Psychological Contract in IT: A Qualitative Exploration of Missed Expectations

René Moquin
Northeastern State University, moquin@nsuok.edu

PSYCHOLOGICAL CONTRACT IN IT: A QUALITATIVE EXPLORATION OF MISSED EXPECTATIONS

René Moquin
Arkansas State University
rmoquin@astate.edu

ABSTRACT

This study examines the nature of reciprocity between IT workers and their organization and the IT profession by applying two theoretical perspectives - social identity and the psychological contract. *Social Identity Theory* addresses the connection between individuals and their profession while *Psychological Contract Theory* addresses the mental retention of direct and indirect promises and their reciprocation. The linkage of these theories assesses the behavioral outcomes of missed expectations. The results from in-depth interviews with IT professionals generate a taxonomy of twenty-five themes that potentially influence a breach or violation of the psychological contract. The discussion then focuses on the four salient themes that were highly referenced by the interviewees and that closely aligned with the theoretical foundations of the study. This paper widens the operational aspects of the *Psychological Contract* by investigating the factors that potentially influence a *Psychological Contract Breach* and *Psychological Contract Violation* within the IT profession.

Keywords

Social Identity Theory, Psychological Contract Theory, Psychological Contract Breach, Psychological Contract Violation, Emotional Exhaustion, Qualitative Research

INTRODUCTION

IT professionals influence organizational performance, project outcomes, employee morale and employee replacement costs (Dinger, Stepina, Thatcher, Breland, & Treadway, 2015; Kwon & Rupp, 2013). Retaining IT workers ranks second on a list of the ten most worrisome management issues (Kappelman et al., 2017). Retention research has been heavily rooted in March and Simon's (1958) *Theory of Organizational Equilibrium*. This theory posits that employees will remain in an organization only as long as the offered inducements are equal to or greater than the contributions individuals must make to the organization. When inducements are less than required contributions, the desire to switch jobs increases by the influence of lowered job satisfaction and organizational commitment (Joseph, Ng, Koh, & Ang, 2007). Accordingly, studies of IT turnover research focus on identifying the distal factors that indirectly influence IT turnover via their impact on the factors related to job satisfaction, organizational commitment, and perceived ease of movement (Joseph et al., 2007).

One gap noted in IT turnover research is the influence that missed career expectations has on IT workers' commitment to the profession. This is supported by Joseph's et al. (2007) meta-review where only three of the forty-three antecedents of turnover were related to career satisfaction (Igbaria, Parasuraman, & Badawy, 1994), professional commitment (Morrow & Wirth, 1989), and career orientation (Igbaria & Baroudi, 1995). While some studies have focused on IT profession turnover to wit, Armstrong et al. (2015), Dinger et al. (2015), Brooks, Riemenschneider, Hardgrave, & O'Leary (2011) and Kaiser (1983), there continue to be calls for IT turnover research that transcends the organization to the IT profession (Brooks et al., 2011, Joseph et al., 2007, Armstrong et al., 2015). Reflecting this sentiment, Brooks et al. (2011) argue that, "research examining the IT worker has been useful in explaining individual behavior primarily within an organizational context; it has not focused much on providing the necessary information to understand individual IT worker's beliefs, attitudes, and behaviors related to the IT profession (p. 88)." Further, Armstrong et al. (2015) remark, "a perspective is required that takes the individual beyond current circumstances and examines factors that can be conceptualized using a career perspective (p. 723)."

The purpose of this study is to examine the nature of reciprocity between IT workers and the IT profession. We use *Social Identity Theory* (SIT) and *Psychological Contract Theory* (PCT) to examine the interplay between the IT

worker and his/her commitment to the profession through occupational reciprocity. This approach provides an opportunity to examine under-explored areas that could potentially provide a better understanding of professional discontent potentially leading to turnover. Based on this approach, the following research questions arise:

> **Research Question 1 -** What is the nature of the reciprocal expectations that exist between IT workers and their organizations? In other words, what benefits do IT professionals expect to get from their organization and professional field in exchange for their work obligations?

> **Research Question 2 -** What are the results or consequences that occur when IT workers perceive a disequilibrium between their work obligations and the expected benefits from the organization and IT field?

The organization of this paper begins by first presenting a literature review and theoretical framework for addressing the research questions. Next, a discussion outlines the research methodology that includes the sample selection strategy, data collection, and analysis. Finally, we present subsequent discussion of the findings and presentation of results. The final section presents limitations and implications for future research and practice.

