi (2009) examined the interaction between new workers and supervisor support using a four-wave longitudinal research method. Over a six to 21-month period, newcomers detected a decline in both supervisor support and salary increases that they believed they would receive upon entering the relationship (Jokisaari & Nurmi, 2009). The mitigation of supervisor support had the effect of reducing role clarity and job satisfaction (Jokisaari & Nurmi, 2009). Extant literature expounds on the criticality of positive supervisor support and its implication on newcomers and tenured people alike (Jokisaari & Nurmi, 2009). The following sections explicate several instances of supervisor support and how it effects the mentor/protégé relationship, IT layoffs and student/academician interactions.

Mentor/Protégé relationship. Haggard and Turban (2012) examined the psychological contract held by mentors and protégés in both formal and informal situations. The essence of the protégé and mentor association is relational. A protégé seeks assistance from formal (direct supervisor) and informal (non-supervisor) mentors on ways to improve his performance and skill level. The results of the study suggest that mentors that are unable to facilitate their protégé's needs influenced a psychological contract breach. The type mentorship (formal/informal) exhibited little difference in the obligations each felt was owed to the other (Haggard & Turban, 2012). However, the supervisory nature of the mentor/protégé relationship acted as a moderator to PCB. Protégés mentored by their direct supervisors experienced a profound PCB and the mentorship by non-supervisory types was less affected (Haggard & Turban, 2012). Unfortunately, protégés do not always view their supervisors as mentors.

IT layoffs. Agarwal (2011) examined psychological contract and organizational commitment in the Indian IT industry. The recent global economic downturn changed the perspective of the psychological contract (Agarwal, 2011). Because of market and economic perturbations, organizations were forced to adjust their operational and management practices to adjust to economic changes. These changes often involved the reduction of skilled staff and affected the PC of the survivors. The results from 140 Indian IT professionals concluded that layoffs negatively altered the surviving employees' PC and had a direct impact on organizational commitment. In addition, females were more adversely affected because of the lack of job alternatives for them. Education also appears to influence PC and organizational citizenship behaviors such that IT professionals with higher education experienced more job opportunities.

Student/Academician interactions. Bordia, Hobman, Restubog, & Bordia (2010) examined the student/academician relationship in terms of mutuality and reciprocity in an interactive and collaborative advanced training project. Mutuality refers to a homogenous state such that both the student and academician have similar expectations (Dabos & Rousseau, 2004). The project goals were to maximize the student experience, satisfaction, and psychological well-being and involved the completion of a required thesis paper by the students in their final year of an information systems program. From a psychological contract perspective, students expected mentorship and collaboration from their academicians. Likewise, academicians expected student effort. Thus, students and faculty expect mutual project engagement by reciprocating effort and support (Bordia et al., 2010). Conscientiousness moderated psychological contract breach and project success because conscientious students and academicians dispense higher effort toward project success and were more affected by mutuality and reciprocity failures. This outcome suggests diminished project satisfaction and psychological well-being among all students (Bordia et al., 2010). Students with high levels of conscientiousness relate to project satisfaction, suggesting that students higher in this trait were more satisfied with the project component. The research supports the PC attributes such that positive mutuality and reciprocity contributed to a positive student experience because degraded mutuality and reciprocity contributed negatively to the student experience.

Summary. Gouldner's (1960) norm of reciprocity and Blau's (1964) social exchange theories exemplify the give-and-take nature of the work relationship. Individuals that perceive organizational support potentially reciprocate by exhibiting appropriate organizational citizenship behaviors. Job satisfaction, agent performance,

trust, and loyalty are positively associated with support, reducing psychological contract breach and turnover intention. In the next section, this study examines job autonomy and work exhaustion, and their influence on psychological contract breach.

Autonomy

Extant research suggests control over one's work environment increases self-efficacy, task effectiveness, and proactive behavior (Kim, Cable, Kim, & Wang, 2009; Hartog & Belschak, 2012). The following sections provide several instances of autonomy and highlight its positive outcomes in employee/organizational situations such as innovative behavior, turnover intention, and skill set currency.

Innovative behavior. The current progress of IT pervasiveness necessitates organizations to invest in innovative solutions. Pearson, Pearson, and Griffen (2009) researched the organization's need to escalate innovative behaviors by identifying its impediments. Out of 233 respondents, issues such as work-family conflict and work overload diminished the effect on IT innovative behaviors because increased autonomy improved individual innovativeness. This implication suggests the minimization of constraints such as an overabundance of work responsibilities can positively affect work/home life, and innovativeness.

Turnover intention. Kim and Stoner (2008) investigated the effects of role stress, job autonomy, and social support in a social work context to predict burnout and turnover intentions among social workers. Social workers typically experience an overabundance of cases, demanding clientele, inadequate staff resources, and substantial administration burdens (Kim & Stoner, 2008). Job autonomy was tested as a negative influence on

turnover intentions such that autonomy potentially fostered an increased sense of methodological control over one's workload. The results suggest that job autonomy did not directly affect job burnout. However, turnover intention was affected. Job autonomy was tested for moderating effects of stress and burnout. An interactive effect suggests that higher work stress and lower job autonomy positively affect job burnout. Although increased autonomy does not preclude a complete deterrence from turnover intention, the implications suggest that job autonomy decreases its likelihood.

Skillset currency. IT professionals share functional similarities with other fields while maintaining a distal relationship in other respects (Cougar & Zawacki, 1978). First, change in IT is constant. Each computer engineering cycle produces faster-processing equipment (Moore G. E., 1965). Software solutions organize data adding dimensional depth, enabling improved decision-making. Second, the IT profession maintains a broad spectrum of specialties such as software and web development, information security, administration, network, and e-commerce (Bureau of Labor Statistics, 2014). The pervasiveness of computing affords many the opportunities to engage in specific areas suited to an individual's self-efficacy and interest. Finally, as technology changes, updated skill sets are necessary for effective and efficient work (Ahuja M. , 2002; Luftman & Kempaiah, 2007).

The IT profession is challenging not only from a technological perspective but also from the currency of knowledge required. Skill sets are often outdated quickly because new and progressive information solutions arise. Thus, the ability of IT professionals to stay on the cutting edge of technology is difficult. Shih, Jiang, Klein, and Wang (2011) investigated the role job autonomy has on learning motivation and work

exhaustion. If IT professionals had more job autonomy, could learning demands be addressed? The results suggest that job autonomy increased learning motivation and lessened the effects of perceived work exhaustion (Shih et al., 2011).

Summary. The literature review clearly suggests that perceived job autonomy influences job satisfaction, stress, and turnover intention. Perceived job autonomy grants the flexibility necessary to address both organizational and in-role behaviors including training and learning. A downside to reduced autonomy can be perceived work exhaustion, changes in behavior, and functionality. Thus, granting control is a method aiding individuals in how they resolve their responsibilities. In the next section, the influence of work exhaustion on psychological contract breach is examined.

Perceived Work Exhaustion

Perceived work exhaustion and job burnout are well-researched areas (Rutner, Hardgrave, & McKnight, 2008; Rutner, Riemenschneider, O'Leary-Kelly, & Hardgrave, 2011; Moore J. E., 2000; Kim & Wright, 2007; Shih, Jiang, Klein, & Wang, 2013; Ahuja, McKnight, Chudoba, George, & Kacmar, 2007). The selected work exhaustion literature focuses on IT professionals and their perceived negative experiences in the field, situations involving remote consultancy projects, work exhaustion, autonomy, and social interactions.

Remote consultancy projects. Ahuja et al., (2007) examined long-term IT consultancy projects and its effect on IT professionals (i.e. Road warriors) and work-family stress. The term *road warrior* in this context refers to IT professionals engaged in projects such as hardware and software configuration and implementation at the

customer's location. IT consultancy can exist in several ways. Hardware and software configurations are but one facet of a road warrior's potential domain. IT road warriors are responsible for multiple customer-centered projects at different geographical locations. Each project can last several weeks or months. Ahuja et al.'s (2007) study suggests that a direct and positive relationship exists between work exhaustion and turnover intention. The exogenous variables influencing work exhaustion were perceived work overload, work-family conflict, and reward fairness. Job autonomy inversely correlated to exhaustion, and work-family conflict was deemed the important outcome of the research. In addition, the results suggest that prolonged exposure to remote consultancy projects and the reduced focus on the family increases stress and exhaustion. Furthermore, thoughts of turnover are likely increased for road warriors.

Work exhaustion. Moore (2000), Trauth et al., (2009) and Pearson et al., (2009) investigated the influence of work exhaustion on IT professionals. First, Moore (2000) conducted a multi-method investigation on the premise of turnover intentions among IT and non-IT workers. The intent was to determine if IT workers experienced more exhaustion over non-IT workers, including the factors contributing to work exhaustion. Ahuja et al.'s (2007) study suggests that work exhaustion is a significant predictor of turnover intention for IT workers (Moore J. E., 2000). Additionally, amongst all antecedents to work exhaustion (e.g. perceived workload, role ambiguity, role conflict, autonomy, and fairness of rewards), perceived workload was a significant predictor of turnover. The results suggest that if the organization is concerned with retaining skilled IT workers, then management (IT or otherwise) should be concerned with their workload or face the possibility of IT turnover.

Second, Trauth et al., (2009) conducted research aimed at the retention of women in the IT profession by employing *the individual differences theory of gender and IT*. While aimed at the study of underrepresentation of women in IT, it is clear that work exhaustion is not perceived equally among genders (Trauth, Quesenberry, & Huang, 2009). Women in IT face a much harder prospect in regards to work exhaustion such as negative stereotypes, exclusion from social networks, and work-family responsibilities that far exceed their male counterparts. Work and family situations provide a heightened stress level for women IT professionals that negatively influences their productivity and absenteeism (Trauth, et al., 2009). The research results suggest that three organizational factors (1) work-life balance, (2) organizational climate, and (3) mentoring influenced the careers of women IT professionals. Organizations should first work to identify and acknowledge the differences between genders and exhaustive work events. Once identified, treatments are needed to address the organization's paradigm on how each organizational factor influences productivity and the retention of valued IT professionals.

Finally, Pearson et al., (2009) investigated constraining factors such as autonomy, overload, and work/family conflict, on IT innovativeness. The contemporary business environment is besieged with hyper-competitiveness, both on domestic and global levels. An organization's ability to remain competitive primarily relies on innovative technology solutions. Underperformance potentially results in Digital Darwinism, referring to the extinction of agencies unable to adapt to new demands (Baltzan, 2015). Pearson et al. (2009) suggests that an individual experiencing work overload, unreasonable time demands, and low resource availability reduces his ability to innovate successfully. The research results, however, indicate an insignificant impact of overload on innovativeness.

What is suggested is that a perceived lack of self-efficacy may negate any attempts at innovation. Individuals with heightened perceptions of self-efficacy on certain applications may feel less motivated to innovate (Pearson, Pearson, & Griffin, 2009).

Autonomy. Some IT professionals maintain high achievement needs such as training, challenges, and certifications (Boon Lee, 2000). However, many organizations likely have multiple active projects, potentially limiting learning opportunities. In the context of high achieving IT professionals, some overload their schedule, attempting to balance work and training. Decreased job autonomy exacerbates this situation by limiting how much one can fulfill both work and learning. Shih, Jiang, Klein, & Wang (2011) examined the issues of job autonomy on work exhaustion. An attribute of the IT profession is its quickly changing nature. Staying current with the latest technologies is a paradoxical quandary. IT professionals assert that to maintain marketability they must continually update their skill set. Job autonomy is used to reduce exhaustion (Shih, et al., 2011). In essence, more autonomy translates to increased control over the method of skill currency, reducing exhaustion. Of 306 respondents, the influence of job autonomy in concert with learning demand lowers turnover intentions.

Social interactions. InfoWorld (2012), Deery et al., (2002), Wegge et al., (2009), Rutner, Riemenschneider, O'Leary-Kelly, & Hardgrave (2011) investigated the nature of stressful and frequent interactions between IT workers and their customers. While the fission of IT professionals and users continues unabated, interactions between these two groups continue to receive focus in both practitioner and academic literature. In some interactions, users with self-proclaimed experience with technology are typically

associated with negative stereotypical terms such as “stupid user” and “bonehead” (InfoWorld, 2012). Call centers are replete with unproductive IT and user interactions that affect mental and physical energy resources (Deery et al., 2002; Wegge et al., 2009).

Rutner et al. (2009) used emotional dissonance to investigate frequently occurring IT professional and customer interactions to determine the influence of emotional dissonance on work exhaustion. Their results suggest that of 272 IT professionals, using negative display rules when responding to others employs both surface layer acting (i.e. acting in bad faith) and deep acting (i.e. acting in good faith). However, the path from negative display rules to deep acting is not significant (i.e. requires more cognitive investment to elicit the correct emotions), and thus surface acting is used. Surface acting requires less cognitive energy to reach the required emotional display. Surface acting, requiring fewer cognitive resources, has a definite, clear pathway to work. Since deep acting is reported to be more genuine, it has less of an effect on work exhaustion than surface acting.

Summary. Perceived work exhaustion exists as a negative influence on job satisfaction and positive impact on turnover intentions. Aside from work overload, negative emotional situations require more cognitive energy to cope with these interactions, likely leading the individual to consider leaving the organization. In the next section, the formation of psychological contract breach is discussed.

Psychological Contract Breach

Psychological contract breach is a manifestation of unfulfilled promises and lack of reciprocations. In the agential dyadic, obligatory reciprocity imparts the justification of

one's worthiness (Emerson, 1976). Agents execute appropriate behaviors for reciprocation, according to the value proposition in operant psychology. Homans (1974, p.25) suggests *The more valuable to a person is the result of his action, the more likely he is to perform the action*". However, failed reciprocations have the effect of enabling interpretations of poor organizational support. In psychological contract theory, two resultant conditions of unsuccessful reciprocations are PCB and PCV. For example, in a job recruiting event, the organizational representative and an individual socially interact; each filters the conversation based on his perceptual verbal, physical, and mental queues. Perceptions formulate the image of one to the other and each member in the interaction potentially interprets the conversation differently, thereby forming expectations that may or may not have been verbally exchanged (Rousseau, 1995; Rousseau, 2001). The image of one's needs and wants drives his efforts forming the behaviors that fulfill his schema; however, one's behaviors may or may not fully translate to his schema (Lippmann, 1922). Robinson and Morrison (2000) developed a set of measurement items necessary for the PC construct, based on the psychological contract theory. The measurement items address a set of generalizable items such as pay, promotion, opportunities, and training and development.

Psychological contract breach addresses both unmet promises and the lack of reciprocations (Rousseau, 1995). For example, IT professionals are often interrupted on project work to address less interesting issues such as tactical problem. While project work is potentially a salient PC item, handling tactical issues may be perceived as breach to their PC. Depending on the importance of the PC item, the constant switching between interesting and uninteresting tasks may not immediately translate into turnover intention.

However, unreciprocated salient promises can be perceived as reneged, and prompt the individual to consider reducing organizational citizenship behaviors and turnover intentions. Morrison and Robinson (1997) suggest that the state of the PC relies on a comparative functional process between expectancies and realities (i.e. monitoring). Some PC items may go unnoticed while others trigger a host of emotional reactions, sense making and coping (Niederman, Sumner, & Maertz, 2007; Morrison & Robinson, 1997). For example, occasional overtime may be dismissed as the nature of the job. However, continual overtime events can begin the process of assessing expectations and realizations. It is important to note that psychological contracts are not static but are in a constant change (Rousseau, 1995). New experiences, maturity, and changing interests influence the PC structure, eliciting new behaviors to meet these changes.

Rousseau (1995), Morrison & Robinson (1997), and Blau (1964) suggest that fulfilling the employee and organizational PC benefits the work relationship. However, recall that subjectivity is a complicating factor (Rousseau, 1995). Perception of a significant incongruence starts the demise of the work relationship. For example, military recruiters advertize the excitement and adventure of a soldierly life. Often pictures of pilots flying over spacious skies and their portrayal in action films such as “Top Gun” inspire individuals to enlist. However, for most, the ability to “fly jets” is limited to a small group of individuals with exceptional mental and physical capabilities. Thus, the comparison between what one believes will occur and what happens potentially generates adverse outcomes triggering a contextual re-assessment of one’s internal beliefs, expectations, and motivations. Extant research supports the results of missed promises as reduced employee performance, distrust, dissatisfaction and reduced organizational

commitment (Morrison & Robinson, 1997). In addition, purposeful mitigation of promises potentially generates intense emotional reactions such as betrayal and injustice (Morrison & Robinson, 1997), although this is not always the case.

Perceived PCB involves an interpretation of the event using a frame such as reneging, inadvertency, and incongruence (Rousseau, 1995; Robinson & Morrison, 2000). First, *reneging* is the purposeful failure to reciprocate obligations (Morrison & Robinson, 1997). For example, an employee communicates with management regarding an open organizational position. Management provides promising feedback that the employee will have the position on a precise date, once a suitable replacement can be found (they verbally indicate five weeks). After reaching five weeks, the employee checks on the status of the promise only to be told they were unable to find a replacement, when in actuality, management has not begun the search process. This perceived promise is assumed reneged, potentially reducing performance, and inciting turnover intentions. An organization's failure to communicate the reasons behind a reneged promise likely leads to counteractive agential assessments (Rousseau, 1995).

Second, an *inadvertent* reciprocation failure stems from unavoidable circumstances such poor organizational performance, external perturbations, such as an economic depression, and takeover (Morrison & Robinson, 1997). For example, a corporate takeover typically results in new management, right sizing, and budget recalibrating. The overtaking organization inserts its employees into positions occupied by the submitting organization resulting in employee layoffs.

Finally, *incongruence* is the agential schemata divergence of promises and their salience, and the awareness that a perceived promise was unfulfilled or was less than

expected (Rousseau, 1995). For example, an IT professionals need for skill improvement may involve departing his software-development group to join the network group. Management compromises by requesting a six-month involvement in a particular project. On the agreed-upon date, management asks the employee to spend another three months on the project. The breach of the original promise is incongruent with the employee's expectations calling into question the organization's authenticity.

An essential process in PCB is the situational cognitive *assessment*. Employees often assume a promise was reneged (Morrison & Robinson, 1997), influencing an immediate negative emotional response. However, PC incongruence could potentially be the organization's assessment of employee underperformance or disloyalty (Morrison & Robinson, 1997). This awareness potentially changes the breach interpretation. In addition, emotional outcomes may be based on the types of promises made and his importance to the individual. However, prior to an emotional response is a cognitive assessment, making PCB the first step in the sense-making process (Morrison & Robinson, 1997). It is important though not always followed that the incumbent determines the nature of the breach and its salience before an outcome is presented.

Determining the conditions of PC disequilibria involves sense making, which does not typically involve a singular event (Parzefall & Coyle-Shapiro, 2010). According to social exchange theory, a common sense-making outcome of an unbalanced exchange is for one to re-establish equilibrium (Blau, 1964). Some PC items are highly salient, eliciting almost immediate negative emotions, changes in reciprocity, and event reframing (Parzefall & Coyle-Shapiro, 2010). Others are considered less important and for this reason less exceptional, such that its mitigation is unnoticed. Locke (1976)

suggests that one's value hierarchy is an ordinal representation parallel to their PC (e.g. most important to least important). Extant research on PCB is well documented and includes such issues as breach severity, breach determination, promised versus delivered obligations and PC inequities.

Breach severity. Individuals maintain a mental *list* of perceived promises and obligations (Rousseau, 1995) such that salient promises are readily available (Kotter, 1973). To ensure that one's salient promises are satisfied, a cognitive monitoring process focuses on the reciprocation of these significant obligations (Morrison & Robinson, 1997). The awareness that an important PC item was unreciprocated triggers the assessment process; in essence, how important was the promise to its holder. Lester, Turnley, Bloodgood, and Bolino (2002) examined interpretations of PCB from supervisors and their subordinates. Salient items for employees were pay, opportunities, and a positive work relationship Lester, et al., (2002). Supervisors tended to elucidate missed obligations as an unavoidable organizational situation. Employees perceived failed reciprocations as renegeing. However, Lester et al. (2002) suggest that in contrast to psychological contract research, employees felt that their organization generally addressed their PC. Still, some subordinates felt their organization renegeed on their promises, thereby reducing their organizational commitment and performance efficiency. Others were more likely to attribute PCB to incongruence between employees and their supervisors. As a result, addressing lower employee commitment and performance can be rooted in perceived PCB. Lester et al., (2002) indicate the statistical significance of misaligned perceptions of PCB between supervisors and their subordinates is closer to 25 percent. This suggests that while the majority of employees believe their organization

reciprocated “well enough” a small percentage felt differently. While the unsatisfied minority may be less of a factor, what is unknown is the value of these employees to the organization.

Breach determination. Psychological contract breach determination addresses factors contributing to an employee's perception that a potential salient promise was unreciprocated. Robinson and Rousseau (1994) conducted a mixed-method study on psychological contract violation with newly graduated MBA students. Quantitatively, several respondents experienced frequent psychological contract violations by their organization. Qualitatively, the more frequent psychological contract violations were training, salary and job promotion (Robinson & Rousseau, 1994). As a result, employee performance, trust, job satisfaction and obligation were diminished which therefore led to turnover intentions. External conditions, such as a down economy, can create an organizational dilemma regarding initial promises made to their employees (Robinson & Morrison, 2000). Failure to reciprocate promises and communicate the reasons behind the failure can result in unfavorable interpretation and thus fosters relationship degradation.

Another potential situation contributing to PCB determination is the initial employee socialization process. Organizational indoctrination is a social event where employees are inculcated with company values, beliefs, and culture (Van Mannen & Schein, 1979). The indoctrination process, therefore, enables employees to assess their cognitive schema by organizational agents and thus reduces potential incongruence (Morrison & Robinson, 1997). Robinson & Morrison (2000) investigated inaugural employee indoctrination and found that when organizations circumvented this activity, employee performance was negatively affected. Robinson & Morrison (2000) also

investigated instances of prior PCB experience from the employee and employer relationship. Employees experiencing previous organizational missed reciprocations were highly vigilant about their PC and likely to perceive PCB in their current organization. Previous breach experience, although an important factor in the work relationship, is beyond the scope of dissertation.

Promised versus delivered obligations. Montes and Zweig (2009) used a multi-method approach to disentangle outcomes of perceived PCB and their effects on employees' feelings of violation and various behavioral intentions. The research goal was to test the criticality of PC promises to determine the role of PCB. The research results suggest PCB perceptions did not necessarily represent fulfillment discrepancies but did exist in the absence of promises. In addition, commitments played a negligible role in predicting feelings of violation and behavioral intentions. Contrary to existing literature, employees were found to be concerned less with promises than with delivery such that reciprocities of equal or better value than initially expected may be "*good enough*".

Inequities. Equity theory (Adams, 1963; Miles, Hatfield, & Huseman, 1989) states that individuals assess their relationship by the ratio of their inputs and returned outputs. Similar to PC (Rousseau, 1995) and social exchange (Blau, 1964), the under-representation of outputs to inputs potentially influences the restoration of inequities (Miles et al., 1989). For this reason, equity sensitivity refers to a condition of heightened awareness and concern about inequities.

Kickul and Lester (2001) examined how equity sensitivity moderates the PCB and employee attitude relationship (i.e. entitled and benevolent). Entitled individuals are

posited to exhibit increased negative affect toward their organization and decreased job satisfaction and organizational citizenship behaviors compared to non-entitled individuals. The incorporation of the equity sensitivity concept is an important measure in determining the magnitude of reactions to an inequity since it is reasonable that interpretations can vary between entitled and benevolent individuals. The results suggest that entitled individuals were more affected by PCB on items such as pay and benefits. Benevolent individuals were more sensitive to breaches of autonomy and control whereas entitled individuals were more affected by growth and development (Kickul & Lester, 2001).

Summary. PCB is the condition where one becomes aware of broken promises. While some PC items are highly salient, others are less so. Thus, it is reasonable that highly regarded promises are monitored more carefully. Performance and commitment are mainly associated with how well the employee and organization assess and compare their input-to-output ratio. From the organization's perspective, it is difficult to determine which subjective promissory items are important to the employee such that failed reciprocation reduces performance and commitment, creating disappointment (Montes & Zweig, 2009). For this reason, reciprocation failures can create the perception of a degraded relationship, disengaging employees from the organization. In the next section, the emotional outcome of PCB, psychological contract violation, is examined.

Psychological Contract Violation

According to Rousseau (1995) and Morrison & Robinson (1997), the omission of salient promises potentially generates high affective outcomes. Psychological contract

theory includes affect in its framework known as PCV. Robinson and Morrison (2000) identified situations where failure to reciprocate highly significant promises generated strong emotional reactions. For example, a promised salary raise or job promotion seen as commensurate of an employee's dedication is unreciprocated by the organization for an unknown reason. The employee can investigate reasons for the mitigation or bypass this process entirely and consider leaving the organization (Morrison & Robinson, 1997). The literature review makes clear the multiple negative outcomes of PCV such as diminished trust, performance and engagement.

Salience is the dividing line between tolerable and intolerable outcomes. For example, managers may promise a promotion to a tenured employee but instead hire outside the organization. This notion is potentially interpreted as a purposeful violation, resulting in affective responses such as anger, distress, dismay, and injustice (Morrison & Robinson, 1997). Ancillary repercussions such as distrust (Erkutlu & Chafra, 2013), turnover (Suazo & Stone-Romero, 2011), and aberrant behaviors (Restubog, Zagenczyk, Bordia, & Tang, 2013) are likely. For this reason, it is reasonable that unreciprocated highly salient promises evoke more intense reactions (Robinson & Morrison, 2000). For example, many IT professionals perceive their compensation to be less attractive than market value (Burnes, 2006) which has the potential to provide justification for seeking alternative employment. The literature review addresses the PCV realm centering on four areas: underperformance, workplace deviance, organizational commitment, and IT PCV.

Underperformance. Stoner and Gallagher (2010) examined how the level of job involvement influences negative reactions to psychological contract violation such as depression and turnover intention. Job involvement refers to one's job engagement and

participation (Paullay, Alliger, & Stone-Romero, 1994). Stoner and Gallagher's (2010) research suggests employees with high job involvement are more engaged in their jobs and are less sensitive to contract perturbations. Employees with low job involvement are perceived to be less involved in their work and were more affected by PCV. The level of job involvement appears to influence the relationship between PCV and depressed mood at work and turnover intention. Thus, the more psychologically involved employees are in their work the less attention is granted to negative PCV outcomes. Workers less psychologically involved in their work exhibit greater negative outcomes to PCV (Stoner & Gallagher, 2010).

Workplace deviance. Employees and organizations engage in *relational loyalty* referring to a mutual commitment to socio-emotional exchanges (MacNeil, 1985; Rousseau & McLean, 1993). Each agent values support and typically remains in the relationship despite occasional problems or the availability of a more attractive offer (Hart & Thompson, 2007). The majority of employees desire to be active and contributing members of their organization.

However, situations defying the norm of reciprocity can evoke strong negative outcomes. One such outcome is workplace deviance, referring to the "*voluntary behavior that violates significant organizational norms, and in so doing, threatens the well-being of the organization and/or its members*" (Robinson & Bennett, 1995, p. 556).

Organizational effectiveness is at risk when deviant behaviors such as theft, improper display emotion, violence, and nonparticipation are exhibited (Harrell, 2011; Robinson & Bennett, 1995). For example, in 2008, a Chinese engineer working in the U.S. exported sensitive Department of Defense information to The People's Republic of China. The

perpetrator was sentenced to 24 years in prison. More disturbing was that no discernable method existed to determine the amount of exported information or threat to the U.S. In another equally disturbing case, a network administrator opened up his former organization's email server to spammers. He also deleted the email server database along with several critical files necessary for the proper start-up sequence. The justification for his action, from the former employee's view, was based on the method used to terminate his contract (McMillan, 2008). In addition, the U.S. Department of Justice reported that between 1993 and 2009 approximately 572,000 people were affected by non-fatal workplace violence (Harrell, 2011).

Procedural justice refers to the method used to determine an individual's outcome (Thibaut & Walker, 1975; Brockner & Wiesenfeld, 1996). Interactional justice is the fairness of treatment, including the fairness of treatment of organizational agents (Bies & Moag, 1986; Greenberg, 1987). Sayers, Sears, Kelly, and Harbke (2011) examined the interaction between PCV and workplace incivility, moderated by procedural and interactional justice. An individual that expects high procedural and interactional justice consumes more mental effort determining organizational reciprocity failures. However, perceived significant inequities trigger employees to engage profound and elaborate cognitive processes to make sense of the unexpected turn of events (Sayers et al., 2011). Employees in high procedural and interaction justice environments are acclimated to fair treatment. An incongruent situation is, therefore, counter to expectations and triggers an investment of mental energies to determine the cause of the imbalance and to exhibit the appropriate response (Sayers et al., 2011). The results suggest that procedural and interactive justice act as modifiers of the PCV and instigated incivility relationship.

Zoghbi-Manrique-de-Lara (2010) investigated deviancy using procedural justice, deviant workplace behavior directed at the organization (DWBO) and task satisfaction. The research premise suggests employees perceiving unfair organizational treatment (i.e. procedural justice) exhibit DWBO according to how satisfied they are in their work environment. For example, software developers programming in COBOL may be required to switch to another coding language. Long-term COBOL developers may not desire to make the switch because of their efficacy in the current language. It is reasonable that switching to the new coding scheme may have a detrimental effect on task satisfaction. The results support the notion that inadequate procedural justice can initiate DWBO via a drop in job satisfaction (Zoghbi-Manrique-de-Lara, 2010).

Organizational commitment. Chiang, Liao, Jiang, & Klein (2012) examined erosive influences to organizational commitment vis-à-vis psychological contract violation. In addition, contract type (transactional/relational) was tested as a mediator between psychological contract and organizational commitment. The research premise focuses on the reduction of relational-based over transaction-based contracts, somewhat in opposition to previous organizational research on long-term commitments (Chiang et al., 2012). The main argument of Chiang et al's., (2012) research maintains that dedicated, loyal and commitment workers have a high attachment to their organizations (e.g. relational psychological contract). However, perceptions are that current organizations desire more flexibility straining the worker and organization attachment. In the context of full time IS professionals in Taiwan and Malaysia, PCV eroded organizational commitment from employees with relational contracts types than those with transactional contracts. Contract types were found to moderate the relationship

between the PC and organizational commitment suggesting that employees with a relation-based PC exhibit higher loyalty. Psychological contract violation thus negatively affected the worker/organizaion attachment and influenced turnover intention.

Psychological contract violation in the IT profession. Riemenschneider and Armstrong (2012) examined the effects of PCV in the IT profession based on the recent downturn in the US economy. IT professionals are pushed to do more with less (Rutner, Hardgrave, & McKnight, 2008; Moore J. E., 2000; Watson, 2009) and, in some cases, for less pay and benefits. The research premise focuses on the potential direct influence of PC, investiture/divestiture, self-efficacy, supervisor support for career and family and career orientation, to PCV. The results suggest that the strongest predictor of PCV was the existence of a PC, followed by career orientation. An individual's focus on his/her career and the profession highlights the expectations one has for the profession, thus increasing the potential for violations. In contrast, investiture/divestiture was the strongest negative predictor. Educators and professional organizations can develop interventions that increase investiture through support opportunities such as mentoring and networking to counteract the adverse effects of a high psychological contract and career orientation while maintaining the positive impact of a strong obligation on an individual toward the field (Riemenschneider & Armstrong, 2012).

Summary. PCV exists in several forms, most notably in the employee and organization relationship. While the majority of work relationships are likely positive and productive, it is evident that PCV can create stress reducing relationship valence, performance, commitment, and loyalty. IT is important to note that although that the

dissertation focuses on the employee's PC, the organization's PC is equally important and likely suffers the same complexities as the employee's PC. In the next section, a potential contingency of PVC is turnover intention.

Turnover Intention

High IT professional turnover continues to be an organizational concern.

Turnover intention refers to an individual's propensity to consider leaving an organization based largely on positive or negative attitudinal formulations toward workplace situations (Fishbein & Ajzen, 1974). For example, a career-minded IT professional may perceive repeated PC repudiations from his respective organization leading him to consider that another organization may be better suited to his needs.

Turnover intention correlates to job dissatisfaction (Hulin, 1968), work exhaustion (Moore J. E., 2000), discrepancy of wants (Jiang & Klein, 2002), poor leader-member exchange (Sherman, Kennedy, Woodard, & McComb, 2012), and negative affective organizational commitment (Craig, Allen, Reid, Riemenschneider, & Armstrong, 2012). Joseph et al., (2007) conducted an extensive multi-method study on turnover influences such as motivation, ease of movement, job-related factors (e.g. boundary spanning activities, job autonomy, and job involvement) and perceived items such as career plateau, fairness of rewards and pay. Reducing actual turnover includes perceived job alternatives (Thatcher, Stepina, & Boyle, 2002), procedural justice (Thibaut & Walker, 1975), interactional justice (Bies & Moag, 1986), and work-family conflict (Armstrong, Riemenschneider, Nelms, & Reid, 2012). However, a reasonable premise is that highly negative and disparaging work experiences are potentially associated to turnover intention (Maertz & Kmitta, 2012). Despite organizational efforts to clarify an

employee's PC, subjectivity and malleability complicate its fulfillment. People tend to believe their organization is capable of fulfilling their expectations. Recurring reciprocation failures reduce trust and potentially elicit thoughts of turnover. The literature review reveals antecedents to turnover intention such as work-life balance, compensation and support.

Work-Life balance. Blomme, Van Rheede and Tromp (2010) investigated the interaction between psychological contract, the employment relationship, and work-life balance in the hospitality field. Specifically, PC imbalances of highly educated male and female employees in relation to turnover were examined. The results suggest that predictors of turnover intentions are different for men and women such that for males job characteristics were important while women preferred promotion opportunities and work-life balance. Furthermore, extant research suggests that the IT profession continues to struggle with retaining women, their concerns about work-life balance (Reid, Allen, Armstrong, & Riemenschneider, 2010), as well as organizational climate and mentoring (Trauth, Quesenberry, & Huang, 2009).

Ahuja, McKnight, Chudoba, George, and Kacmar (2007) investigated the stress IT road warriors experience from consulting engagements and its effect on turnover intention. Depending on the organization and its purpose, a single IT professional potentially has multiple remote on-site engagements. Depending on the customer's implementation schedule, time away from family can be lengthy to include a full workweek and overnight stays (Madden, 1995). The research results indicate that work-family conflict contributes to work exhaustion and disrupts the work and family balance.

Compensation. Bhanu (2011), Riemenschneider & Armstrong (2012), Schaubroeck, Shaw, and Duffy (2008) suggest that compensation appears as a salient PC item among employees. Of all variables suggested to influence turnover intention, compensation continued to influence turnover intention. SamGnanakkan (2010) found that inadequate compensation influenced turnover intention on information and communication technologists. Similarly, Ford & Burley (2012) examined the factors of disengagement and exhaustion in university IT professionals. An individual's turnover intentions are likely initiated by a slow disengagement with his organization such as deteriorating working conditions and inadequate pay raise incentives. Robison (2008) found that 22% of IT professionals left their organization because of insufficient pay and benefits.

Turnover intentions in the IT profession. The worker-organization association signifies a relationship built on dependence and trust (Dabos & Rousseau, 2004). Riemenschneider & Armstrong (2012) examined the factors influencing IT professionals to experience contract violation with the organization. The IT professional-organizational relationship breakdown stems from the perception of unreciprocated promises (Rousseau, 1995). Among the multiple antecedents interacting with psychological contract violation, supervisor support is the focal point because reciprocations drive the supervisor-worker relationship. The results suggest supervisor support on career and work-family conflict was a significant predictor of psychological contract violation. Although turnover intentions were not specifically tested, it is reasonable that the consideration of turnover intentions is possible at this stage.

Summary. Turnover intention precursors are clearly associated with the misalignment between expectations and realizations (Morrison & Robinson, 1997). It is reasonable that all psychological contracts undergo realignments throughout one's lifetime (Rousseau, 2001). Thus, the PC is difficult to satisfy because it changes and is subjective (Rousseau, 1995). Given enough reciprocation failures, extant research suggests a logical progression from PCV to turnover intention (Shahnawaz & Goswami, 2011; Paillé & Dufour, 2013).

IT Psychological Contract

This study examines the process of IT turnover intention from an *organizational* perspective. My intent, in future research, will be to examine what causes IT professionals to leave their profession. It is reasonable that a factor in IT profession turnover intention occurs first at the organizational level. Moreover, it is possible that longitudinal demanding situations influence IT professionals to consider leaving the IT profession (Robinson & Morrison, 2000). A follow-up research plan from this dissertation will take psychological contract theory beyond the dyadic relationship to one encompassing IT professional turnover intentions within the IT profession (Riemenschneider & Armstrong, 2012). The direct physical organizational side of the relationship represented by organizational agents likely influences IT profession turnover. An individual's goals, successes, and failures are an intrapersonal event (Bandura, 1977), largely based on one's profession vigilance. However, externalities can interfere with goal attainments such as job dissatisfaction, family constraints and economic downturns.