LITERATURE REVIEW AND THEORY DEVELOPMENT

Social Identification Theory

Social Identification Theory (SIT) provides a sound basis for examining individuals and groups. SIT suggests that individuals desire to orient themselves as individuals and as members of social groups (Baumeister & Leary, 1995; Boucher & Maslach, 2009; Burke & Stets, 2009; Tajfel, 1978). A group refers to a collection of similar others based on attributes like sex, age, occupation, and partisanship (Zavalloni, 1973). Groups are socially contrived objects implying unity, uniqueness, and governance (Tajfel, 1978). Further, the notion of groups implies division, comparison, and prestige, all of which only exist when other groups are present (Tajfel & Turner, 1986). For example, individuals working in the Accounting profession likely identify themselves as *Accountants.* Accountants holding the *Certified Public Accountant* (CPA) distinction are members of an elite and prestigious group. Similarly, application programmers, web designers, and network administrators comprise the IT group. A more prestigious IT group may include individuals retaining special certifications like Microsoft Certified Systems Engineer (MSCE) and Cisco Certified Internetwork Expert (CCIE). Further, IT workers tend to identify strongly with the IT profession (Brooks et al., 2011; Joseph, Boh, Ang, & Slaughter, 2012). This finding supports the notion that an individual's role and group affiliation are potential factors in an exchange-based relationship (Mael & Tetrick, 1992).

An essential aspect of the IT group is its *culture*. Culture refers to the set of attributes like beliefs, values, and expectations that guide behavior (Leidner & Kayworth, 2006). Each group has a unique cultural infrastructure that differs on some dimensions from other groups (Tajfel, 1972). IT culture conflict provides a more in-depth examination into the social fissure between IT and other groups (Leidner & Kayworth, 2006). For example, the perception of IT as a cost center rather than a value-adding entity is common (Zetlin, 2017). However, current research on business and IT alignment suggest that perceptions of IT as a service unit are changing (Ping-Ju Wu, Straub, & Liang, 2015).

The notion of group characteristics such as culture and uniqueness includes the establishment of boundaries and comparative assessments (Tajfel & Turner, 1986). This study employs the concept of the *in-group* and *out-group* referring to a social collective sharing common traits and governance (Burke & Stets, 2009). *In-group* members refer to "we" while *out-group* members refer to "they." This separation can result in potentially unfair cross-group comparisons (Goffman, 1963; Hofstede, Hofstede, & Minkov, 2010; Tajfel, 1978; Tajfel & Turner, 1986). People can associate with multiple groups like friend, parent, enemy, and in the case of careers, IT, accounting, sales, and management. Burke and Stets (2009) suggest that social groups are specialized where non-members are perceived as outsiders (out-group). This research examines the social interactions between the *in-group (IT)* and *out*-group (non-IT) and investigates the effects of the in– and out-groups on the psychological contract.

Psychological Contract Theory

Rousseau (1995) classifies contracts as *formal* and *informal.* A *formal* contract is a specific and objective agreement between agents containing responsibilities and repercussions for contravention. An *informal* contract is a vague and

interpretive group of implied promises between actors (Rousseau, 1995). PCT addresses the mental representation of implied expectations, and the influence reciprocity has on behavioral outcomes (Morrison & Robinson, 1997; Robinson & Morrison, 2000). PCT research typically addresses interpersonal interactions like employee and organization (Payne, Culbertson, Lopez, Boswell, & Barger, 2014). For this study, PCT addresses the retention of occupational expectations from an *intrapersonal* perspective.

Psychological Contract (PC) refers to the cognitive schema of subjective and interpretive expectations between agents (Argyris, 1960; Menninger, 1963; Rousseau, 1995; Schein, 1980). Essentially, it is what an agent believes s/he will eventually receive in exchange for appropriate behavior. The investment of an expected future result relies on an individual's performance and associated expectation. For example, research suggests that IT workers consider salary, challenge, promotion, and autonomy to be salient (Ahuja, McKnight, Chudoba, George, & Kacmar, 2007; Riemenschneider & Armstrong, 2012; Rutner, Hardgrave, & McKnight, 2008). Depending on the degree of saliency, failure to achieve one or more of these items likely calls into question the intent of the investment (Kotter, 1973; Rousseau, 1995). PC fulfillment involves *monitoring* which refers to the continual mental comparison of expectations to associated reciprocities (Morrison & Robinson, 1997; Rousseau, 1995). A missed reciprocation can trigger a sense-making process to determine the cause (Morrison & Robinson, 1997). Confirmation of a missed expectation can result in various behavioral reactions from a breach (less severe) to a violation (more severe) depending on the salience the holder applies to the expectation (Morrison & Robinson, 1997; Rousseau, 1995). A core concept of PCT is the affiliation organization and employee, or in this study, the worker to his/her chosen profession. Rousseau (1995) conceptualizes affiliation through relationship modalities such as relational and transactional.[1] The relational contract is less regulatory and more a relationship (kinship) involving trust and expectation. Thus, a worker's awareness that one or more expectations went unfulfilled can weaken the affiliation to his/her chosen profession. The subjectivity of the PC enables the holder to establish its contents and associated salience. Therefore, when highly salient PC items are unreciprocated, negative behavioral outcomes are likely.