Foundationally, a relationship between the IT professional and his profession exists hermeneutically and ontologically and is thus intra-relational. For example, career

satisfaction is the assessment of achievements. In contrast to the agential responsibility of the contract (Shore & Tetrick, 1994), the IT professional is *solely* responsible for interpreting the external nuances and possibilities perceived by the profession. For this reason, profession reciprocities exist cognitively in the IT professional's self-constructed PC such as needs, motivations, professional growth, including the required investment of efforts, dedication, and commitment. For example, trade magazines annually publish salary survey results presenting potential IT profession pay outcomes. In 2012, the projected salary estimate for a CIO caliber position was \$155,160, IT director at \$123,019, and a systems administrator at \$72,754 (Computerworld, 2012). Henderson (2012) published the Department of Labor Statistics projected employment growth patterns for IT professionals from the 2010 to 2020 to be at 8.9% (software publishers) and 6.1% (data processing and hosting), which is faster than the average for all occupations. Technical certifications are another widely published and sought-after asset. Certifications such as the Cisco Certified Internetwork Expert (CCIE), Microsoft Certified Systems Engineer (MCSE), and Certified Information Systems Security Professional (CISSP) are all examples of professional expectations. In the next chapter, the theory and associated measurement constructs necessary to test the research model are discussed.

CHAPTER THREE

Theory, Model and Hypotheses

The literature review addresses IT turnover intentions from many perspectives such as social exchange theory (Blau, 1964), psychological contract theory (Rousseau, 1989), theory of planned behavior (Ajzen, 1991), equity theory (Adams, 1963), and expectancy theory (Vroom, 1964). While each theory presents a unique aspect of turnover, the following sections explicate the appropriateness of applying psychological contract theory as the lens to examine the organizational concerns of IT turnover. The identification of the associated constructs and their role in psychological contract theory are presented, followed by building the hypotheses.

Theory

A contract refers to “an agreement or covenant between two or more persons, which each party binds himself to do, or forbear some act, and each acquires a right to what the other promises” (Webster, 1983, p. 396). For example, an organization requesting a broadband connection to their facility works with an Internet service provider on issues such as the connection fee, line speed, uptime, payment schedule, and service termination. These items are recorded on a physical, legal, and binding contract between the two parties suggesting that each is aware of the agreement conditions. The failure of either agent to honor the contract may result in service termination or civil action. Contract partners clearly understand the expectations. However, despite the contract’s clarity, there are multitudes of external situations broadband providers cannot

control. For example, an Internet connection agreement states that the customer will receive a sustained level of connection resilience (i.e. *uptime*). Upon extended periods of downtime, credits are issued to the customer to “make-up” for the unexpected outage. In addition, as the service provider continues to uphold its part of the contract, the customer may become frustrated with frequent uncontrolled outages and seek other broadband providers with a more stable connection.

It is clear in the above discussion that despite a specified contract, either party can decide to cancel the agreement. Rousseau (1995) addresses contracts from a cognitive perspective. While some contracts can appear unambiguous, the employee/organization agreement is less so. The employment contract is typified less as a dichotomy and more as a fuzzy object. Rousseau (1995) suggests that the organizational contract is more a cognitive arrangement that is deep and interpretive. Thus, the psychological contract is defined as “*an individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party*” (Rousseau, 1989, p. 123). Work engagements are functional and social relationships involving two or more people collectively focused on a common purpose (Vroom, 1964). Each has a stake in the relationship such that workers provide a service in exchange for wages, social interaction and involvement in the production of goods and services (Vroom, 1964). The organization generates products and services necessitating the need for skilled workers. Employees work to fulfill their basic needs such as air, food, water, shelter and self-actualization (Maslow, 1943). Organizations are concerned with survival and achievements such as earning the reputation of “world-class organization”. Thus, when choosing an organization an individual fuses his ontological formation of beliefs, values

and goals into appropriate endeavors he believes most likely will satisfy these cognitive arrangements. Likewise, organizations search for individuals most able to help the organization reach its goals. For this reason, workers and organizations engage in a relational attachment where each works to reciprocate to the other. It is important to note that while a transactional engagement likely achieves organizational needs, the focus of this study involves long-term work relationship endeavors.

Psychological contract theory is similar to social exchange theory in that it addresses the mutual exchange of obligations between two or more agents (Blau, 1964). However, psychological contract theory is unique in that it incorporates the cognitive arrangement of salient promises (psychological contract), their fulfillment (psychological contract fulfillment), their mitigation (psychological contract breach), and an affective component that addresses missed highly salient promises (psychological contract violation). First, the formalization of the PC can occur from influences like friends, family, experiences, education, and societal norms; in essence, schemas (Rousseau, 2001). A schema serves as an organizer and influence to one's interest. Rousseau (2001) suggests a model of abstraction with high and low-level elements such as ideologies and norms and the respective obligational elements. This scheme was adopted by Rousseau's (2001) graphical depiction of a hypothetical professor-school schema and translated it to an IT professional/organization orientation that is presented in figure 1. In Rousseau's (2001) model, success and reputation are parent level objects that define a professor's effectiveness, both by their achievements and their reputation in the field. Lower level elements address the necessary atomic elements that create the professor's reputation and success. The arrangement of Rousseau's (2001) model in the IT professional-

organizational schema represents a set of high-level elements such as professional reputation and psychological success. Psychological success refers to the level of proficiency one has with their profession. Professional reputation refers to the level of technology and business acumen an IT professional possesses. Essentially, the better one's skill-level, the more success one feels. Thus, the individual associates himself with a profession and organization that best fits his goals and beliefs (Backashaus, 2003). A reasonable assumption is that based on personality type; the individual is motivated by incentives to increase his skillset. The root items address the actionable items (i.e., training, experience, and organizational service) that improve one's professional reputation and psychological success. The actionable items service the mid-level goals of IT professional development and business education. The parent-level objects are associated with the lower level items.



Figure 1. A hypothetical IT professional schema

Research Model and Hypotheses

A conceptual model of psychological contract breach, psychological contract violation, and turnover intention drawn from the IS, psychological and management literature is presented in Appendix A. This model extends Riemenschneider and Armstrong's (2012) model by including PCB and turnover intention. Inclusive are the antecedents that likely contribute to PCB. As previously discussed, PCB is composed of two subcomponents: Unfulfilled promises and lack of reciprocation. The original PCB construct contains five measurement items. Three items are reverse-coded while the remaining two are not. A review of the measurement items by two experienced researchers indicated the possibility of splitting PCB into two separate constructs. Unfulfilled promises address the perception that an agent did not receive what they expected from the organization (Rousseau, 1989; Morrison & Robinson, 1997). Lack of reciprocation addresses the perception that the organization may not be honoring the *right* promises. In accordance with extant research to investigate the relationships presented in the model, control variables associated with turnover intentions must be considered (Moore J. E., 2000). According to Mobley, Griffeth, Hand, & Meglino (1979), age and tenure are proximal to turnover intention and are included in the model as control variables. The following subsections establish the research model hypotheses accompanied with the appropriate support for each.

Psychological Contract

Based on extant research, the psychological contract is an overarching cognitive concept identifying and organizing subjective and salient expectations one has of the organization (Rousseau, 1995). Common expectancies identified in the literature include compensation, benefits, opportunity, and promotability. The PC is subjective such that each individual maintains unique beliefs and goals during its construction, therefore complicating successful fulfillment by the organization (Rousseau, 1995; Morrison & Robinson, 1997). Thus, the PC contains many important items besides salary and promotional opportunities such as workload, stress and autonomy. It is therefore reasonable to consider the PC as a multi-dimensional concept because each individual decides which promises are salient. To properly consider the issues surrounding IT turnover, Wrigley (1970) suggests that motivations for leaving are largely known only to the individual, except restlessness. Subsequently, Moore and Burke's (2002) reference to IT as a turnover culture argues that any number of salient items outside the common PC are equally probable.

Compensation, opportunity and promotability have been identified in extant literature as fundamental items in the employee's PC. Because of the importance of honoring salary, career opportunity and promotion promises, an organization's failure to reciprocate can diminish the work relationship and lead to cognitions of PC breach that are likely related to perceptions of unfilled promises and/or lack of reciprocation. For example, job promotions, organizational opportunities and compensation are elements of PC that are not necessarily contractual but employees may perceive these as 'owed' nonetheless, leading to the hypotheses in H1a-H1c that reference a breach of promises.

However, compensation is articulated and often contractual and is likely to elicit perceptions of violations directly related to a breach of reciprocation as hypothesized in H1d. In sum, a PC breach is composed of elements related to promises that may be articulated and thus assumed by the employee or articulated and contractual.

H1a: An organization's reciprocation of a promised job promotion will be negatively associated with psychological contract breach-Unfulfilled Promises.

H1b: An organization's reciprocation of promised organizational opportunities, such as training and career development will be negatively associated with psychological contract breach-Unfulfilled Promises.

H1c: An organization's reciprocation of promised remunerations will be negatively associated with psychological contract breach-Unfulfilled Promises.

H1d: An organization's reciprocation of promised remunerations will be negatively associated with psychological contract breach-Lack of Reciprocation.

Perceived Supervisor Support

Psychological contract theory describes the work relationship in terms of duration and embeddedness (Rousseau, 1995). Duration refers to the length of the relationship (e.g. short-term or long-term) whereas embeddedness refers the strength of the association of the employee to the organization (Rousseau, 1995). Short-term engagements typically are transactional and long-term are relational. Moreover, the more one identifies with the organization, the greater their embeddedness. Thus, long-term

employees identifying themselves with the organization refers to a relational psychological contract in which the employee has established a greater depth and breadth of organizational interactions. Similar to H1a-H1d, lack of supervisor support can elicit perceptions of unfulfilled promises and/or lack of reciprocation, thereby diminishing the work relationship.

Moreover, the work environment has transcended the give-and-take paradigm to one based on the notion of a relationship. For example, firms are looking for ways to foster high-performing employees and groups. The notion of the family organization has permeated the business philosophy through transformative leadership (Llopis, 2012). Treating employees as part of a positive and progressive relationship includes providing socio-emotional support (Meyer & Allen, 1997). Employees rely on organizational support to meet goals such as promotability and job security and to find creative solutions to minimize work-family conflict situations. Galup, Klein, & Jiang (2008) suggest poor supervisor support contributes negatively to job satisfaction. Similarly, Rigas (2009) found that indisposed supervisor support in Taiwanese organizations lead to work exhaustion and turnover intentions. Moreover, salary increases for unhappy IT professionals had little to no effect on their organizational commitment. Extant research suggests that positive supervisor support is a common negative influence to psychological contract breach (Rousseau, 1995).

Because of the progression of the relationship and the nature of the work environment, supervisor support has become an important factor related to employee expectations. Therefore, perceived supervisor support should counter the negative effects

of psychological contract breach from unfulfilled promises and the lack of reciprocation. Therefore, this leads to the following hypotheses.

H2a: Perceived supervisor support will be negatively associated with psychological contract breach-Unfulfilled promises.

H2b: Perceived supervisor support will be negatively associated with psychological contract breach-Lack of Reciprocation.

Perceived Work Exhaustion

Perceived work exhaustion refers to the depletion of physical, mental, and emotional energy over extended periods of demanding events (Moore J. E., 2000; Malakh-Pines & Aronson, 1981). The IT profession is characterized as highly competitive, constantly changing, nonstandard work schedules, heavy workloads, unhappy users, layoffs, and high turnover (Ahuja M. , 2002; Joseph, Ng, Koh, & Ang, 2007; Riemenschneider & Armstrong, 2012; CIO, 2012). Extant research suggests that work exhaustion is less an influencing factor in turnover intentions. However, work-family conflict and perceived work overload significantly affect turnover intentions (Ahuja et al., 2007). Maslach and Jackson's (1981) conception of job burnout encompasses emotional exhaustion, depersonalization and diminished personal accomplishments. *Emotional exhaustion* refers to the diminished mental capacity to deal with continuous stressful situations. *Depersonalization* refers to an eventual distal and negative relationship with others. *Diminished personal accomplishments* refer to the awareness that one is unable to reach established organizational goals, or placate frustrated users (Maslach & Jackson, 1981). The common underlying outcome is a disparity between expectation and delivery increasing mental energy to cope with the

inequality. While the initial investment of cognitive energy on stressful events may not immediately translate into PCB-Lack of Reciprocity (PCB-LR), longitudinal work stress events can be perceived as organizational aloofness. IT professionals are asked to do more with less and at times, for less money (Rutner, Riemenschneider, O'Leary-Kelly, & Hardgrave, 2011). Therefore, perceived work exhaustion should correlate positively to both PCB-LR and PCB-UP. This leads to the following hypotheses.

H3a: Perceived work exhaustion will be positively associated with psychological contract breach-Unfulfilled promises.

H3b: Perceived work exhaustion will be positively associated with psychological contract breach-lack of reciprocation.

Autonomy

Autonomy refers to the level of freedom individuals have in the way they conduct their work (Dodd & Ganster, 1996). Extant research suggests that job autonomy gives an individual methodological discretion on how and when tasks are to be performed (Hackman & Oldham, 1976). Autonomy limits constraints and reduces tedium, and can increase job satisfaction perceptions (Ahuja, McKnight, Chudoba, George, & Kacmar, 2007; Moore J. E., 2000). Autonomy also contributes positively to worker attitudes and mental well-being. For example, Morgeson, Delaney-Klinger, & Hemingway (2005) found that autonomy increased discretionary behavior such as increased work quality. However, low autonomy was found to correlate to perceived work overload, work exhaustion, work-family conflict, and turnover intentions (Ahuja et al., 2007). Mourmant, Gallivan, and Kalika (2009) found that individual-level attributes such as autonomy present organizational IT retention problems such that some employees consider

entrepreneurialism. The IT profession's vastness affords individuals alternative pathways to career satisfaction by considering turnover and establishing their organization and potentially competing against their previous organization (Mourmant et al., 2009).

From a psychological contract perspective, job autonomy contributes to a successful give-and-take paradigm that would maintain relationship homeostasis, lessening the chances of employee frustration and withdraw. The inability of IT professionals to maintain control over their work environment such as job schedules, workload and involvement in decision-making can lead to the perception of inadequate organizational reciprocations. Low job autonomy likely characterizes the work environment as highly controlled and thus employees may feel less committed to the organization. However, adequate job autonomy counteracts negative perceptions of unfulfilled promises and lack of reciprocation thus leading to the following hypothesis.

H4: Job autonomy will be negatively associated with psychological contract breach-Lack of Reciprocation.

Emotional Dissonance

Emotional dissonance refers to the internal conflict between how one feels and how one should act (Rutner, Hardgrave, & McKnight, 2008). In some organizations, IT is considered service-oriented where IT professionals must adhere to positive display rules and a willingness to help, educate and address tactical and strategic projects in and out of their field (Diefendorff & Richard, 2003). Typical IT professionals experience nonstandard work schedules and stressed users, challenging one's display rules. Users expect constant access to information. System problems are likely to place users in a heightened state of emotion. For example, the recent implementation of the national

healthcare site frustrated users causing them to sign up with other healthcare providers, and paying a premium to do so (Pettypiece, Vekshin, & Niquette, 2013). Despite internal conflict and frustrations with others, business social protocol suggests that professionals act in a controlled, patient, and kind manner (Ekman, 1973).

Rutner et al., (2008) found a correlation between emotional dissonance and work exhaustion, predicting perceived work exhaustion more accurately than perceived workload, role conflict and role ambiguity. Moreover, emotional dissonance lowered job satisfaction and ultimately increased turnover intentions (Rutner et al., 2008). Similarly, Wegge, Van Dick, & Von Bernstorff (2009) suggest that in call center work, emotional dissonance reduces work motivation and well-being. The focus on felt and expressed emotional self-control is likely the long-term exposure to continual negative interactions increasing the likelihood of negative response conflict. A psychological contract breach is possible given the occurrence of enough negative interactions. For example, IT helpdesk workers, similar to call centers, are focused on sustaining user productivity. Software and hardware issues slow or stop progress. Depending on the nature of the problem, social interactions between help desk workers and their users are often strained. The longevity of unproductive interactions can lead to depersonalization. The accumulation of negative situations likely leads to unfulfilled promises if employees believe the organization has the responsibility to protect the employee from such conditions. On the other hand, if the employee discusses the issue with management but continues to deal with unproductive situations, a lack of reciprocation is likely perceived.

H5: Emotional dissonance will be positively associated with psychological contract breach-Lack of Reciprocation.

Psychological Contract Breach

Psychological contract breach refers to an individual's awareness of an asymmetry between what is expected and what is received (Rousseau, 1989). As previously discussed, this study expands the utility of PCB into two separate components: unfulfilled promises and lack of reciprocation. PCB-Unfulfilled Promises refers to the general definition as presented by Rousseau (1989) such that an agent in the work relationship is aware that one or more expected promises were un-honored. PCB-Lack of reciprocation refers to the awareness other promises, perhaps more salient than the one honored have been missed (Rousseau, 1989). Psychological contract asymmetry can act as a potential pathway to PCV. Psychological contract violation refers to a heightened emotional response from the realization that a significant promise was missed (Rousseau, 1989). Extant research provides examples of significant antecedents to PCV such as investiture, divestiture, self-efficacy and career orientation (Riemenschneider & Armstrong, 2012). However, PCB is distal from PCV such that while contract inequity exists, adverse outcomes may not always translate to PCV (Rousseau, 1995; Morrison & Robinson, 1997).

Unique to PCB are reciprocation vigilance and monitoring. For example, the reduction of employee performance, trust, satisfaction and organizational commitment are likely outcomes of PCB (Robinson & Morrison, 2000). Patrick (2012) suggests that organizational commitment and justice significantly influence employee commitment. Major, Morganson, and Bolen (2012) found that growth opportunities, job security, job stress, and work-family culture influence organizational commitment. Organizational commitment, employment security, and opportunity deficits negatively affect the work

relationship. The awareness of an incongruent condition enacts an assessment to determine the importance of the promise, whether the incongruence was purposeful or accidental, and whether to ignore it or exhibit a strong negative emotion (Robinson & Morrison, 2000). The inability of the organization to access the IT professional's PC indicates that some promises are likely unfulfilled. However, failure to satisfy PC items such as salary, latitude and promotion is likely perceived as a general lack of reciprocity. Thus, PCB-unfulfilled promises and PCB-Lack of Reciprocity are potential antecedents to a psychological contract violation.

H6: Psychological contract breach-Unfulfilled Promises will be positively associated with psychological contract violation.

H7: Psychological contract breach-Lack of Reciprocation will be positively associated with psychological contract violation.

Psychological Contract Violation

PCV evokes contravening behaviors of unreciprocated promises, whether promises were overt or implied. While PCB may enable coping mechanisms, PCV addresses a deeper attachment to the promise and potentially elicits stronger affective reactions. PCV fosters feelings of anger, distress, injustice, and mistrust arising from the realization that an individual's organization has failed to reciprocate (Robinson & Morrison, 2000). The formation of intense feelings appears in congeneric situations like supervisor abuse (Thau, Bennett, Mitchell, & Marrs, 2009), missed promotion, and salary raise, inadequate, and unethical improprieties (Robinson & Rousseau, 1994). PCV is a separate and unique construct from PCB such that the eventuality of an unreciprocated expectation generates "*a trauma for the relationship and undermines good faith*"

(Rousseau, 1995, p. 119). Cognitive monitoring compares expectations against actual returns and upon incongruence; one can potentially ignore, cope, or respond negatively (Rousseau, 1995). Thus, it is reasonable that employees who experience PCV will be more likely to respond negatively. Extant research indicates that some IT professionals are content with their current job and organization but are continually looking for ideal employment (Chiang, Liao, Jiang, & Klein, 2012; Coombs, 2009). Thus, significant PCV events can lead IT professionals to exhibit turnover intentions and leads to the following hypothesis.

H8: Psychological contract violation will be positively associated with turnover intention.

Turnover Intention

Extant research suggests failed reciprocities create disturbances in the work relationship creating undesirable attitudes, leading one to turnover intentions (Ahuja, McKnight, Chudoba, George, & Kacmar, 2007; Paillé & Dufour, 2013). In addition, Hom, Mitchell, Lee, and Griffeth (2012) present motivational attributes such as employee preference to stay, employer control and extrinsic control (e.g. costly to leave, no pressure, and costly to stay) over events such as job dissatisfaction. Joseph, Ng, Koh, & Ang's (2007) narrative review and meta-analysis research suggests job satisfaction and perceived job alternatives as mediators to turnover intention. However, the complexity of Joseph et al., (2007) refers to a much deeper and complex arrangement. For example, contrary to career stage theory, older IT professionals reported lower job satisfaction in part because of the change inherent in the IT profession (Joseph et al., 2007). Moreover, while the results of the meta-analysis provide support for turnover intentions, additional

research is apparently needed. For this reason, based partially on Joseph et al.'s, (2007) call for more research on turnover mediators, turnover intention is the dependent variable.

CHAPTER FOUR

Research Method

Statistical Power Analysis

To address the goals of the present dissertation and to provide the necessary data for hypotheses testing, a statistical power analysis and an observation-to-construct ratio estimation is necessary. A power analysis determines the required sample size needed to achieve appropriate power, effect, and statistical significance. Power tests were conducted using the G*Power software package by Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). An *a priori* t-test with multiple linear regression (fixed model, single regression coefficient) was used. A two-tailed test was conducted, and alpha was set to 0.05 (Cohen, 1988; Hair Jr., Black, Babin, & Anderson, 2010). Effect size was set to 0.15 (Cohen, 1988; Hair et al. 2010), power ($1-\beta$ error probability) was set to 0.80 (Cohen J. , 1992) and the model contained seven predictor variables. The derived non-centrality parameter δ is 2.87, critical t was 2.01, and the degrees of freedom were 47, resulting in a statistically significant sample size of 55.

The G*Power results were cross-checked against extant research on appropriate sample sizes, significance levels, the number of independent variables, and the percentage of variance explained levels (Hair et al., 2010). According to Hair Jr. et al., (2010), the minimum sample size to detect minimum R^2 values (e.g. .10, .25, .50 and .75) is 10 times the maximum number of arrows pointing at a single construct. The maximum number of arrows pointing at a single construct in this dissertation is five. Therefore, at a

five percent significance level, 50 observations are required to achieve a statistically significant minimum R^2 value at 80 percent power.

The appropriate sample size necessary to meet the statistical assumptions in multivariate analysis is a ratio of 15 to 20 respondents per construct (Hair Jr., Black, Babin, & Anderson, 2010). As discussed above, in PLS, the appropriate sample size is ten times the number of relationship indicators pointing to a single latent variable (Hair Jr., Hult, Ringle, & Sarstedt, 2014). To reach a minimum R^2 of .25 at a significance level of .05, 70 responses are required (Cohen J. , 1992; Hair Jr., Hult, Ringle, & Sarstedt, 2014). Appendix A presents the constructs and measurement items.

Sample Strategy

To quantitatively test the dissertation's proposed theory of psychological contract, a survey-based study targeting experienced IT professionals at all levels (e.g. CIO, system analyst, programmer, and so forth) was conducted. A criteria-based sampling method narrowed the selection to those IT professionals *potentially* experiencing the same phenomenon (Creswell, 2013). Acceptable candidates had five or more years of IT experience in two or more IT sub-fields and at least five years of tenure at an organization. These criteria are necessary because experienced participants are more likely to have experienced PCB and PCV since these develop after spending time with the organization (Ng, Feldman, & lam, 2010). The data collection process consisted of an online web-based survey, containing all measurement items used in this dissertation. The survey was constructed in Qualtrics, and the arrangement of measurement items was guided by the work of Trochim & Donnelly (2008) and Cape (2010). First, survey

questions were worded to minimize psychological prompting. Second, unnecessary and vague terms were minimized. Finally, sensitive questions were avoided.

Data collection was facilitated by an online survey. A company specializing in Internet-based survey panel recruiting was contacted for respondents. One-hundred and four respondents were garnered for a reasonable fee. Respondents were selected according to the study's criteria that states respondents should have at least five years of experience in an IT-related field such as system administrator, programmer, security specialist and chief information officer, and have at least five or more years of IT experience in an organization. All 104 cases were returned for a response rate of 100 percent. Collecting data in this manner has been successfully conducted in the management literature to facilitate the process of identifying a representative sample of the population, particularly when specific characteristics of the participants are required (e.g., Carlson et al., 2012; Judge et al., 2006; Neubert et al., 2008; Piccolo and Colquitt 2006). The total sample size for the Internet-based survey method was 104.

Measures

This section discusses the construct and measurement items used in this study. All measurements were adopted from the extant literature. Appendix A contains detailed information on the constructs and measurement items.

Psychological Contract

Psychological contract was measured using the four-item scale from Robinson and Morrison (2000), and Riemenschneider, and Armstrong (2012). The theoretical moorings of the psychological contract suggest an overarching notion of disequilibrium

with interpreted promises and their reciprocation. Riemenschneider and Armstrong's (2012) work addresses the aspects of salary, raises, and pay structure. While extant literature supports salary as a fundamental necessity (Heneman III & Schwab, 1985), the psychological contract likely involves a larger milieu. For this reason, additional measurement items were obtained from three areas: salary, opportunity, and promotion. First, the wage items were adopted from Heneman III & Schwab (1985). While there were 18 measurement indicators, only the salary items were adopted. Each item was measured on a 5-point Likert scale from 1 = very dissatisfied to 5 = very satisfied. The following stem was used "*The statements below describe various aspects of your pay. For each statement, decide how satisfied or dissatisfied you feel about your pay.*" Item examples are "*My current salary*", "*My most recent raise*", and "*The company's pay structure*".

Second, opportunity refers to the availability for employees to improve their skill set through training and involvement in complex tasks. The opportunity measurement items were adopted from Wayne, Shore, & Liden (1997). Two subsections containing two items each assess opportunity and are measured with two different Likert scales. These scales were adopted as they appear in the literature and were not modified until the data analysis. The first set of items were measured with a 5-point Likert scale (e.g. 1 = Strongly disagree to 5 = Strongly agree). Some examples include "*In the positions that I have held at my company, I have often been given additional challenging assignments*" and "*In the positions that I have held at my company, I have often been assigned projects that have enabled me to develop and strengthen new skills*". The next set of items were measured using a 6-point Likert scale (e.g. 1 = not at all to 6 = a very large extent).

Examples include “*Besides formal training and development opportunities, to what extent have your managers helped to develop your skills by providing you with challenging job assignments*” and “*Regardless of your company's policy on training and development, to what extent have your managers made a substantial investment in you by providing formal training and development opportunities*”. As will be addressed in chapter four, the 5 and 6-point scales for this construct were converted to a 6-point Likert scale.

The last set of psychological contract items address job promotion and were adopted from Spector (1997). Promotions were assessed with four items on a 6-point Likert scale (e.g. 1 = disagree very much to 6 = agree very much). Example items include “*There is really too little chance for promotion on my job*” (reverse coded), “*Those who do well on the job stand a fair chance of being promoted*”, “*People get ahead as fast here as they do in other places*”, and “*I am satisfied with my chances for promotion*”.

Perceived Supervisor Support

Perceived supervisor support contained eight items, adopted from Greenhaus, Parasuraman, and Wormley (1990) and measured with a 7-point Likert scale (e.g. 1 = Strongly disagree to 7 = Strongly agree). Examples include “*My supervisor takes the time to learn about my career goals and aspirations*” and “*My supervisor cares about whether or not I achieve my career goals*”.

Perceived Job Autonomy

Perceived job autonomy contained four measurement items adopted from Barrick & Mount (1993). These items were measured on a 7-point Likert scale (e.g. 1 = strongly

disagree to 7 = strongly agree). Examples include *“In my work, I usually do not have to refer matters to my direct supervisor for a final decision”*, *“Usually, my direct supervisor does not have to approve my decisions before I can take action”*, *“Rather than asking my direct supervisor, I usually make my own decisions about what to do on a job”*, and *“I can usually do what I want on this job without consulting my direct supervisor”*.

Perceived Work Exhaustion

Perceived work exhaustion contains five items adopted from Schaufeli, Leiter, and Kalimo (1995). This construct focuses on the number of exhaustive events potentially leading to workplace burnout. The items are measured on a 7-point Likert scale (e.g. 1 = Never to 7 = Daily, all the time). The stem *“Please indicate to what extent you agree or disagree with the following statements”* is generic so as to reduce the amount of psychological priming. Examples include *“...emotionally drained from my work”*, *“...used up at the end of the work day”*, *“...fatigued when I get up in the morning and have to face another day on the job”*, and *“...burned out from my work”*.

Emotional Dissonance

Emotional dissonance was measured with ten items adopted from Rutner et al., (2008). The items are measured on a 5-point Likert scale from 1 = never to 5 = very frequently. Examples include *“To be effective in my job, I must try to be sympathetic with customers even when I am not”*, *“In doing my job, I must portray myself as interested in the customers’ frustrations even when I don’t really care”*, *“To be effective in my job, I must not demonstrate how agitated I may feel with customers”*, and *“To do my job well, I must pretend not to be irritated at customers even when I may feel that way”*.

Psychological Breach

The psychological contract breach construct contained five items and was adopted from Morrison and Robinson (1997). Measurement items one through three address the psychological contract breach-Unfulfilled promises construct. Examples include “*Almost all the promises made by my employer during recruitment have been kept thus far*” (reverse coded), “*I feel that my employer has come through in fulfilling the promises made to me when I was hired*” (reverse coded), “*So far my employer has done an excellent job of fulfilling its promises to me*” (reverse coded). Measurement items four and five address the psychological contract-Lack of reciprocation construct. Examples include, “*I have not received everything promised to me in exchange for my contributions*”, and “*My employer has broken many of its promises to me even though I’ve upheld my side of the deal*”.

Psychological Contract Violation

The psychological contract violation construct contains four items adopted from Robinson and Rousseau (1994) and measured on a 7-point Likert scale (e.g. 1 = strongly disagree to 7 = strongly agree). Examples include “*I feel a great deal of anger toward my organization*”, “*I feel betrayed by my organization*”, and “*I feel extremely frustrated by how I have been treated by my organization*”.

Turnover Intention

The turnover construct contains four items adopted from Jackson, Turner, Brief (1987) and Mitchell (1981). A 5-point Likert scale was used to measure the items (e.g. 1 = very unlikely to 5 = somewhat likely). Example questions are “*How likely is it that you*

will be working at the same company this time next year?” (reverse scored), *“How likely is it that you will take steps during the next year to secure a job at a different company?”*, *“I will be in this company five years from now”* (reverse scored), and *“I will probably look for a job at a different company in the next year.”* In the next chapter, the data analysis and results are discussed.

CHAPTER FIVE

Data Analysis and Results

Participant and Organizational Statistics

The survey respondents consisted of professionals working in the IT industry in diverse organizations and job roles. In terms of the respondents' industry association, the largest response (38%) was in the miscellaneous category that includes fields such as engineering and education. This was followed by IT (35%) and Finance (6%). The majority of respondents were in the 30-39 age bracket and the majority of respondents had an organizational tenure of 10 to 19 and 6 to 9 years. In terms of the respondents' education, approximately thirty-five percent had a 4-year degree. Fifty-seven percent of the respondents were male. Table 2 presents a summary of the sample characteristics.

Multivariate Analysis Technique Selection

The data analysis process incorporated Excel (Microsoft, 2013), SPSS and Amos (IBM Corp., 2013), and SmartPLS 3.0 (Ringle, Wende, & Becker, 2014). The primary statistical package for data analysis was SmartPLS. SmartPLS is a Partial Least Squares (PLS) and Structural Equation Modeling (SEM) tool that tests for statistical conclusion validity. PLS-SEM was chosen because of its ability to assess the psychometric properties of the measurement items and to model the relationships among the independent and latent dependent variables simultaneously. PLS is a correlational-based parametric method with fewer stringent assumptions on data distribution.

Table 2. Sample Characteristics

Category	Description	Frequency	Percentage
Gender	Male	59	57%
	Female	45	43%
Age	20-29	16	15%
	30-39	39	37%
	40-49	21	20%
	50-59	22	21%
	60-69	5	5%
Education	High School/GED	10	10%
	Some College	12	11%
	2-year College degree	12	11%
	4-year College degree	37	35%
	Master's degree	27	26%
	Professional degree (e.g. MD, JD)	5	5%
	Doctoral degree	1	1%
Tenure (yrs.)	0-5	13	37%
	6-9	36	34%
	10-19	39	12%
	20-29	11	10%
	30-39	4	4%
	40-49	1	1%
Industry	Miscellaneous*	39	38%
	IT	36	35%
	Finance	6	6%
	Services	5	5%
	Healthcare	4	4%
	Manufacturing	3	3%
	Wholesale	2	2%
	Retail	2	2%
	Legal	2	2%
	Marketing	2	2%
	Banking	1	1%
	Sales	1	1%

When compared to other statistical methods, PLS is efficient and effective provided attention is focused on its operating tolerances (Goodhue, Lewis, & Thompson, 2012).

The methodology outlined by Hair Jr. et al., (2010) was followed to prepare the data for multivariate analysis. The following sections address data cleansing, outliers, and

the multivariate assumptions. The multivariate assumptions tested were normality, homoscedasticity, linearity, and independence of the error terms.

Data Cleansing

The sample data set was examined for missing information. The online survey was configured to require a response to each question to limit missing data. A potential side effect was early opt-outs. An opt-out occurs when a respondent begins the online survey process but exits before completing it. An initial visual check of the data quickly identified early opt-out cases. A frequency count of empty cells was conducted on each case to determine the amount of missing data. Cases missing 10 or more percent of their data were retained unless the missing data follows a non-random pattern (Hair Jr., et al., 2010). The results indicated no missing values. However, it was observed that several measurement items exhibited unexpected values. For example, the measurement items for the psychological contract breach construct had the same value. The duplication of values was unexpected since the first three of five measurement items were reverse coded. A frequency analysis was conducted on each case to determine how many cases exhibited repeating values to address this aberrant condition. Out of 104 cases, 14 demonstrated repeating response patterns. To address this issue, aberrant cases were temporarily removed from the sample set. A median was calculated for each PCB measurement item. The aberrant items were then reinserted into the sample, and their values were replaced with the median value (Hair Jr., et al., 2010). The median was used to correct for data skewness and kurtosis as will be discussed later.

Outliers

Outliers appear distinctly different from all other measurements and impacts model predictability. Data outliers were visually examined by creating a box plot for each variable in the data distribution. The boxplot graphically maps centrality, range, and values outside the mean. Several data points for multiple variables were identified outside the inner fences. The outliers were then identified by using the labeling outlier's method (Hoaglin, Iglewicz, & Tukey, 1986). Extreme values were computed in SPSS for each univariate. These values are compared against lower and upper boundary values. The boundaries are calculated as follows.

$$\text{Upper} = \text{Quartile 3} + (2.2_{\text{boundary multiplier}} * (\text{Quartile 3} - \text{Quartile 1}))$$

$$\text{Lower} = \text{Quartile 1} + (2.2_{\text{boundary multiplier}} * (\text{Quartile 3} - \text{Quartile 1}))$$

The boundary multiplier establishes the comparison range. Hoaglin et al., (1986) initially used a value of 1.5. However, recent research indicates a boundary value of 2.2 mitigates the inadvertent severing of a portion of the normal distribution (Hoaglin & Iglewicz, 1987). To assess outliers identified by the boxplots, a descriptive EXAMINE function in SPSS generated extreme values and percentiles for each variable. Each extreme value falling outside the calculated lower and upper boundary was labeled as an outlier. The comparisons produced no outliers, suggesting the absence of spurious measurements. No adjustments to the data were needed, thus justifying further multivariate assumption analysis.

The obligation-opportunity construct consisted of four measurement items on two different scales. OBO1_1 and OBO1_2 exist on a 5-point Likert scale and OBO2_1 and OBO2_2 exist on a 6-point Likert scale. To accurately present obligation-opportunity as a

summated scale, all OBO measurement items were adjusted to fit on a 6-point Likert scale. To recode the measurement items into the same scale, the following equation was used: $Y = (B - A) * (x - a) / (b - a) + A$ where the variables a and b represent the current scale (e.g. 1 to 5) and “A” and “B” represent the new scale (e.g. 1 to 6). The final step, $x_2 = 1.5 * x_1 - 0.5$, calculates the new rescaled value x_2 where x_1 is the original value (IBM, 2010).