Psychological Contract Breach (PCB) refers to the *awareness* of inequality between effort and reciprocation (Morrison & Robinson, 1997; Rousseau, 1995). For example, Payne et al. (2014) found when IT neophytes perceived a PCB, they readjusted their PC instead of immediately assuming injustice. Contrarily, situations like work-family conflict, work exhaustion (Ahuja et al. 2007), burnout (Armstrong, Brooks, & Riemenschneider, 2015), job stress and job insecurity (Shropshire & Kadlec, 2012) generated significant negative behaviors (Robinson & Rousseau, 1994). Further, current research suggests a connection between PCB and turnover (Clinton & Guest, 2014). In more severe cases, however, a PCB may escalate, transforming into a more serious condition, namely Psychological Contract Violation.

Psychological Contract Violation (PCV) refers to intense feelings of anger, distress, and injustice arising from the awareness of an unreciprocated *salient* promise (Robinson & Rousseau, 1994). For example, the H1b visa created chaotic situations for some organizations. A U.S. based healthcare organization opted to lay off a significant portion of their IT workforce for H1b workers. This action incited a protest backed by anger and betrayal citing incompetent management as the cause (Thibodeau, 2016). Further, research suggests that salient occupational expectations like salary, job challenge, and supervisor support (Riemenschneider & Armstrong, 2012), and unappreciative and disrespectful users (Wallen, 2011) generate highly emotional outcomes.

In sum, PCT is not exclusive to IT workers. Workers of all industries likely retain a set of beliefs, goals, and expectations that when unmet, potentially create a broad range of behavioral outcomes. However, IT workers are expected to work long hours, work with a constrained budget and maintain high system availability (Armstrong et al., 2015; Rutner et al., 2008; Rutner, Riemenschneider, O'Leary-Kelly, & Hardgrave, 2011). PCT addresses the linkage of stressful situations to emotional outcomes. It is probable that the connection of the IT worker's social

---

[1] A third affiliation, hybrid, contains the notions of relational and transactional modality. For example, an organization may initially engage a consultant for a particular project and end up hiring him/her.

identity and his/her experience with emotionally exhausting situations may not immediately translate into turnover. However, long-term exposure to these factors could influence IT workers to consider career turnover.

Emotional Exhaustion

Emotional Exhaustion (EE) refers to an individual's perception of physical and emotional overextension that potentially results in depersonalization, job dissatisfaction, and reduced organizational commitment (Maslach & Jackson, 1986). Some IT professionals experience stressful and exhaustive situations resulting in emotionally charged outcomes (Ahuja et al., 2007; Armstrong et al., 2015; Moore, 2000). A common stressful factor for IT workers is work exhaustion (Armstrong et al., 2015; Moore, 2000; Rutner et al., 2011). IT professionals work hard, long hours, often with limited resources (Armstrong et al., 2015; Rutner et al., 2011). Further, the rapidity of IT changes influence IT workers to continually upgrade his/her skill set to ensure organizational relevance. Organizational changes such as mergers have resulted in significant and stressful job cuts such as Verizon and Yahoo (LATimes, 2017), Dell and EMC2 (Brown, 2017), and the possible T-Mobile and Sprint convergence (Mills, 2017). While organizational elasticity illustrates normal market turbulence, the repercussions on employee vigilance and turnover intentions are possible.

In sum, the primary components that each theory represents and its role in this study are conceptualized - SIT presents the IT worker identity defining career orientation and expectations. PCT addresses career expectations and associated missed expectations. EE speaks to the behavioral outcome of missed expectations likely influencing thoughts of job or career reorientation.

METHODOLOGY

Study Design

Organizational IT turnover is typical, but it is difficult to quantify every factor influencing an IT professional to consider occupational turnover. Qualitative research provides a method of investigating a phenomenon at a deeper level through a process of constant comparative analysis including the ability to investigate less identifiable phenomenological elements (Boudreau & Robey, 2005; Eisenhardt, 1989; Lee, 1999). Thus, the selection of the qualitative approach allows the ability to examine the influences of SIT, PCT, and EE on potential intentions to leave the organization as well as the IT profession.

The formation of the study's nineteen interview questions includes a detailed literature review on SIT, PCT, and EE from an IT perspective. The participant selection process involved a purposive sampling methodology, which requires selecting individuals based on specific criteria related to the phenomenon being studied (Creswell, 2013; Miles & Huberman, 1994). The sampling criteria stipulate that candidates (1) be currently working in or have previously worked in the IT field and (2) have at least five years of IT experience. Previous research suggests that long-term employment increases the possibility of PCB and PCV exposure (Ng, Feldman, & Lam, 2010; Robinson & Morrison, 2000).

Data Collection

In all, twenty-four IT professionals participated in the in-depth interviews. Table 1 below presents the descriptive statistics.