Multivariate Assumptions

Normality

Normality refers to the balance of data, or the normal distribution, which is the keystone for statistical methods. Data normality is essential for conducting proper F and t-statistics (Hair Jr., et al., 2010). Conditions altering data normality include skewness and kurtosis. Skewness refers to the unbalanced distribution of data to one side or the other. An unbalanced distribution to the left indicates negative skewness and an unbalanced distribution to the right indicates positive skewness. A histogram is a graphical method to examine univariate data normality. The results indicate that several variables appeared to be non-normal. The magnitude of non-normality involved calculating skewness and kurtosis z-scores using the following equations (Hair Jr., et al., 2010).

$$z_{\text{skewness}} = \text{Skewness} / (\sqrt{6/N})$$

$$z_{\text{Kurtosis}} = \text{Kurtosis} / (\sqrt{24/N})$$

Zskewness and zKutosis results that surpass the ± 1.96 or ± 2.56 threshold indicate non-normality (Hair Jr., et al., 2010). Before considering data transformation methods on non-normal distributions, the Shapiro-Wilk and Kolmogorov-Smirnov tests were conducted as

a further test of normality. The Kolmogorov-Smirnov results indicate non-normal data distributions with the exception of ED. However, the Shapiro-Wilk test confirms that all variables are non-normal. In sum, all variables were below the .05 threshold, indicating non-normality (Hair Jr., et al., 2010). Table 3 summarizes the normality results. Multiple remedies exist to address non-normal distributions. Negatively skewed distributions involve squaring the variable's value. Platykurtic distributions involve calculating the variable's inverse or log (Hair Jr., et al., 2010).

Table 3. Normality Tests

Construct	Kolmogorov-Smirnov ^a		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
Obligation-Promotion	0.12	0.00	0.93	0.00
Obligation-Opportunity	0.11	0.00	0.95	0.00
Obligation-Salary	0.15	0.00	0.92	0.00
Supervisor Support	0.13	0.00	0.90	0.00
Autonomy	0.16	0.00	0.93	0.00
Perceived work exhaustion	0.10	0.01	0.94	0.00
Emotional dissonance	0.07	.200*	0.96	0.01
Psychological contract breach-Unfulfilled promises	0.17	0.00	0.87	0.00
Psychological contract breach-Lack of reciprocation	0.13	0.00	0.91	0.00
Psychological contract violation	0.19	0.00	0.85	0.00
Turnover intention	0.14	0.00	0.90	0.00

* This is a lower bound of the true significance (above the 1.96 threshold).

a. Lilliefors Significance Correction

Before conducting remediation, Hair Jr., et al., (2010) suggest that a theoretical justification for the change is considered. A histogram was generated for each variable before and after the remediation. Transforming data changes its interpretation, potentially over or understating the observation (Hair Jr., et al., 2010). This situation supports the selection of PLS as the primary statistical package for this research because PLS works well with complex models and makes essentially no assumptions on the underlying data

distribution (Hair Jr., Hult, Ringle, & Sarstedt, 2014). Despite the choice of PLS as the main statistical method, all multivariate assumptions were tested using SPSS.

Homoscedasticity

Equal variance and homoscedasticity between the dependent and independent variables was tested using a one-way analysis of variance (ANOVA). This test determines a dependent variable's variance unexplained by a limited set of independent values and “...whether the variances of a single metric variable are equal across any number of groups” (Hair Jr., et al., 2010, p. 75). The results suggest that all variables exhibited unequal variances. This finding further supports PLS as the appropriate method to use on the structural model.

Collinearity

Collinearity refers to the relationship strength between two or more independent variables. Communal independent variables reduce discriminant validity and predictive power. Collinearity was addressed by conducting a linear regression between the independent and dependent variables (Gaskin, 2011). Collinearity is violated with tolerance values of .20 or lower, and variance inflation factor (VIF) values of 5 or greater (Hair Jr., et al., 2014) as these values suggest problems. All constructs exhibited acceptable tolerance and VIF scores. Table 4 summarizes these results.

The Bartlett's test for sphericity was conducted to assess correlations among variables that are necessary for justifying the principle component analysis (Hair Jr., et al., 2010). A significance value of $< .05$ signifies the necessary correlation conditions

allowing the factor analysis to proceed. The results justify the principle components analysis. Table 5 summarizes the Bartlett's test results.

Table 4. Multi-Collinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
OBC -> PCBUP	0.36	2.77
OBO -> PCBUP	0.38	2.63
OBS -> PCBUP	0.43	2.34
SSUP -> PCBUP	0.29	3.44
PWE -> PCBUP	0.99	1.01
OBS -> PCBLR	0.45	2.20
SSUP -> PCBLR	0.47	2.14
PWE -> PCBLR	0.81	1.24
AUT -> PCBLR	0.63	1.59
ED -> PCBLR	0.78	1.29

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Obligation-Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBLR=Psychological contract Breach-Lack of Reciprocation

Table 5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.84
Bartlett's Test of Sphericity	Approx. Chi-Square	6191.48
	df	1326
	Sig.	.000

Linearity

Linearity refers to the relationship strength between constructs. The absence of linearity underestimates association strength (Hair Jr., et al., 2010). A non-linear condition exists when the F statistic's p-value is < .05 (Garson, 2012). A one-way ANOVA test was conducted to assess linearity. The results suggest that the majority of variables were non-linear because their p-values were below recommended .05 threshold.

These results provide justification to use PLS as the statistical package because of its ability to handle non-linear data. Table 6 summarizes the linearity tests.

Independence of the Error Terms

The Durbin-Watson test (DW) was conducted to test the multivariate assumption of independence of the error terms. An acceptable value for the DW test should be between 1.5 and 2.5 (Garson, 2012). The result from the DW test was within the guideline (1.8) suggesting adequate independence of the error terms. In the next section, measurement model reliability and validity checks are conducted.

Table 6. Linearity Results

	Relationship		F	p	Result
OBC	>	PCBUP	5.02	0.00	Sig.
OBS	>	PCBUP	5.48	0.00	Sig.
OBO	>	PCBUP	6.58	0.00	Sig.
SSUP	>	PCBUP	3.94	0.00	Sig.
PWE	>	PCBUP	2.06	0.08	ns
SSUP	>	PCBLR	0.92	0.59	ns
PWE	>	PCBLR	4.79	0.00	Sig.
AUT	>	PCBLR	1.02	0.45	ns
ED	>	PCBLR	1.45	0.09	ns
PCBUP	>	PCV	1.29	0.24	ns
PCBLR	>	PCV	12.72	0.00	Sig.
PCV	>	TOI	4.54	0.00	Sig.

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBLR=Psychological contract Breach-Lack of Reciprocation

Measurement Model

In this section, the measurement model is assessed by composite reliability, Cronbach's alpha, convergent validity, discriminant validity, and common method bias

tests. All measurement items were adopted from the extant literature. There were no modifications made to any of the measurement items.

Cronbach's Alpha and Composite Reliability

To assess internal consistency, Composite Reliability (CR) and Cronbach's alpha (CA) identify each measurement item fit on its associated construct (Hair Jr., et al., 2014). CR is achieved when the outer loadings are between .70 and .90 (Nunally & Bernstein, 1994). The results ranged from .89 to .98 and satisfies the recommended values. Cronbach's alpha (CA) measures internal consistency; measurement items intercorrelate and consistently measure what they should measure (Straub, Boudreau, & Gefen, 2004). Appropriate CA values are .70 and above (Nunally J. , 1978). The CA results ranged from .83 to .96 and were above the recommended minimum value. During the factor analysis, the psychological contract breach construct resulted in two distinct elements. The Cronbach alpha result for these items were within the appropriate range. Table 7 summarizes composite reliability and Cronbach's alpha results.

Convergent Validity

Convergent validity is demonstrated when measurement items thought to reflect a given construct, converge on their assigned factor (Hair Jr., Black, Babin, & Anderson, 2010; Straub, Boudreau, & Gefen, 2004). High outer loadings indicate commonality among the measurement items. Acceptable outer loading values should be .70 or greater to achieve indicator reliability (Hair Jr., et al., 2014). The principle component analysis (PCA) with VARIMAX rotation was conducted to assess convergent validity.

The results indicate that each variable's loading was higher on its associated factor than on other constructs. The psychological contract breach construct was found to exist as two separate constructs (refer to Table 8). Analysis of the measurement items indicated the first three address the psychological contract breach in terms of unfulfilled promises. The remaining two items refer to the psychological contract breach in terms of lack of reciprocation. Table 8 presents the factor loadings for psychological contract breach.

To increase explained variance and facilitate parsimony, measurement items with values less than .40 were removed from their associated constructs. While loading values below .50 are supported for exploratory research (Hair Jr., Hult, Ringle, & Sarstedt, 2014), my intent was to include the increase explanatory power without reducing the model's effect.

The following items were removed because the loading value to their associated construct was lower than the other measurement items: PCV_1, PED_1, SSUP_1, SSUP_2, SSUP_3, SSUP_4, SSUP_8, PWE_2, PWE_5 and OBO2_2. With each extraction, t-scores, reliability, and validity were evaluated to ensure little to no power loss. Cross-loadings that load higher on other constructs signify poor discriminant validity (Hair Jr., et al., 2014). The evaluation of cross-loadings for discriminant validity is considered a liberal test (Gefen & Straub, 2005). Table 8 summarizes the loadings and cross-loadings. The cross-loading values for rPCB_4 (-.70) and rPCB_5 (-.78), and PCV_2-PCV_4 (-.76, -.77, -.74). However, rPCB and PCV loaded above +.90 and are higher than the cross-loading values. Therefore, the rPCB and PCV items were retained.

A more conservative test of discriminant and factorial validity is the Fornell-Larcker criterion, which is computed as the square root of the AVE for each construct on the diagonal. The results show acceptable AVE values and suggest that each construct shares more variance with its items than with other constructs and captures at least 50 percent of the measurement variance (Chin W. , 1998). Note that OBS, PCV, and SSUP correlations are above .70. However, AVE is higher for the noted correlational values thus maintaining discriminate validity. Table 9 summarizes the Discriminant validity results.

Common Method Bias

Common method bias (CMB) tests were conducted to address social desirability, positive and negative affectivity, method halo, and measurement error (Straub, Boudreau, & Gefen, 2004; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Table 7. Composite Reliability and Cronbach's Alpha

Construct	CR	CA
Obligation-Promotion	0.89	0.83
Obligation-Opportunity	0.89	0.85
Obligation-Salary	0.93	0.88
Supervisor Support	0.97	0.96
Perceived Work Exhaustion	0.97	0.96
Autonomy	0.93	0.91
Emotional Dissonance	0.96	0.95
Psychological Contract Breach-UP	0.96	0.94
Psychological Contract Breach-LR	0.96	0.91
Psychological Contract Violation	0.98	0.96
Turnover Intention	0.94	0.87

Table 8. Loadings and Cross Loadings

VAR	AUT	ED	OBO	OBC	OBS	PCB- LR	PCB- UP	PCV	PWE	SSUP	TI
AUT_1	0.85	0.10	0.46	0.41	0.52	-0.15	-0.36	0.21	0.13	0.47	0.01
AUT_2	0.89	0.07	0.41	0.43	0.50	-0.09	-0.36	0.27	0.11	0.49	0.10
AUT_3	0.91	0.03	0.34	0.40	0.50	-0.14	-0.32	0.20	0.05	0.48	0.03
AUT_4	0.90	0.10	0.31	0.37	0.48	-0.19	-0.34	0.23	0.21	0.46	0.07
PED_10	0.00	0.88	0.10	0.04	0.10	-0.40	-0.08	0.35	0.27	0.04	0.34
PED_2	0.19	0.77	0.25	0.21	0.28	-0.38	-0.10	0.36	0.37	0.22	0.25
PED_3	0.17	0.79	0.26	0.24	0.28	-0.38	-0.16	0.46	0.37	0.22	0.31
PED_4	0.07	0.86	0.14	0.14	0.19	-0.47	-0.05	0.45	0.36	0.14	0.34
PED_5	0.06	0.90	0.19	0.15	0.18	-0.48	-0.07	0.45	0.40	0.19	0.33
PED_6	0.03	0.76	0.10	0.10	0.17	-0.36	-0.14	0.33	0.34	0.04	0.26
PED_7	0.11	0.85	0.15	0.11	0.18	-0.39	-0.18	0.33	0.33	0.12	0.31
PED_8	0.04	0.87	0.16	0.12	0.13	-0.40	-0.12	0.36	0.32	0.16	0.38
PED_9	0.03	0.90	0.13	0.08	0.12	-0.43	-0.02	0.41	0.32	0.10	0.34
aOBO1_1	0.43	0.14	0.84	0.54	0.54	-0.04	-0.48	0.00	0.13	0.60	0.05
aOBO1_2	0.30	0.15	0.86	0.58	0.49	0.10	-0.50	-0.13	-0.05	0.65	-0.10
OBO2_1	0.35	0.20	0.88	0.65	0.60	-0.02	-0.57	0.11	0.10	0.64	-0.02
OBC_2	0.37	0.13	0.65	0.89	0.59	0.03	-0.51	0.01	0.08	0.59	-0.05
OBC_3	0.41	0.18	0.57	0.79	0.64	-0.08	-0.49	0.13	0.19	0.49	-0.13
OBC_4	0.38	0.10	0.56	0.91	0.62	0.03	-0.54	-0.01	0.01	0.68	-0.15
OBS_3	0.53	0.16	0.52	0.62	0.88	-0.01	-0.50	0.07	0.13	0.53	-0.17
OBS_4	0.46	0.19	0.56	0.64	0.92	-0.02	-0.53	0.11	0.11	0.56	-0.16
OBS_5	0.52	0.23	0.62	0.67	0.90	0.07	-0.55	0.03	0.07	0.62	-0.21
rPCB_4	-0.11	-0.45	0.01	0.02	0.07	0.96	-0.05	-0.70	-0.60	0.05	-0.62
rPCB_5	-0.21	-0.49	0.02	-0.03	-0.03	0.96	-0.09	-0.78	-0.62	0.04	-0.64
rPCB_1	-0.34	-0.14	-0.56	-0.51	-0.55	-0.04	0.93	0.12	0.07	-0.46	0.18
rPCB_2	-0.41	-0.12	-0.59	-0.59	-0.57	-0.06	0.96	0.13	0.03	-0.56	0.20
rPCB_3	-0.34	-0.08	-0.55	-0.58	-0.53	-0.11	0.94	0.22	0.10	-0.55	0.27
PCV_2	0.26	0.47	-0.01	0.05	0.07	-0.76	0.16	0.98	0.67	-0.03	0.67
PCV_3	0.24	0.45	-0.01	0.05	0.08	-0.77	0.16	0.98	0.67	-0.04	0.65
PCV_4	0.24	0.44	0.01	0.03	0.08	-0.74	0.18	0.98	0.65	-0.04	0.69
PWE_1	0.16	0.37	0.09	0.11	0.16	-0.58	0.04	0.62	0.95	0.00	0.46
PWE_3	0.15	0.40	0.08	0.11	0.10	-0.62	0.06	0.64	0.95	0.06	0.56
PWE_4	0.13	0.39	0.03	0.08	0.06	-0.62	0.10	0.66	0.95	-0.02	0.54
SSUP_5	0.53	0.12	0.70	0.63	0.63	0.05	-0.53	-0.03	0.02	0.92	-0.07
SSUP_6	0.52	0.17	0.62	0.61	0.57	-0.03	-0.48	0.03	0.08	0.91	-0.09
SSUP_7	0.40	0.19	0.65	0.63	0.56	0.05	-0.43	-0.05	-0.02	0.83	-0.19
SSUP_9	0.44	0.12	0.64	0.58	0.51	0.10	-0.53	-0.08	-0.03	0.89	-0.05
TI_2	0.06	0.43	0.05	-0.02	-0.10	-0.60	0.15	0.59	0.48	-0.02	0.93
TI_4	0.05	0.29	-0.10	-0.20	-0.26	-0.63	0.28	0.69	0.55	-0.17	0.95

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Obligation-Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBUR=Psychological contract breach-Lack of Reciprocation

Table 9. Correlations and Square Root of AVE

VAR	AUT	ED	OBO	OBC	OBS	PCB-LR	PCB-UP	PCV	PWE	SSUP	TI
AUT	0.89										
ED	0.09	0.84									
OBO	0.42	0.19	0.86								
OBC	0.45	0.15	0.69	0.86							
OBS	0.56	0.21	0.63	0.72	0.90						
PCB-LR	-0.17	-0.49	0.01	0.00	0.02	0.96					
PCB-UP	-0.39	-0.12	-0.60	-0.60	-0.59	-0.07	0.94				
PCV	0.25	0.46	0.00	0.05	0.08	-0.77	0.17	0.98			
PWE	0.15	0.41	0.07	0.10	0.11	-0.64	0.07	0.68	0.95		
SSUP	0.53	0.16	0.73	0.68	0.64	0.05	-0.56	-0.04	0.01	0.89	
TI	0.05	0.38	-0.03	-0.12	-0.20	-0.66	0.23	0.68	0.55	-0.11	0.94

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Obligation-Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBLR=Psychological contract Breach-Lack of Reciprocation

“Common methods bias is the magnitude of the discrepancies between the observed and the true relationships between constructs that results from common methods variance”

(Doty & Glick, 1998, p. 36). The most common causes of CMB include one method for data collection and collecting data in a single period. Harmann’s one-factor test and the common latent factor (CLF) method analysis were conducted to assess CMB (Straub, Boudreau, & Gefen, 2004). Harmann’s one-factor test involves conducting a principle factor analysis by forcing all un-rotated variables into a single factor. Explained variance of 50 percent or more evinces common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The results indicate that 30 percent of the variance is explained by a single factor and is thus within the guidelines. Table 10 summarizes Harmann’s test results.

Table 10. Harmann's Test for Common Method Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Var	Cumulative %	Total	% of Var	Cumulative %
1	15.948	30.670	30.670	15.948	30.670	30.670

Extraction Method: Principal Component Analysis.

The common latent factor (CLF) test was conducted using Amos (IBM Corp., 2013) to ensure no unobserved CMB over and above the Harmann's test, existed. The method was followed as outlined by Gaskin (2012). In the CLF test, a single latent variable is created that is dissimilar to all other factors. Two regression tests are conducted. First, the model is estimated without the CLF variable. The resulting standardized estimates are then retained.

Second, the model is estimated with the CLF variable, which is connected to each measurement item in the model. The paths are constrained by setting their weights to one. The latent variable is limited by setting its weight to a non-numerical value (e.g. "a"). The difference between the model with CLF and without the CLF is calculated by subtracting model with CLF from the model without the CLF. Any result equal to or greater than .20 (Podsakoff et al., 2003) signifies the existence of common method variance. The calculations for each measurement item were below the .20 threshold suggesting that no observable common method variance exists.

PLS Structural Model Results

The bootstrap procedure assesses structural model significance. Hair Jr., et al., (2014) recommend setting the bootstrap parameters to 5,000 subsamples, no sign changes, a two-tailed test, a .05 significance level, and the Bias-Corrected and Accelerated (BCa) bootstrap. The PLS parameters were set to a path weighting scheme, a

maximum of 300 iterations, and a stop criterion of 5 (e.g. 10^5). This configuration was necessary to yield conservative results (Hair Jr., et al., 2014). Figure 2 presents the structural model results.