Table 1. Descriptive Statistics of Interviewees

Category	Item	#Participants	Tenure
Gender	Male	18	22
	Female	6	25
Role	Upper Management	11	30
	Middle Management	8	19
	Graduate Student	2	22
	Academician	1	17
	IT Worker	2	10.5

Table 1. Descriptive Statistics of Interviewees continued

Age Range	20–30	1	8
	31–40	2	15
	41–50	6	15
	51–60	8	25
	61–70	1	36
Industry	Academic	7	29
	Convenience Store	5	24
	Entrepreneur/Outsourcing	1	15
	Investment	1	35
	Materials Handling	1	26
	Military	1	8
	Petroleum	5	19
	Supply Chain	3	22

The interview method involved semi-structured and open-ended questions with each session lasting between 20–45 minutes. The average interview lasted approximately 31 minutes, which was governed by the participant's availability, company permission, and work schedule. The author strictly adhered to the interview time limit and was able to complete each interview within the allotted timeframe. The verbatim transcripts ranged from 7–18 pages.

Constructing the interview questionnaire (c.f. Appendix A) involved an extensive literature review centering on psychological contract, identity theory, and IT workers. Participants discussed their organizational experience as an IT worker. Work relationship deterioration was examined by providing supporting participant excerpts as they reflected on negative aspects of their career.

Data Analysis

Template analysis is used to build the appropriate qualitative taxonomy; it is one of several qualitative coding techniques where textual data (interviews) are examined, and thematic codes are created (Brooks & King, 2012). It is flexible in that *a priori* codes can be generated as an initial guidepost for subsequent analysis (Brooks & King, 2012). Each thematic code is associated with a particular unique attribute and serves as a hierarchical identifier for similar occurrences (Miles & Huberman, 1994). Subsequent interview analysis involved a constant comparative process serving as the method for creating, refining, and removing codes. The study employed NVivo (QSR International, Burlington, MA), a software application designed to analyze qualitative data and to promote collaborative teamwork (Bourdon, 2002).

A coding scheme was initiated by the author, who conducted all of the interviews and constructed a preliminary list of coding categories based on a review of the literature. The *a priori* codes were sent to two additional researchers. The code base was refined through a process of deliberation and agreement leading to a parsimonious taxonomy. After agreeing on the coding method and thematic taxonomy, the remaining uncoded interviews were distributed amongst the team to complete the coding process.

FINDINGS

Thematic Categories

In all, eight themes were generated from eleven interview transcripts (c.f. Table 2). This discussion will focus only on the four salient themes that were highly referenced by the interviewees and that closely aligned with the theoretical foundations of SIT, PCT, and EE (See Table 2).

Table 2. Salient Themes

Concept Label	Description	Example
Attitude	The perceived emotional disposition of a non-IT user when dealing with technology.	I can't get this to do so and so, and I'm frustrated, and I've finally reached the end of my rope, so I'm calling you and, number one I'm going to yell at you for a little while because it doesn't work, and then I expect you to come fix it. And then I also expect you to calm me down
Relationships-Non-IT	The perceived productive or non-productive interactions between IT professionals and non-IT users.	They call me…they call the analysts, they don't have such a good relationship with them as they have with me
Relationships-IT	The perception that an IT professional's knowledge, expertise, and recommendations are being ignored or overridden.	
Incompetence non-IT/ Technical Disconnect	The perceived inability of non-IT users to understand and effectively work with technology.	(1) Because you will get the **stupid** user (2) You know you did something, but they won't tell you. So, you go "OK, let's play this game," about an hour and a half in the process, you're like "oh, we did this." "Yeah, you did"

Psychological Contract (PC)

A current survey on what IT workers consider essential include fair compensation, enjoyable work environment, career advancement, access to training, and challenging work (Computerworld, 2016). Further, Information Week (2017) found that free food, paid maternity and paternity leave, flexible paid time off, flex perks, flexible scheduling, remote work, career development opportunities, supportive culture, competitive salaries, and excellent benefits were considered essential expectations among IT workers (Harvey, 2017). Similarly, we examined what our respondents expected of the IT profession. Several of the interviewees mentioned a variety of salient elements that included pay, rewards, achievement, and promotion. The first set of excerpts provides evidence of the expectation that working for an organization as an IT professional would pay well. It is possible that the IT trade journals of the time helped to bolster salary expectations (Computerworld, 1984; Johnson, 1983; PC Magazine, 1998):

> "There's a lot of people that go into college in the IS field and think, and I was guilty of it too, you're gonna make six figures walking out the door on your first job." *(Dir. of IT-Convenience Store Co. A).*

> "The only thing I would say right now is I feel as if I'm, compared to other IT people, probably slightly underpaid." *(IT Dir.-Convenience Store Co. B).*

> "I rationalized that that was maybe going to be my next step, and that would be the big pay increase that I was waiting for and kind of the next step forward." *(IT Procurement Mgr.-Supply Chain).*

Secondly, while salary is typically an axiomatic extrinsic expectation, some participants expressed that both extrinsic and intrinsic rewards were significant for self-efficacy and job satisfaction. Some participants expanded on the unique and satisfying aspects of serving users and customers. The following excerpts exemplify rewards and the potential indirect impact they had on the work relationship:

> "I've always been a high achiever, and I felt like that if I performed to the best of my abilities I'd be recognized and rewarded for that." *(V.P. of IT - Academic).*