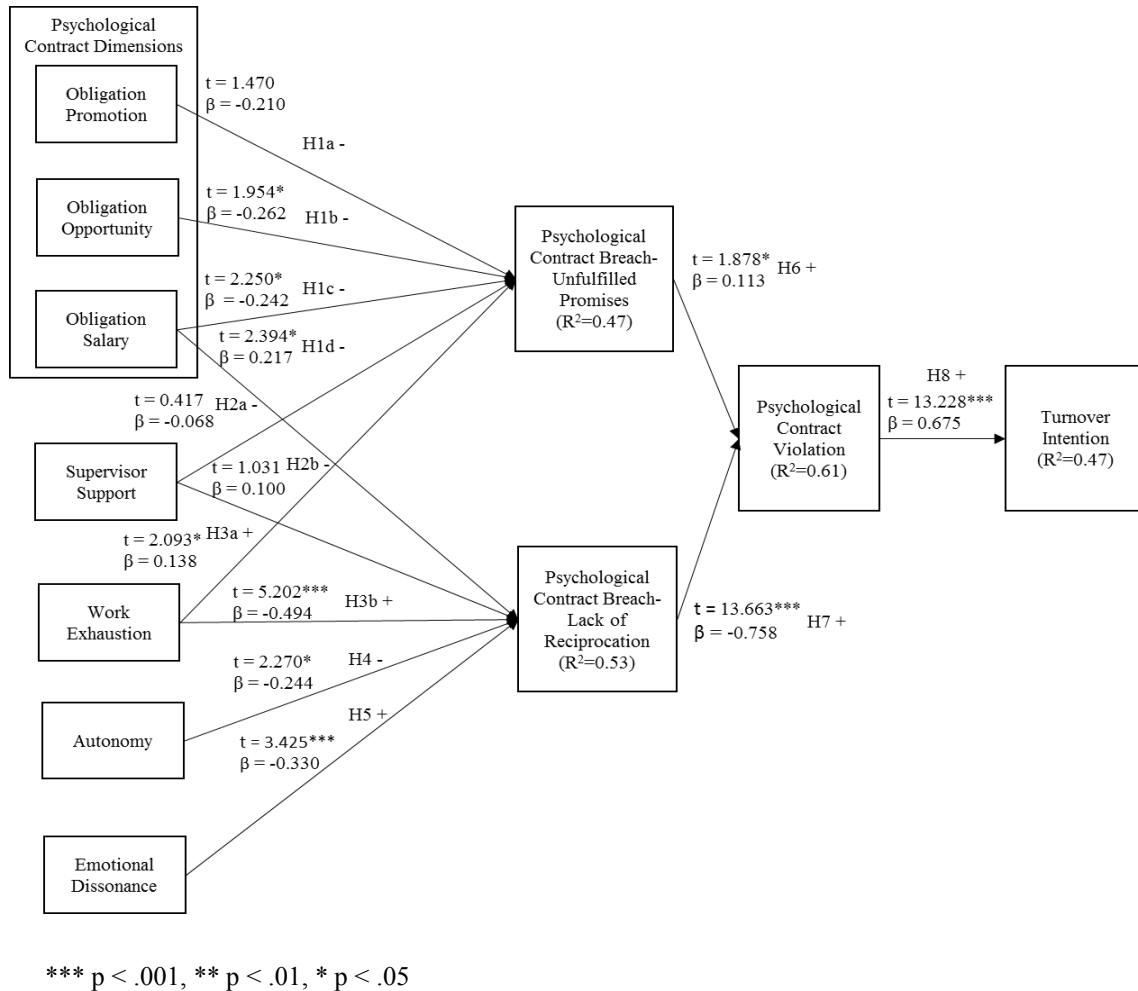


Figure 2. PLS Model Results

Hypotheses Results

The results of the following hypotheses were conducted using a one-tailed test. Hypothesis 1a posited that obligation-promotion would be negatively associated with PCB-Unfulfilled promises (PCB-UP). The result indicates that a negative relationship exists and is statistically significant ($-.210$, $p < .07$). Therefore, H1a is supported.

Hypothesis 1b posited that obligation-opportunities such as training and career development would have a negative effect on PCB-UP. The result indicates that a significant negative relationship exists ($-.262, p < .05$). Therefore, H1b is supported.

Hypothesis 1c posited that promised remunerations would be negatively associated with PCB-UP. The results indicate a significant negative relationship exists ($-.242, p < .05$), therefore supporting H1c. Hypothesis 1d posited that remunerations would be negatively associated with PCB-lack of Reciprocation (PCB-LR). The results indicate that a statistically significant inverse relationship exists ($.217, p < .05$). Therefore, H1d is not supported.

Hypothesis 2a posited that perceived supervisor support would be negatively associated with PCB-UP. The results indicate no existing relationship exists ($-.068, ns$). Therefore, H2a is not supported. Hypothesis 2b posited that perceived supervisor support would be negatively associated with PCB-LR. The results indicate no significant relationship exists ($.100, ns$). Therefore, H2b is not supported.

Hypothesis 3a posited that perceived work exhaustion would be positively associated to PCB-UP. The results indicate that a positive statistically significant relationship exists ($.138, p < .05$) and, therefore, H3a is supported. Hypothesis 3b posited that perceived work exhaustion would be positively associated to PCB-LR. The results indicate that a statistically significant inverse relationship exists ($-.494, p < .001$). Therefore, H3b is not supported.

Hypothesis 4 posited that job autonomy would be negatively associated to PCB-LR. The results indicate that a statistically significant negative relationship exists ($-.244, p < .05$) and, therefore, H4 is supported.

Hypothesis 5 posited that emotional dissonance would be positively associated to PCB-LR. The results indicate that an inverse relationship exists (-0.329 , $p < .001$). Therefore, H5 is not supported. Collectively, the antecedents OBC, OBO, OBS, SSUP, and PWE explained approximately 47 percent ($R^2 = .472$) of the variance of the dependent variable, PCB-UP. The antecedents OBS, SSUP, PWE, AUT and ED explained approximately 53 percent ($R^2=0.528$) of the variance of the dependent variable, PCB-LR.

Hypothesis 6 posited that PCB-UP would be positively associated with PCV. The results show that a statistically significant positive relationship exists (0.113 , $p < .05$, one-tailed test). Therefore, H6 is supported. It is important to note that the relationship between PCB-UP and psychological contract breach is unidirectional. It is reasonable that the occurrence of PCV would occur only after perceptions of PCB-UP. Hypothesis 7 posited that PCB-LR would be positively associated with PCV. The results indicate a statistically significant negative relationship exists (-0.758 , $p < .001$). Therefore, H7 is not supported. PCB-UP and PCB-LR explain approximately 61 percent ($R^2 = 0.610$) of the variance in psychological contract violation.

Hypothesis 8 posited that PCV would be positively associated with TI. The results indicate a statistically significant relationship exists (0.675 , $p < .001$) and, therefore, H8 is supported. Psychological contract violation explains approximately 47 percent ($R^2 = .470$) of the variance on turnover intention. Table 11 summarizes the hypotheses results.

Table 11. Hypotheses Results

Hypothesis	Path	Regression Weight (Standardized)	p	Results
1a	OBC -> PCB-UP (-)	-0.210†	<0.07	Supported
1b	OBO -> PCB-UP (-)	-0.262*	<0.05	Supported
1c	OBS -> PCB-UP (-)	-0.242*	<0.05	Supported
1d	OBS -> PCB-LR (-)	0.217*	<0.05	Not Supported
2a	SSUP -> PCB-UP (-)	-0.068	ns	Not Supported
2b	SSUP -> PCB-LR (-)	0.100	ns	Not Supported
3a	PWE -> PCB-UP (+)	0.138	<0.05	Supported
3b	PWE -> PCB-LR (+)	-0.494***	<0.001	Not Supported
4	AUT -> PCB-LR (-)	-0.244*	<0.05	Supported
5	ED -> PCB-LR (+)	0.329***	<0.001	Not Supported
6	PCB-UP -> PCV (+)	0.113*	<0.05	Supported
7	PCB-LR -> PCV (+)	-0.758***	<0.001	Not Supported
8	PCV -> TI (+)	0.675***	<0.001	Supported

*** p < .001, ** p < .01, * p < .05, † p < .10

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Obligation-Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCB-UP=Psychological contract breach-Unfulfilled promises, PCB-LR=Psychological contract Breach-Lack of Reciprocation

Control Variables

The control variables, age, and gender were tested to assess their impact on the model. Extant research suggests that gender and age influence PCB, PCV and TI (Bal & Smit, 2012; de Lang, Bal, Van der Heijden, de Jong, & Schaufeli, 2011). For example, older employees with more experience might be less prone to psychological breach and violations.

Equally possible would be a significant difference between how males and females interpreted PCB-UP, PCB-LR, PCV, and TI. Each control variable was inserted into the model as an independent variable. A relationship was created between the control variable and the dependent variable (Hair Jr., Hult, Ringle, & Sarstedt, 2014). The results indicate that no statistically significant relationships were found between the control variables and the dependent variables. Therefore, no further tests on the control variables were conducted. Table 12 summarizes the control variable test results.

Post Hoc Analysis

Mediation tests. The model's mediator effects were evaluated to determine their relative size and significance. First, direct effects were tested from each antecedent to psychological contract violation. Psychological contract breach-Unfulfilled promises and psychological contract breach-Lack of Reciprocation were tested on turnover intention. The study's findings indicate that the antecedents AUT, ED and PWE have a direct effect on psychological contract violation. Psychological contract breach-Unfulfilled promises and psychological contract breach-lack of reciprocation have a direct effect on turnover intention.

Table 12. Control Variable Tests

Path	Sample	Mean	s.e.	t-score	Sig.
Gender -> PCB-UP	-0.04	-0.04	0.07	0.56	0.58
Gender -> PCB-LR	-0.08	-0.07	0.07	1.08	0.28
Gender -> PCV	-0.07	-0.07	0.07	0.98	0.33
Gender -> TI	0.02	0.02	0.07	0.24	0.81
Age -> PCB-UP	0.14	0.15	0.87	1.64	0.10
Age -> PCB-LR	-0.02	-0.02	0.09	0.31	0.76
Age -> PCV	-0.03	-0.03	0.06	0.52	0.60
Age -> TI	-0.08	-0.07	0.07	1.01	0.31

Legend: PCB-UP=Psychological contract breach-Unfulfilled promises, PCB-LR=Psychological contract Breach-Lack of Reciprocation, TI=Turnover Intention, PCV=psychological contract violation

The antecedents OBO, OBS and SSUP, did not exhibit any direct connection to PCV.

Table 13 summarizes the direct effect results.

Indirect effect tests were conducted between the antecedents and PCV via the mediators PCB-UP and PCB-LR. In addition, indirect effects between PCB-UP and PCB-LR via PCV as the mediator were conducted against TI. To conduct mediation tests, the Sobel (Preacher & Hayes, 2004), critical interval, Cohen's f^2 and variance accounted for

(VAF) methods were used. First, the Sobel test determines if an indirect effect exists to account for a portion of the explained variance.

Table 13. Direct Effects Test

Relationship			t	path	p	R ²
Obligation-Promotion	>	PCV	0.91	0.15	ns	0.021
Obligation-Opportunity	>	PCV	1.03	0.27	ns	0.075
Obligation-Salary	>	PCV	0.97	0.15	ns	0.022
Supervisor Support	>	PCV	0.58	-0.10	ns	0.010
Perceived Work Exhaustion	>	PCV	9.64	0.67	<.001	0.454
Autonomy	>	PCV	3.56	0.29	<.001	0.082
Emotional Dissonance	>	PCV	6.29	0.48	<.001	0.227
PCB-UP	>	TI	3.03	-0.25	<.001	0.063
PCB-LR	>	TI	11.72	0.66	<.001	0.429

Legend: PCB-UP=Psychological contract breach-Unfulfilled promises, PCB-LR=Psychological contract Breach-Lack of Reciprocation, TI=Turnover Intention, PCV=psychological contract violation

Sobel was assessed using the Preacher and Hayes (2004) script for SPSS. This script adds a simple mediation procedure to the SPSS regression function. The simple mediation process enables the selection of the mediator, DV, and IV. Full mediation occurs when paths “a” and “b” are significant and “c” is insignificant (Baron & Kenny, 1986). Partial mediation occurs when all paths are significant.

Second, variance accounted for (VAF) was calculated to determine the effect size of the constructs with a significant indirect effect. VAF is calculated as $(a * b) / ((a * b) + 1)$ (Hair Jr et al., 2014). The guideline for significant mediational effect size is a VAF (1) less than .20 indicates no mediation, (2) between .20 and .80, inclusive, suggests partial mediation, and (3) .80 and higher suggests full mediation (Hair Jr., et al., 2014). In addition, a mediating effect is achieved when the Sobel value is significant at $p < .05$ (Preacher & Hayes, 2004).

Third, to examine mediator effect size, the Cohen's f^2 test was conducted. This test examines the magnitude or strength the mediator between x and y. Cohen's f^2 is calculated as: $f^2 = (R^2_{\text{included}} - R^2_{\text{excluded}})/(1-R^2_{\text{included}})$. The guideline for effect size is that an f^2 value (1) between .02 and .15 suggests a small effect, (2) between .15 and .35 suggests a medium effect and (3) greater than .35 suggests a large effect (Hair Jr., Hult, Ringle, & Sarstedt, 2014).

Finally, a critical interval test was conducted to determine the existence of mediation by examining the CI lower and upper boundary ranges within 95 percent confidence factor. Significant mediation exists when zero does not exist within the CI range. Such a condition would indicate a potential split of variance on either side of zero (Preacher & Hayes, 2004; Hayes, 2009). The results suggest that, OBC->PCBUP-PCV, SSUP->PCBUP-PCV, and ED->PCBLR-PCV appear to support full mediation. OBO->PCBUP->PCV, OBS-PCBUP->PCV and PWE->PCBLR->PCV support partial mediation. Table 14 summarizes the Sobel, Cohen's F^2 , VAF, and Critical Index tests.

Table 14. Mediation Results

Relationship	Sobel	R^2_{incl}	R^2_{excl}	Cohen's F^2	Effect	VAF	CI^{95}_{LL}	CI^{95}_{UL}	Med
OBC> PCBUP> PCV	-0.34	0.10	0.46	-0.40	NA	0.04	-0.66	-0.03	Full
OBO> PCBUP> PCV	-0.40	0.05	0.06	-0.01	NA	0.43	-0.78	-0.03	Partial
OBS> PCBUP> PCV	-0.44	0.08	0.02	0.06	Weak	0.38	-0.80	-0.08	Partial
OBS>PCBLR> PCV	-0.04	0.60	0.02	1.44	Large	0.10	-0.41	0.33	NA
SSUP> PCBUP> PCV	-0.26	0.04	0.06	-0.02	NA	0.46	-0.53	0.02	NA
SSUP> PCBLR> PCV	0.01	0.59	0.06	1.29	Large	0.18	-0.26	0.28	NA
ED> PCBLR> PCV	0.74	0.60	0.23	0.91	Large	0.73	0.44	1.05	Full
AUT> PCBLR> PCV	0.20	0.61	0.08	1.34	Large	0.43	-0.04	0.45	NA
PWE> PCBUP> PCV	0.01	0.46	0.45	0.01	NA	0.01	-0.02	0.04	NA
PWE> PCBLR> PCV	0.43	0.65	0.45	0.54	Large	0.52	0.27	0.58	Partial
PCBUP> PCV> TI	0.10	0.48	0.06	0.80	Large	0.38	-0.05	0.26	NA
PCBLR> PCV> TI	0.21	0.50	0.43	0.15	Weak	0.47	0.09	0.32	Partial

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBLR=Psychological contract Breach-Lack of Reciprocation

CHAPTER SIX

Discussion

This research draws on psychological contract theory, which is grounded on the notion of a give-and-take and relational paradigm. Relationships exist in various social configurations. The engagement of two or more individuals in a relationship necessitates obligation and reciprocation. Multiple relationship types identify the range of obligation and reciprocal events. From an organizational perspective, a topological arrangement of various relationship types explicates different dimensions of the employee and organization interaction. While each has contextual applications, the relational psychological contract involves reciprocation, trust, loyalty, affective commitment and work engagement (Parzefall & Hakanen, 2010; Agarwal U. A., 2014). Undesirable situations potentially damage the relationship weakening trust and increasing emotional stress. Attention to organizational and employee goals nurtures the psychological contract. However, access to the PC and determining the salience of its contents are likely improbable because of its subjectivity (Rousseau, 1995; Robinson & Morrison, 2000). In addition, social interpretation of actions and verbiage, more prominent during the pre-hire process, fosters the cognitive retention of real and imagined promises. Therefore, it is probable that the psychological contract can and will be broken (Rousseau, 1995). This study addresses the effect of unexpected situations acting against the IT professional's psychological contract. Potential antecedents to psychological contract breach, possible

mediational conditions to PCV via PCB-UP and PCB-LR, and the influence of PCV on turnover intentions are addressed.

Antecedents to Psychological Contract Breach

Psychological contract theory argues that employees retain certain expectations from their organization in exchange for loyalty, commitment, trust and work performance. What IT professionals want and find significant is cognitively stored and monitored for its reciprocation. Moreover, the exact set of wants and needs and their order of importance is likely different for each person. Thus, one's PC structure exists as a multi-dimensional model that contains a diverse set of expectations including their order of importance. The foundation of the PC was addressed in this study by considering likely axiomatic items of most work relationships such as salary, promotion and opportunity. Hypotheses H1a - H1d were developed to address this structure.

Furthermore, the literature review supports this structure because salary, promotion and challenge are common worker concerns (Computerworld, 2012; Robinson & Rousseau, 1994). For example, IT professionals that perceive poor distributional justice diminish their organizational attachment (Lester, Turnley, Bloodgood, & Bolino, 2002; Riemenschneider & Armstrong, 2012). Job opportunity, such as complex project assignments and skill development were found to be salient among IT professionals (H1b). In addition, remuneration appeared to counteract perceptions of unfulfilled promises (H1c). However, the association between remuneration and PCB-LR (H1d) was positive instead of the predicted negative. As previously discussed, the PCB construct, as a whole, contained some reverse coded items. It is likely that the switch in cognitive thinking from positive to negative for this construct generated respondent error and likely

explains the inverse relationship (cf. Hughes, 2009). Further research is needed to provide support for the original hypotheses made regarding PCB-UP and PCB-LR and respondent errors made on these constructs.

In sum, the data show that organizational awareness of promotion, opportunity and salary can counteract perceptions of unfulfilled promises (PCB-UP). Extant research suggests that salary, promotion, and challenge are common salient items (Robison, 2008; Robinson & Rousseau, 1994). Moreover, potentially other factors equally reduce PCB, such as supportive management.