> "I do my job because I like to hear somebody say, 'You've done a good job.'" *(Dir.-Petroleum Co. B).*

> "…what I ended up finding out is that it was a level of hard work that was the greater guarantee of satisfaction in the work that you did. But, you looked out over the horizon for things that you accomplished thinking that you would get rewarded." *(Doctoral Student A - Academic).*

Finally, some participants considered job promotion necessary and indicated it was part of their career intent. What is evident in the following responses are the precursors to diminished organizational commitment. The organization's failure to reciprocate job promotions resulted in deleterious outcomes:

> "If I felt, I was ready for the next level of responsibility…and couldn't get what I thought I was ready for when I was there, I would leave and go find another job." *(CIO-Convenience Store Company D).*

> "…the promises that were made to the people who had all this IBM experience were such that 'if you stay, we'll teach you their operating system, their database management system, their programming languages…we'll move you up into management and you guys can be managers of the new world.'" *(CIO-Convenience Store Company A).*

To gain a better understanding of what IT workers felt were essential aspects of their career we asked our participants to identify the advantages of the IT profession (question 11 in the interview protocol). Table 3 below presents the result of this question.

Table 3. *Advantages of the IT Profession*

Term	Respondent (n=19)	%
Change	1,2,6,8,9,13,19	29%
Growth/Challenge	6,12,16,19,22	21%
Variety	2, 3,5,11,13	21%
Helping others	2,4,14,22	17%
Opportunity	5,15,19,22	17%
Value-adding	1,4,7,22	17%
Flexibility	2,3	8%
Pay	6,19	8%
Social Interaction	2	8%
Good peers	22	4%
Job security	4	4%
Reward	18	4%

While salary, promotion, and reward are somewhat typical in some industries, items such as helping others, change, growth, variety are equally if not more critical profession expectations than the former. In sum, research has operationalized the PC to contain a distinct set of dimensions such as pay, promotion, and opportunity (Riemenschneider & Armstrong, 2012). However, Conway and Briner (2005), and Freese and Schalk (2008)

suggest that more research is necessary to assess additional elements of the PC since no agreed upon measuring scheme currently exists. While the importance of PC is unique and subjective, a missed expectation can result in multiple behavioral outcomes.

Psychological Contract Breach and Psychological Contract Violation

In PCT, two concepts address the disequilibrium between expectations and fulfillment PCB and PCV. PCB is the awareness that one or more expectations were not reciprocated (Robinson & Morrison, 2000). Depending on the missed expectation and its importance, multiple behavioral outcomes are possible. Research suggests that PCB is associated with adverse outcomes such as turnover intention (Clinton & Guest, 2014; Zhao, Wayne, Glibkowski, & Bravo, 2007). The following excerpts exhibit issues with job opportunity, stress, and job promotion as inhibitors:

> "Some disappointment in that, hearing how IT is a great field, and there are job opportunities here and there and being stuck in a position I was not happy with." *(Manager-Supply Chain Co. A).*

Second, some participants discovered that heavy workloads and stressful situations were common in IT and underestimated the realities of the IT profession:

> "…lots of late evenings and early mornings." (*IT Dir.-Petroleum Co. B).*

Third, some participants recalled that a lack of promotions breached their mental contract from an organizational and professional perspective. In one case, Alex considered himself an IT expert and a high performer ready for advancement, and he eagerly applied for a software developer position which management ultimately failed to reciprocate:

> "And let's say four weeks came, to the day, and I walked into the guy's office and said, 'Am I going to be a developer on Monday?' And he said, 'Well I don't have a replacement.'" *(Alex-CIO/COO-Investment Co. A)*

Further, women IT professionals experience difficulties advancing in IT (Quesenberry & Trauth, 2012; Reid, Allen, Armstrong, & Riemenschneider, 2010; Trauth, 2012). Women IT professionals often have to be direct in their intentions or risk exclusion:

> "Women had to really kind of put their foot down or inject themselves into something. Even to get promoted myself — my very first promotion, I was seeing peers now I had worked with for several years; now it's people that hadn't been there as long as I have. Supervisory opportunities were opening up all the time, and they were getting promoted to supervisor, and I was not."*(Finance/IT-Petroleum Co. C).*

Finally, similar to Alex's case, Kevin, an IT procurement director, stated that his goal was to excel in IT and then management. He perceived his performance to be appropriate for his escalation to management. However, management responded incongruently with Kevin's expectation:

> "I need you to do this because you're not doing a good enough job at it." *(Network Procurement Dir.-Supply Chain Co. A).*

> "And you think, my Lord, I'm doing an incredible job, and I'm going above and beyond." *(Network Procurement Dir.-Supply Chain Co. A).*

Psychological Contract Violation (PCV) is markedly different from PCB such that missed salient promises generate a *significant* negative behavioral response (Morrison & Robinson, 1997). Participants were asked to recall situations that influenced PCV. Common amongst some respondents were user perception, workload, and job promotion failures. First, the failed implementation of a cross-departmental project resulted in adverse reactions from the user base. Specifically, IT received the blame for the project's failure:

"A lot of it got pushed on us, and it was pretty negative on myself and on the team ...I think we're trying to push harder back…they'll just throw it back to IT and say 'well you guys should know it was going to affect invoicing this way too'" *(IT Dir.-Convenience Store Co. C).*

Second, nonstandard hours and constant user needs are standard IT responsibilities. Based on the organization's requirement for business availability and the necessity of IT workers to maintain updated systems, a typical workday extends into overtime and weekend work. When posing the question of psychological contract breaches and violations, many respondents recalled times where workloads and overtime hours were commonplace:

"I work 8:00 to 5:00 Monday through Friday, quote, unquote, but yet Saturday, Sunday; it's just like another work day some weeks. I think that's probably the single biggest violation that I see." *(IT Dir.-Convenience Store Co. B).*

"Lots of frustration, lots of late evenings and early mornings; a great deal of feeling completely overwhelmed at what was going on." *(IT Dir.-Petroleum Co. B).*

"It's 'I'm down. I need you to fix it right now.' So then, you have to drop everything you're doing. Then there's people counting on you. There's a lot of pressure involved. And, if you can't get it done, they're just breathing down your neck, so that gets very frustrating." *(Secretary/Treasurer-Petroleum Co. D).*

"I call it a violation because, at times, you just don't want to deal with it. You don't want to hear about somebody's problem at 3:00 in the morning, whether it's a legitimate problem or something that's silly they're calling you about." *(IT Dir.-Convenience Store Co. B).*

In a final example, Pat, a CIO in a convenience store organization, mentioned aspirations of advancing his career through job promotion. Pat reflected on an incident where he and several co-workers engaged with management to become proficient in a complex set of applications. In exchange, they were promised a promotion into management. However, Pat perceived that management reneged on their promise, which resulted in a highly emotional outcome and escalated to turnover:

"We were deemed not valuable…we all decided to leave at the same time." *(Pat-CIO-Convenience Store Co. D).*

PCB and PCV address situations that involve missed expectations and the associated behavioral outcomes to such a condition. These findings provide examples of the types of situations that catalyzed associated behavioral outcomes. Respondents tended to respond to PCB and PCV events emotionally. However, references to PCV were somewhat sparse. Similar to additional analysis on PCB, we examined the items that our respondents felt were disadvantages to working in the IT profession. Table 4 below presents the results the prominent disadvantages.

Table 4. *Summary of the Disadvantages of IT*

Term	Respondent (n=19)	%
IT Culture Conflict	1,11,14, 15,16	17%
Non-standard hours	2,13,21	13%
Work-life conflict	3,5,21	13%
Training/skill update	19,20,21	13%
Service-Oriented	2,5	8%
Resource constrained	6,18	8%
Stress	22,23	8%
Third-Party Dependency	4	4%
Regulations	20	4%

In situations of a PCV, the associated outcome was significantly more emotional. Situations that elicit negative emotional responses can influence commitment, job satisfaction, disengagement, and turnover intention (Cho, Rutherford, Friend, Hamwi, & Park, 2017; Ghapanchi & Aurum, 2011). Continual exposure to emotionally charged situations can lead to job and career disengagement.

One of the more prominent codes in the research findings was *Emotional Exhaustion* (EE). EE exists mainly in perceptions of peers and out-group members (users and management). To gain a deeper understanding, responses are categorized into in- and out-groups. The in-group consists of IT workers and members of the out-group include non-IT members, individually, management and users.

The respondents (In-group) appeared to identify strongly with the IT profession via their role, experience, and role. Some participants maintained negative perceptions of their management. Most were in IT leadership positions; however, their recollections of unproductive interactions involved both individuals in and out of their group. The following sections examine the perceptions IT workers had of their management.

Many participants recalled that the relationship with the administration was poor. Example terms used to describe IT and management interactions included approbation, opposition, and subjugation. The following five excerpts provide support for a perceptual division between IT and management and further identify management as the centerpiece of the problem:

> "When you have that emotional feeling that you're not being ... respected, or you're not being evaluated appropriately at work … it really is a slippery slope into a self-fulfilling prophecy because you begin to not work as hard because you feel like you're not being reciprocated." *(IT Procurement Mgr.-Supply Chain)*.

> "I expected at the end of the year I would get promoted. At the end of the year, the CIO brought in a ... consultant … who got the promotion to manager…. We were deemed not valuable. And so we all decided to leave at the same time ... we got screwed." *(CIO-Convenience Store Company)*.

> "IT is not understood and rather than using IT as a more strategic partner ... one hundred percent necessary in today's business environment, it's viewed as something that is just a cog in the wheel that, you know if I don't like it I can replace it." *(Dir. IT-IT Outsourcing)*.