Supervisor support likely has a significant influence on one's psychological contract and career direction. Proper supervisor support can generate increased work performance (Dhar R. , 2012) whereas unsupportive supervisors weaken the work relationship and likely increase perceptions of PCB and PCV (Riemenschneider & Armstrong, 2012). Thus, reasonable supervisor support reduces the perception of unfulfilled promises and lack of reciprocations. However, no support was found for these relationships indicating that respondents do not appear to view supervisor support as part of the PC. These findings provide organizations a method to address morale by maintaining and improving the relationships with their IT workers through supportive management. While initial supportive actions can be perceived to address the PC, healthy relationships require continual follow-up (Shen, 2011; Canary & Dainton, 2003). An organization that fails to maintain the work relationship can expect relationship erosion.

Perceived work exhaustion addresses the depletion of mental and physical resources because of the constant engagement in negative situations. For example, technical call centers typically interact with both positive and negative customers. It is

reasonable that the majority of these calls are stressful. Technical call centers experience high turnover rates because of, in part, continual customer verbal aggression (Li & Zhou, 2013). Other exhaustive issues include work-life conflict (Kraemer & Gouthier, 2013; Moore J. E., 2000; Hechanova, 2013), gender disparity (Trauth, Quesenberry, & Huang, 2009), and the periodicity of economic turbulence which can alter the IT professional workload. The findings for perceived work exhaustion (H3a-H3b) suggest that the respondents perceived that their promises were unfulfilled in some way. This finding could be the result of previous exhaustive events such as continuous overtime, negative users and micromanagement. However, an anomaly was discovered when examining the association between work exhaustion and PCB-LR (H3b). While feelings of PWE appear to influence PCB-LR, the findings indicate an inverse relationship. This relationship suggests that as PWE increases, PCB-LR decreases. This result is counter-intuitive and is potentially the result of reverse-coded items on the survey instrument. An examination of the data shows several respondent errors in the PCB-LR measurement items. According to Schriesheim (1981) and Hughes (2009), reverse-coded items require a cognitive alteration in focus such that the probability of incorrect responses significantly alters the variability of the results. The data indicated such a pattern and was adjusted by replacing the erroneous values with the median (Hair Jr. 2010). The result of this imputation could have retained a portion of the error or even exacerbated it. Extant research suggests that including negatively worded items likely weaken the result validity and “*theoretically control or offset agreement response tendencies...*” (Schriesheim & Hill, 1981, p. 1113). Hughes (2009) investigated the impact of incorrect responses on reverse-coded survey items. The results suggest reverse-coded items can significantly impact the mean and

therefore, “...*When scales contain more than one reverse-coded item and incorrect response rates are greater than 5%, then the impact on scale means can be significant, with effect sizes as large as 0.64 standard deviations*” (Hughes, 2009, p. 84).

In sum, perceived work exhaustion appears to influence perceptions of PCB in terms of unfulfilled promises. However, PWE did not appear to have an influence on PCB-LR. Thus, organizations that fail to address exhaustive work situations can lead IT professionals to perceive that one or more promises have been reneged. Moreover, layoffs and the declining presence of women in the IT profession (Riemenschneider, Reid, Allen, & Armstrong, 2010; Trauth, Quesenberry, & Huang, 2009) strain technological progress and potentially increase survivor workloads. The current high demand for technology and a declining IT workforce complicate balanced workloads and likely have exhaustive effects (Rutner, Hardgrave, & McKnight, 2008; Rutner, Riemenschneider, O’Leary-Kelly, & Hardgrave, 2011; Moore J. E., 2000). Therefore, perceived work exhaustion influences IT professionals to consider turnover intention (Moore J. E., 2000; Ahuja, McKnight, Chudoba, George, & Kacmar, 2007).

Successful hardworking and skilled IT professionals are organizational assets. Curtailing the ability of IT workers to improve business processes and their involvement in the organization’s direction can pose problems. Relegation and micromanagement can reduce involvement and incite frustration. Anderson (2006) suggests, “*Once you have surrounded yourself with successful, hardworking, highly skilled IT professionals, there is only one thing left to do...get out of the way.*” The results for job autonomy (H4) suggest that the respondents perceived sufficient latitude in their positions that negatively influenced PCB-LR. While job autonomy may not initially be cognitively salient, the

propensity of the PC to change over time can make job autonomy more important. The literature review suggests that job autonomy increases innovative behavior because IT professionals feel they have a stake in the organization's success (Newton, Blanton, & Will, 2008). It is possible that the respondents find technical work intrinsically satisfying and are not necessarily bound to anticipations of self-government.

Hypothesis 5 argued that emotional dissonance would be positively associated with psychological contract breach-lack of reciprocation. IT call centers and organizational IT professionals regularly socially interact with their customer base. Social interactions between IT professionals and their customers involve both positive and negative situations. For example, an information system outage during a critical moment complicates the IT to user interaction. Depending on the situation, some interactions can be highly unproductive. Coping with continual negative situations can erode one's ability to respond in a professional manner. The results for emotional dissonance (H5) indicate a significant inverse relationship between emotional dissonance and PCB-LR. This finding appears counter-intuitive necessitating further data analysis. Twenty-four percent of the cases involved repeating patterns. For example, the scale value of 1 and 5 was used to answer all of the survey questions relating to emotional dissonance. While imputation could potentially resolve such anomalies, the data was untouched for concerns that changing the responses would negatively affect the theoretical aspects of the construct (Hair Jr., Black, Babin, & Anderson, 2010).

Hypothesis 6 argued that PCB-unfulfilled promises would be positively associated with psychological contract violation. The results indicate that a significant positive relationship exists. It can be concluded that as perceptions of unfulfilled

promises increase, psychological contract violation increases. Organizations can benefit from this finding by intensifying their focus to the antecedents that influence PCB-UP such as involving IT professionals in more complex tasks, salary adjustments and minimizing exhaustive work situations. While the antecedents to PCB-UP and PCB-LR in this study are not exhaustive, it is important to examine its antecedents because prolonged circumvention of relationship maintenance, whether purposeful or incidental, can lead to a PCV.

Hypothesis 7 posited that a psychological contract breach-lack of reciprocation (PCB-LR) would be positively associated with psychological contract violation. The result indicates a significant inverse relationship ($-.758, p < .001$). Thus, it can be concluded that no support exists for the PCB-LR and PCV relationship. While PCB is composed of two separate constructs, additional research is needed to fully develop PCB-LR.

Hypothesis 8 posited that psychological contract violation would be positively associated with turnover intention. The results indicate that a positive and significant relationship exists ($.675, p < .001$). It can thus be concluded that PCV can trigger turnover intentions. The results are in line with research by Thau et al., (2009), Rousseau (1995) and Robinson and Rousseau (1994) suggesting that the respondents are considering or have already engaged in solutions to their current situation. The results are disconcerting such that depending on the IT professional's impact on the organization, a loss of experience and investment is precarious. Therefore, a potential treatment for organizations is to re-examine their relationships with their IT staff and address potential disparaging issues.

In sum, this research identified a cogent progression of potential factors leading IT professionals to consider leaving their current organization via turnover intentions. The data show that promotion, salary and perceived work exhaustion can influence PCB-UP. The lack of granting employees job autonomy can influence an awareness that the organization is not providing the means for skill advancement thus creating a perception of PCB-LR. Unfulfilled promises can influence strong negative reactions via psychological contract violation that can lead to turnover intentions.

Theoretical Contributions

This dissertation makes several theoretical contributions to the literature regarding potential antecedents to PCB, PCV and TI. First, it was discovered that psychological contract breach could be separated into two separate entities. During the principle components analysis process, the PCB construct was observed to consist of two parts: unfulfilled promises and lack of reciprocity. This observation was consistent via the non-rotated and rotated factor solution. PCB-Unfulfilled promises addresses the comparison between what was expected and received. PCB-Lack of reciprocation addresses a neglect of organizational reciprocation to atone for missed promises or recognize the efforts and performance of their IT staff. A literature search was conducted to investigate additional studies focusing on the multi-element PCB construct. While it is reasonable the PCB construct can exist under different terminology, focus was applied to the search string (“psychological contract breach”) to determine if the PCB construct was deconstructed similar to this study. The search generated 71 items from the 2009 to 2015 timeframe. No research appeared to address the separation of the PCB construct. A portion of the literature adapted PCB from different sources and fit the measurement items to their

study's design. Therefore, PCB-UP and PCB-LR is an unexpected contribution of this research.

Second, while arguments were made regarding the antecedents on PCB, promotion and salary did influence PCB-unfulfilled promises and perceived work exhaustion and autonomy did influence PCB-LR. The amount of work IT professionals are required to address creates a fissure between expectations and reality. It is reasonable that IT professionals do not initially expect to be subjected to work exhaustion and consider this counter to their cognitive image of work requirements. Likewise, it is reasonable that IT professionals work better with less supervision. Psychological contract theory appropriately addresses these situations through the PC, PCB-UP, PCB-LR and PCV constructs. PCB-UP and PCB-LR provide a deeper focus on exactly which portion of the PCB is affected.

Third, a primary goal of this research was to determine if PCB-unfulfilled promises and PCB-lack of reciprocations influenced PCV. The paucity of research on this interaction was evident in the literature review. Robinson and Morrison (2000) investigated potential antecedents influencing psychological contract breach from a longitudinal perspective. Riemenschneider and Armstrong (2012) investigated antecedents that deteriorated the work relationship. The progression of unfulfilled promises or lack of reciprocations to PCV is supported by the study's result. This condition should raise management awareness on potential resolutions to these events. The perception of unfulfilled promises, depending on their salience, can affect trust. In addition, extant research suggests that PCB potentially affects one's self-identity,

garnering strong emotions, and a lowered sense of worth (Henderson & O'Leary-Kelly, 2012).

Finally, psychological contract violation appears to be an antecedent to TI (.68, $p < .001$). While this relationship is not unexpected, and mirrors prior turnover research (Stoner & Gallagher, 2010), the role of PCB has theoretical implications. First, some unreciprocated promises may go unnoticed or even dismissed (Robinson & Morrison, 2000). However, repeated unfulfilled promises likely provide enough influence for IT professionals to consider their organization to be less concerned about honoring promises made to them and more about the organization's profitability. An organization's ability to be aware of the promises employees expect and which ones are highly important is difficult because of subjectivity. Further, the psychological contract changes over time further complicating its assessment (Rousseau, 1995). A potential remedy to avoid PCV is for supervisors and their subordinates to engage in goal-seeking exercises. In this situation, the supervisor and IT worker list a set of achievable personal and organizational goals. For example, a potential goal benefitting both the IT worker and organization may be to send the employee to a technology conference to gather the latest solutions in the IT field. This situation allows the IT worker to be current on the latest technologies. The organization could then better formulate a plan on the next technological solution to employ.

In sum, this study shows that first, the antecedents explained 47 percent and 53 percent of the variance in psychological contract breach-UP and psychological contract breach-LR respectively. Second, psychological contract breach (UP and LR) explain 61

percent of the variance of psychological contract violation. Finally, Psychological contract violation explains 47 percent of the variance of turnover intention.

Practical Implications

The results of this study suggest that from a psychological contract perspective, negative work situations such as perceived work exhaustion and emotional dissonance can trigger perceptions of PCB whether through unfulfilled promises or a lack of organizational reciprocation. The implication of such a condition can be observed and therefore addressed by the organization. First, perceived work exhaustion is observable by an individual's emotional disposition (Rutner, et al., (2008), decreased organizational commitment (Abraham, 1999), absenteeism (Diestel & Schmidt, 2011), and reduced performance (Shih, Jiang, Klein, & Wang, 2013). For example, some IT professionals are required to work non-standard schedules such as on-call duty that is likely perceived as a less desirable job responsibility. The added physical and emotional stress of this schedule potentially reduces organizational commitment the longer one remains on this schedule. A potential remedy to work exhaustion could be the reallocation of duties, refocusing individuals to different challenges, and offering of extended vacations.

Second, supervisors are tasked with sustaining employee performance and commitment by supporting their career and personal goals. The supervisor role is important because of their ability to adjust workloads and facilitate upward mobility in the organization. In addition, supervisors have the responsibility to clarify the organization's goals, and visions, and the role their subordinates have in the organization. Clarifying the purpose and role of their subordinates helps mitigate ambiguity (Major, et al., 2007) For example, it is reasonable that high performing IT professionals gravitate

toward heavy workloads as an intrinsic form of satisfaction. Supervisors must be diligent to ensure burnout is avoided. In addition, frequent social interactions between supervisors and their subordinates are significant. Major et al., (2007) found that if IT professionals believe their supervisor is relationally invested in them, they are more willing to extend extra effort because they know appropriate reciprocation is certain. Observable signs of discontent should raise immediate concerns as these can potentially give way to relationship degradation. Table 15 in Appendix B indicates the mean value of each supervisor support measurement item and presents a negatively skewed distribution suggesting respondents are satisfied with their supervisors. It is possible that there are other factors creating the negative interaction between perceived work exhaustion and PCB-UP and PCB-LR.

Finally, PCB-UP, PCB-LR and PCV influence turnover intention. The wide and diverse spectrum of IT specialties such as security, systems administration, development, data warehousing and web development. The plethora of IT jobs and their availability enables IT professionals to easily consider changing jobs. IT professionals can quickly transfer from one area of IT to another, or, from one organization to another. The ability to float from one job to another has created a turnover culture (Moore & Burke, 2002). The age of the cradle-to-grave workers is largely a thing of the past. Opportunity creates a retention quandary. Thus, future research should focus on organizational adaptability for continuing IT turnover culture or consider methods to address PC malleability PC of their IT professionals.

Limitations

As with all research, the results of this study contain several limitations. Caution should be considered when interpreting the results. First, the sample data set was non-normal, requiring a less stringent application of the distribution assumptions. PLS-SEM was selected as the statistical package to address data non-normality because this is a strength of its method. The effectiveness of PLS-SEM is robust to inadequacies of data distribution as long as the distributions are not extreme (Cassel, Hackl, & Westlund, 1999). The tests for data normality on each measurement item, while skewed, did not indicate distribution extremes. Cassel et al., (1999) suggest that while normal distributions are essential to statistical methods, practicality often follows skewed patterns.

A second potential limitation is common method bias (CMB). Respondents answered both the independent and dependent variable items concurrently. This bias may result in detecting significant relationships among the variables that originate from systematic bias among the respondents. The Harman's single-factor and common latent factor (CLF) tests are diagnostics to determining if a single factor accounts for the majority of the covariance between the measures (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The Harman's test resulted in a single factor explaining approximately 30 percent of the variance, suggesting limited common method variance (Gaskin, 2011). In the generation of eight factors, no single factor accounted for a majority of the covariance. In addition, CLF did not indicate CMB among any of the measurement items. However, the possibility of common method bias remains a limitation when generalizing or replicating the results.

A third limitation involves the study's perception-based nature since measures of turnover intention behavior do not capture the actual turnover behavior. Although it is possible to observe and quantify behavior, it was not a practical approach for this study. Perception surveys are prone to limitations because of the self-report nature of the data. Respondents could have chosen to conceal their real responses if their perceptions were seen as socially undesirable. Remedies to this issue could include using descriptive scenarios and a quasi-experimental design to limit bias.

A fourth limitation of this research is the assumption that most IT professionals seek affiliation with a small number of organizations (i.e. cradle to grave workers). Prior to the pervasiveness of technology, long-term employees were the norm. However, the vastness of the IT profession includes areas such as security, web development, systems management, IT management, software development, and systems analysis. The quickening reorganization of the IT field unveils new and exciting technological opportunities. With the accumulation of a vast and diverse skill set, IT professionals potentially feel less attached to their organizations, exhibiting what Moore and Burke (2002) refer to as a *turnover culture*.

While I acknowledge the study's limitations and biases, focus is applied to the psychological contract the IT professional has with the organization. Some antecedents and relationships may have been overlooked. A cogent representation of the psychological contract as it applies to IT professionals may not be well understood. For example, extant research appears to measure PC as a unitary component (Riemenschneider & Armstrong, 2012; Chiang, Liao, Jiang, & Klein, 2012). Psychological contract breach, however, can be represented as two separate entities:

PCB-UP and PCB-LR. In this study, it was determined that salary, challenges and perceived work exhaustion comprise the PC and that a relationship between these antecedents and PCB-UP is evident. Statistically, no positive and significant relationship exists between PC and PCB. Likewise, job autonomy (AUT) is part of the PC and has a relationship to PCB-LR. It is likely that the association of PC to PCB-UP and PCB-LR could be improved by (1) expanding the dimensional breadth of the PC construct, (2) configuring the PC as a formative construct, and (3) investigating additional antecedents that would fit with PCB-UP and PCB-LR. Future research should consider alternative theories to provide stronger explanatory power on the expectations and reciprocations between IT professionals and their organizations.

CHAPTER SEVEN

Summary and Conclusion

The previous four decades presented a moderate adoption of computing into industry. The rise of system decentralization and the post dot-com era escalated a worldwide adaptation to information systems. The IT professional is a critical component of technology's evolution. In varying degrees of stature, IT professionals are similar to certified public accountants (CPA), business specialists, medical staff, diagnosticians, and artists. Traditionally, technology continues to be a mystery. The complexity of telecommunication, data security, heterogeneous systems bridging, and business solutions necessitate skilled IT professionals. However, recent traumatic events such as the dot-com bust, recessions in 2001 and 2007, and increased market competition found large groups of IT professionals released from their organizations. While an organization's adjustment to nebulous external conditions is likely axiomatic and necessary for survival, the purpose of this study focused on a set of elements that potentially influence IT professionals to consider turnover.

The organization and employee interaction is likely perceived as a transactional, non-relational agreement. However, it is reasonable that agencies and workers are engaged in a relational capacity. Several theories have investigated the conditions affecting IT turnover intention such as the unfolding model of voluntary turnover (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999), burnout (Moore J. E., 2000), and emotional dissonance (Rutner, et al., 2008). In addition, the work of Riemenschneider & Armstrong

(2012) and Ahuja et al., (2007) investigate the antecedents leading IT professionals to consider leaving their organization. The direction of this research builds on this prior research by employing Rousseau's (1995) psychological contract theory.

Psychological contract theory provided the lens to view the relational aspects of the IT professional worker and their organization. PC theory addresses the cognitive retention of salient items and the effect of their missed reciprocation. While this suggests that some items can be negotiated (e.g. less subjective), other more salient items are less so.