From a social identity perspective, our respondents understood their role and responsibilities. They perceived that management is less aware of the technical specificities required to perform their job. The IT and management group include an element of differentness such that each group judges the other on multiple attributes (Tajfel, 1978). Additionally, management was perceived as vastly unequal to the IT group and created a barrier to productive interaction. Further, the perception that IT is a cost center, overhead, and service-oriented continues to be prevalent. It is possible that political divisions can weaken the IT and organizational relationship.

Some respondents perceived that their role and identity as an IT worker were challenged in multiple areas. The following excerpts present situations between the in-group and out-group that potentially reduce organizational effectiveness:

> "Being called 'the computer guy,' I think it's not being respectful; I spent 33 years with that name on my back, and I hate it." *(IT Dir.-Convenience Store Co. E)*.

> "…there are times when you think, 'Why won't they listen to me? Why did they do this? This is just so frustrating,' and it makes you not want to come to work." *(VP Client Services-University A)*.

> "I am trying to be the positive person, who is moving things forward, but I am still viewed as, 'oh, you're one of those guys who has been draining us for years.'"*(Database Administrator-Materials Handling Company)*.

> "They'll come back and say, 'what's going on?' We say we don't control that, you know, but the first thing is it's an IT problem." *(IT Dir.-Convenience Store Co. C).*

> "People are impatient, everybody is impatient, and technology is — everybody wants it, wants it to work right now, and everybody needs it." *(VP IT-University A).*

> "The users … always lie. Why do people lie over and over? They lie when I say what happened? They tell you 'nothing.' 'Come on, don't tell me that nothing happened.' They don't want to tell you that they unplugged the cable." *(IT Dir.-Convenience Store Co. E).*

Similar to the management out-group, IT has an obligation to support its user-base. IT workers maintain the skills to resolve problematic technical situations and thus are in high and constant demand (Robey, Smith, & Vijayasarathy, 1993). IT is perceived as a necessity; however, IT is often the scapegoat when IT projects and services fail (Runge, 2009). Many of the interviewees consistently referred to out-group members as 'they' when recalling unproductive situations.

The findings suggest that the interviewees experienced strained relationships with their peers in situations such as communication, unethical behavior, and goal divergence. In the first example, a respondent recalled spending a significant amount of time and effort completing his portion of an application development project only for it to be ignored by others in his team. After sending the results to his team, it appeared to generate little interest. After a significant amount of time passed with no communication from the team, the respondent became frustrated with the team:

> "Nobody listened to me for weeks, nobody read the change documentation, and I got all kinds of calls all throughout the next day of what is going on, why was this changed, so forth and so forth? I am like, I have the email chain and everything, so there was a lot of anger at that point … everything just went to deaf ears." *(Manager-Supply Chain Co. A).*

In the second example, a communication failure appeared when an IT worker was perceived to have circumvented the change control process. This change created confusion among the user community that precipitated management intervention:

> "When someone within IT makes a change and doesn't communicate that change, and…you can't figure out why we have this problem." *(VP Client Services-University A).*

The next example shows the importance of a software release. Software organizations have the responsibility to ensure that the software release process has addressed the agreed upon enhancements and bug fixes. However, one participant recalled an event where a fellow teammate circumvented the software release process. Facing deadlines and without a quality product, a co-worker decided to release the software in its present form. According to the participant, she became frustrated that the product was released without being thoroughly tested. She attempted to delay the release only to be overruled:

> "I was a little disappointed … because he said that it was ready for release when it wasn't. Because if it wouldn't have been ready for release, he would have gotten in trouble, people wouldn't have gotten their bonuses."*(Instructor/software consultant-University C).*

A final example involved goal divergence. One participant understood his role, and that of the team was to build quality solutions and exhibit a hard work ethic. During the interview, he mentioned that not all of his teammates had the same goal:

> "I get quite disappointed when not everyone is of like mind where we have things to do; we need to do them, we're all professionals here, and it tends to slip because some folks get into it for different reasons." *(Manager-Supply Chain Co. A).*

DISCUSSION

The primary goal of this study was to address calls for more research into IT worker retention and turnover (Ahuja et al., 2007; Coombs, 2009; Ghapanchi & Aurum, 2011; Moore, 2000; Moore & Burke, 2002, Riemenschneider & Armstrong, 2012). Research continues to highlight a perceived shortfall of skilled IT workers and the influence that IT turnover and retention has on the IT profession. This study addresses this gap by providing empirical evidence suggesting the IT professional and organizational relationship occurs through reciprocation. The in-depth investigatory process focused on what IT workers expected and received (or did not receive) from the profession. Similar to most professionals, the respondents cited expectations of salary, challenge, and promotion. However, indirect elements such as challenge, social interaction, value, and constant technological change were among the many reciprocations some felt the IT profession offered. It is possible that the elements the respondents believed were advantages of the IT profession could act as surrogates to the PC. Moreover, Conway, and Briner (2005), and Freese and Schalk (2008) suggest that an agreed upon "list" of PC items does not exist and this study begins to provide such a list.