An online survey collected data from 104 IT professionals, and the data was analyzed to test the proposed model. The results suggest that perceived work exhaustion created a psychological contract breach condition. It is reasonable that the respondents felt that the type of work failed to match their expectations. The study also presents perspicacity to the conditions of psychological contract breach and psychological contract violation. PCB was found to mediate job autonomy, emotional dissonance partially, and perceived work exhaustion. These results present several important work conditions. First, job autonomy is likely seen as the organization's trust in one's ability to make necessary and unsupervised job decisions and enables employees to feel a sense of organizational ownership, responsibility, and purpose. Thus, low job autonomy potentially acts against the work relationship. The results indicate PCB partially mediates job autonomy to PCV. Second, stressful social interaction likely reduces emotional fortitude. PCB was found to mediate emotional dissonance and PCV partially suggesting strong emotional situations influence to relationship degradation. Finally, PCB was found

to mediate PWE and PCV partially, suggesting that deadlines, stressful projects, and users can quickly degrade the work relationship.

Similar to Robinson and Morrison (2000) and Rousseau (1995), PCB correlates to PCV suggesting that through PCB and PCV, a perceived unreciprocated action degrades the work relationship. It is at this point, where thoughts of leaving the organization are possible.

Turnover intention addresses one's motivation to leave his organization. However, TI does not explain actual turnover. Turnover intention is potentially based on several unreciprocated and highly salient promises rather than one single failure. However, I acknowledge that this is possible but less frequent. Overall, this research shows that perceived work exhaustion can start the downward spiral of contentment to turnover intentions. Future research should investigate the longitudinal effects of IT turnover using psychological contract theory.

APPENDICES

APPENDIX A

Dissertation Model

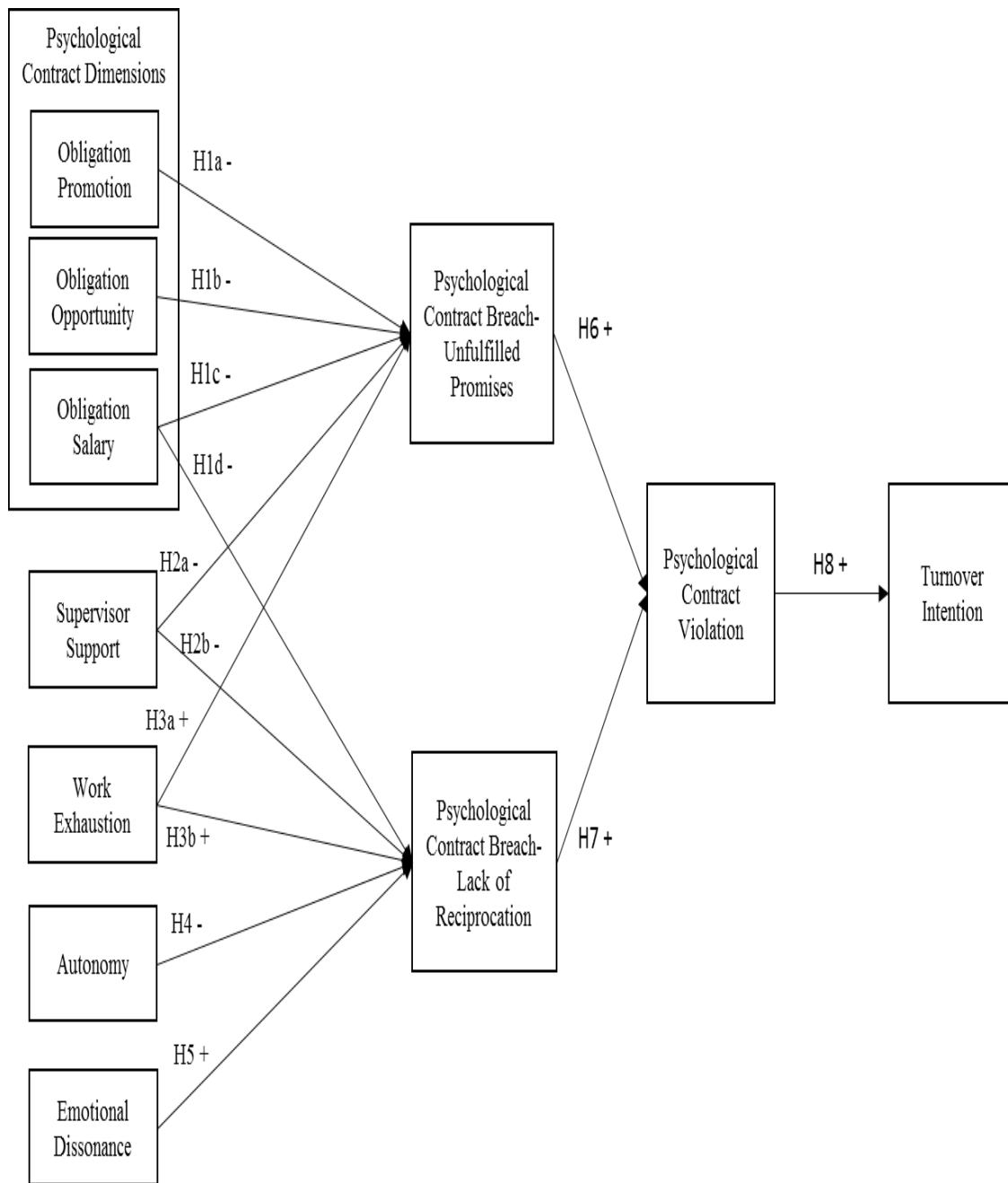


Figure A.1. Proposed Research Model

APPENDIX B

Measurement Items

Table B.1. Measurement Items

Measurement Item	Mean	S.D.
AUT1. In my work, I usually do not have to refer matters to my direct supervisor for a final decision.	5.14	1.653
AUT2. Usually, my direct supervisor does not have to approve my decisions before I can take action.	5.34	1.592
AUT3. Rather than asking my direct supervisor, I usually make my own decisions about what to do on a job.	5.20	1.575
AUT4. I can usually do what I want on this job without consulting my direct supervisor.	4.98	1.743
rOBC1. There is really too little chance for promotion on my job (R)	4.05	1.696
OBC2. Those who do well on the job stand a fair chance of being promoted.	4.25	1.472
OBC3. People get ahead as fast here as they do in other places.	3.96	1.478
OBC4. I am satisfied with my chances for promotion.	4.20	1.607
OBO1. In the positions that I have held at my company, I have often been given additional challenging assignments.	4.11	0.872
OBO2. In the positions that I have held at my company, I have often been assigned project that have enabled me to develop and strengthen new skills.	4.06	0.906
OBO3. Besides formal training and development opportunities, to what extent have our managers helped to develop your skills by providing you with challenging job assignments?	4.21	1.425
OBO4. Regardless of your company's policy on training and development, to what extent have your managers made a substantial investment in you by providing formal training and development opportunities?	3.82	1.549
OBS3. My current salary	3.68	1.073
OBS4. My most recent raise	3.51	1.197
OBS5. The company's pay structure	3.44	1.162
PCB1. Almost all the promises made by my employer during recruitment have been kept thus far (R)	2.51	1.370
PCB2. I feel that my employer has come through in fulfilling the promises made to me when I was hired (R)	2.37	1.277
PCB3. So far my employer has done an excellent job of fulfilling its promises to me (R)	2.44	1.472
PCB4. I have not received everything promised to me in exchange for my contributions	3.57	1.855


(continued)

Measurement Item	Mean	S.D.
PCB5. My employer has broken many of its promises to me even though I've upheld my side of the deal	3.10	1.812
PCV1. I feel a great deal of anger toward my organization	2.86	2.114
PCV2. I feel betrayed by my organization	2.97	2.138
PCV3. I feel that my organization has violated the contract between us	2.91	2.127
PCV4. I feel extremely frustrated by how I have been treated by my organization	3.18	2.142
PED1. To be effective in my job, I must try to be sympathetic with customers even when I am not.	3.49	1.159
PED2. In doing my job, I must portray myself as interested in the customers' frustrations even when I don't really care.	3.19	1.237
PED3. To do my job effectively, I must act as if I empathize with the customer despite my actual lack of concern.	3.05	1.249
PED4. I must act like I care about customers' concerns even when I find it hard to be interested.	3.10	1.225
PED5. To be successful in my job, I must pretend to care about customers' problems even when I am indifferent.	3.09	1.285
NED6. To be effective in my job, I must not demonstrate how agitated I may feel with customers.	3.24	1.258
NED7. To do my job well, I must pretend not to be irritated at customers even when I may feel that way.	3.18	1.256
NED8. To do my job effectively, I must hide any anger I may feel with customers.	3.11	1.303
NED9. To carry out my job, I must try to pretend I am not annoyed with customers when I really am.	3.19	1.294
NED10. In interacting with customers, I must suppress irritation I may feel.	3.18	1.256
PWE1. emotionally drained from my work.	4.03	1.849
PWE2. used up at the end of the work day.	4.17	1.823
PWE3. fatigued when I get up in the morning and have to face another day on the job.	3.62	1.933
PWE4. burned out from my work.	3.41	1.987
PWE5. working all day is really a strain for me.	3.31	2.036
SSUP1. My supervisor takes the time to learn about my career goals and aspirations.	4.98	1.845
SSUP2. My supervisor cares about whether or not I achieve my career goals.	5.06	1.762
SSUP3. My supervisor keeps me informed about different career opportunities for me in the organization.	4.66	1.942
SSUP4. My supervisor makes sure I get the credit when I accomplish something substantial on the job.	5.36	1.636
SSUP5. My supervisor gives me helpful feedback about my performance.	5.26	1.537
SSUP6. My supervisor gives me helpful advice about improving my performance when I need it.	5.25	1.687
SSUP7. My supervisor supports my attempts to acquire additional training or education to further my career.	5.29	1.689
SSUP8. My supervisor provides assignments that give me the opportunity to develop and strengthen new skills.	5.24	1.563
SSUP9. My supervisor assigns me special projects that increase my visibility in the organization.	5.28	1.641
TI1. How likely is it that you will be working at the same company this time next year? (R)	1.68	1.173
TI2. How likely is it that you will take steps during the next year to secure a job at a different company?	3.05	1.575
TI3. I will be in this company five years from now. (R)	2.02	1.323
TI4. I will probably look for a job at a different company in the next year.	2.95	1.562

Legend: OBC=Obligation-Promotion, OBS=Obligation-Salary, OBO=Opportunity, SSUP=Supervisor Support, PWE=Perceived Work Exhaustion, NED=Emotional Dissonance, AUT=Autonomy, ED=Emotional Dissonance, PCBUP=Psychological contract breach-Unfulfilled promises, PCBLR=Psychological contract Breach-Lack of Reciprocation, PCV=Psychological contract violation, TI=Turnover Intention

APPDENIX C

Online-Survey


Qualtrics Survey

The purpose of this study focuses on the potential influences to IT professional turnover. The survey should take about 15 minutes and your participation is **voluntary**. No physical, psychological, and/or sociological risks are involved. All data collected is confidential and anonymous. No personal/web information is requested. You may quit this survey at any time.

Please be aware: Electronic communication may be subject to interception, legally by your employer or illegally by another party, while the information is in transit. Therefore, another party might see your information. Unfortunately, I have no control whether that happens. No personal or web data is collected. If you are concerned about your data security, I suggest that you do not participate in this survey.

If you have any questions or concerns, please feel free to contact René Moquin (rene_moquin@baylor.edu) or Cindy Riemenschneider, PhD., (c_riemenschnneider@baylor.edu). Inquiries regarding the nature of the research, your rights as a subject or any other aspect of your participation can be directed to Baylor University's Committee for Protection of Human Subjects Research through the chairman Dr. David W. Schlueter, PhD., Chair Baylor IRB, Baylor University, One Bear Place # 97368 Waco, TX 76798-7368. Dr. Schlueter may also be reached at (254)710-6920 or (254) 710-3708.

Next

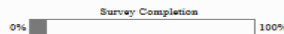
Survey Completion
0% 100%

Thank you for agreeing to take part in this survey! Before we begin, I need to know of your affiliation in the information technology (IT) profession. Some examples of IT positions are: network administrator, software programmer/developer, systems analyst, IT management, web developer, helpdesk, and so forth.

If you do not work in an IT capacity, please accept my thanks for your interest and please do not allow me to waste your time taking this survey.

Which statement best describes you?

- ☐ I have 5+ years experience as an IT professional
- ☐ I do not have 5+ years experience as an IT professional

[Next](#)

Next, I need to know just a little about you. Remember that your responses are anonymous. If you feel uncomfortable answering any of these questions, you can exit the survey.

What is your gender?

What is your age?

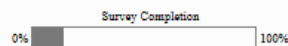
What is the highest level of education you have completed?

How long have you been with your current organization?

What is the principle industry of your organization?

How many years of information technology experience do you have?

Next



Qualtrics Survey

Given your efforts and contributions to the company, when thinking about how well your organization delivered on its promises, commitments, and obligations to you, to what extent do you agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Almost all the promises made by my employer during recruitment have been kept thus far.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my employer has come through in fulfilling the promises made to me when I was hired.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far my employer has done an excellent job of fulfilling its promises to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have not received everything promised to me in exchange for my contributions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My employer has broken many of its promises to me even though I've upheld my side of the deal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next



Please indicate the extent to which you agree or disagree with the following statements regarding your organization.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
When someone criticizes the company, it feels like a personal insult.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very interested in what others think about the company.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I talk about the company, I usually say 'we' rather than 'they'.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's successes are my successes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When someone praises the company, it feels like a personal compliment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a story in the media criticized the company, I would feel embarrassed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

Survey Completion
0% 100%

Please indicate the extent to which you agree or disagree with the following statements regarding your workload:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I feel that the number of requests, problems, or complaints I deal with are more than expected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that the amount of work I do interferes with how well it is done.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the frequency with the following statements regarding your workload.

	daily	Almost everyday	About once a week	2-3 times a month	About once a month	A few times a year	Once a year or less
I feel busy or rushed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel pressured.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

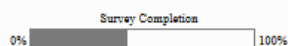
Think about your own feelings concerning each of these statements and answer for yourself, not how you think other people would answer.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
In most situations, managers should make decisions without consulting their subordinates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In work-related matters, managers have a right to expect obedience from their subordinates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees who often question authority sometimes keep their managers from being effective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Once a top-level executive makes a decision, people working for the company should not question it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees should not express disagreements with their managers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managers should be able to make the right decisions without consulting with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managers who let their employees participate in decisions lose power.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A company's rules should not be broken—not even when the employee thinks it is in the company's best interest.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree or disagree with the following statements regarding your profession.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
In general, when someone praises IT professionals, it feels like a personal compliment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I talk about IT professionals, I usually say 'we' rather than 'they'.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT's successes are my successes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, when someone criticizes IT professionals, it feels like a personal insult.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a story in the media criticized IT professionals, I would feel embarrassed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next



Please indicate to what extent you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I count around here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am taken seriously around here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am important around here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am trusted around here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can make a difference around here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

Survey Completion
0% 100%

How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
In my work, I usually do not have to refer matters to my direct supervisor for a final decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Usually, my direct supervisor does not have to approve my decisions before I can take action.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rather than asking my direct supervisor, I usually make my own decisions about what to do on a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can usually do what I want on this job without consulting my direct supervisor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

Survey Completion
0% 100%

Given your efforts and contributions to the company, when thinking about how well your organization delivered on its promises, commitments, and obligations to you, to what extent do you agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I feel a great deal of anger toward my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel extremely frustrated by how I have been treated by my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel betrayed by my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my organization has violated the contract between us.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

Survey Completion
0% ☐ 100%

Please indicate the extent to which you agree or disagree with the following statements regarding your supervisor.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
My supervisor takes the time to learn about my career goals and aspirations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor cares about whether or not I achieve my career goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor keeps me informed about different career opportunities for me in the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor makes sure I get the credit when I accomplish something substantial on the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor gives me helpful feedback about my performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor gives me helpful advice about improving my performance when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor supports my attempts to acquire additional training or education to further my career.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor provides assignments that give me the opportunity to develop and strengthen new skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My supervisor assigns me special projects that increase my visibility in the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

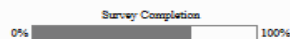
Think about experiences with your previous employer(s) and please indicate the extent to which you agree with the following statements.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
In general, whenever my past employers promised me something, they kept that promise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have had past employers break their promises to me on more than one occasion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Customer Relations: In the following 10 questions, "customers" refer to anyone inside or outside the organization you provide service to.

	Never	Rarely	Occasionally	Regularly	Very Frequently
To be effective in my job, I must try to be sympathetic with customers even when I am not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In doing my job, I must portray myself as interested in the customers' frustrations even when I don't really care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To do my job effectively, I must act as if I empathize with the customer despite my actual lack of concern.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I must act like I care about customers' concerns even when I find it hard to be interested.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be successful in my job, I must pretend to care about customers' problems even when I am indifferent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be effective in my job, I must not demonstrate how agitated I may feel with customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To do my job well, I must pretend not to be irritated at customers even when I may feel that way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To do my job effectively, I must hide any anger I may feel with customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To carry out my job, I must try to pretend I am not annoyed with customers when I really am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In interacting with customers, I must suppress irritation I may feel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next



Please indicate to what extent you agree or disagree with the following statements.

	Never	A few times a year or less	Once a month or less, rarely	A few times a month, sometimes	Once a week, rather often	A few times a week, often	Daily, all the time
emotionally drained from my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
used up at the end of the work day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
fatigued when I get up in the morning and have to face another day on the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
burned out from my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
working all day is really a strain for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to what extent you agree or disagree with the following statements.

	Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely
How likely is it that you will be working at the same company this time next year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it that you will take steps during the next year to secure a job at a different company?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will be in this company five years from now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will probably look for a job at a different company in the next year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

Survey Completion
0% ☐ 100%

The statements below describe various aspects of your pay. For each statement, decide how satisfied or dissatisfied you feel about your pay.

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
My current salary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My most recent raise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company's pay structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
In the positions that I have held at my company, I have often been given additional challenging assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the positions that I have held at my company, I have often been assigned project that have enabled me to develop and strengthen new skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


Please indicate the extent to which you agree or disagree with the following statements.

	not at all	slightly	somewhat	some extent	a large extent	a very large extent
Besides formal training and development opportunities, to what extent have our managers helped to develop your skills by providing you with challenging job assignments?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regardless of your company's policy on training and development, to what extent have your managers made a substantial investment in you by providing formal training and development opportunities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree or disagree with the following statements.

	disagree very much	disagree moderately	disagree slightly	agree slightly	agree moderately	agree very much
There is really too little chance for promotion on my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Those who do well on the job stand a fair chance of being promoted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People get ahead as fast here as they do in other places.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my chances for promotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next

0%  100%

Thank you for completing this survey. Your responses will greatly assist my research.

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