Second, several events marked PCB and PCV conditions like limited job opportunities, stress, blocked job advancement, job promotion, work overload, and perceived role minimization. These events appeared to generate a broad range of emotional outcomes. It is important to note that it is probable that employees in other professions suffer these same conditions. However, the interviewees based their responses on the importance of their role as both individuals and the organization:

> "I'm in a career field that is constantly revolving around change." (*Military/Graduate Student).*

> "We work in an industry where every time you turn around there's the next new thing." *(CIO-Convenience Store Co. D).*

> "We are a valuable tool to the company and have been able to help the company grow" *(Systems Dir.-Supply Chain Co. A).*

> "I like the fact that it's never going to be the same." *(*Network *Procurement Dir.-Supply Chain Co. A).*

The majority of these items relate to the stated PC items including items designated as disadvantages of the IT profession. Third, the findings support a linkage of PCB and PCV conditions to emotional outcomes. The most prominent condition experienced by the interviewees was EE. The frequency of this theme eclipsed all other codes. Emotionally exhaustive events occurred via a mismatch between expectations and reality. In some situations, some felt that non-IT members subjugated their role as IT workers. These conditions appeared during aversive social interactions. For example, some respondents profiled management as inflexible, serendipitous, and aggressive. While IT is critical to organizational performance, its credibility was often called into question. Despite the voluminous research on the consequences of EE coupled with calls for further research on turnover, it continues to be prevalent.

Finally, a common thread in this study is that despite many tense situations that the interviewees faced, none left the IT profession. When posed with questions regarding negative aspects of the IT profession, many had difficulty conceptualizing this situation. A possible explanation may be rooted in job embeddedness and professional identity. First, job embeddedness addresses the fit between the employee and job, the sacrifices involved when considering leaving, and the links employees have with people and activities (Mitchell, Holtom, Sablynski, & Erez, 2001). Extant research suggests IT workers regularly undergo difficult work situations such as work-life conflict, work exhaustion, discrimination, and burnout (Armstrong et al., 2015; Goswami, 2014; Moore, 2000;). From the perspective of the IT profession, the majority of the interviewees maintained positive aspects of the profession despite negative experiences. Second, professional identity refers to the level of affiliation one has for his/her profession (Brooks et al., 2011). Research suggests that the degree of affiliation one has for a profession can influence PCB and PCV. Similarly, the higher the affiliation with the organization, the less concern one has for adverse situations. For example, many interviewees had positive images of their profession and peer group. Most

gravitated to the field because of the learning opportunities, getting to "play" with new technology, and inherent challenges.

The motivation guiding this study involves the potential factors that influence IT workers to consider leaving the profession. Factors like salary, challenge, reward, flexibility, job security, supervisor support, and opportunity are essentially common job expectations. However, emotional exhaustion stemming from interactions with in- and out-groups appears to counter positive expectations respondents had of the IT profession. Moreover, IT workers that highly identify themselves with the IT profession, including those individuals maintaining significant certifications, may feel less organizational commitment when questioning their expertise and credibility. However, the findings suggest that IT professionals, either through job embeddedness or high organizational identification, are committed both to their profession and organization.

CONCLUSIONS

This study widens the operational aspects of the PC by investigating the factors that potentially influence a PCB and PCV with the IT profession. It is possible that IT workers can be relationally attached to their profession (professional identity) in much the same fashion as their organization (organizational identity). A taxonomy of twenty-five potential antecedents emerged, providing support for psychological contract breach and violation. The results show that although missed promises and adverse situations can generate emotional outcomes, the interaction does not imply immediate relationship deterioration.

Measuring the success or failure of reciprocative actions through the PC is complex since no universally accepted definition of what the PC can contain exists (Conway & Briner, 2005). The PC's subjectiveness infers that it can contain many items depending on what its holder believes fits his/her beliefs, values, and goals. It is possible that many individuals underestimate their circumstances thus significantly influencing the interpretation of unexpected events. For example, a common taken-for-granted aspect of employment involves EE situations. Rousseau (1989) and Robinson & Morrison's (2000) research on the outcome of unexpected events provides evidential support to the power of emotional situations providing a catalyst to PCB and PCV outcomes. Further, this situation was intensified by the strained interaction between in- and out-groups.

The study also examines the application of PCT and SIT from the perspective of IT turnover. A key focus was the emotional outcomes of PCB, PCV, and EE. Expectation inequality likely signifies the start of a downward progression of job commitment. Many interviewees perceive management as "outsiders" and management appears to use its position as a way to subjugate IT value. As one IT professional recalls, "They still think we cost too much money" and "we really struggled with getting the business to understand how critical our systems are and the need for having them redundant." While there is much research on the interactional dynamics between management and employees (e.g., supervisor support), it is evident in this research that this barrier continues to exist in the field of IT. The existence of such a barrier may not ever be fully resolved or directly contribute to the IT worker leaving the profession. However, it is possible that the continued friction between these groups can act as an indirect influence to career turnover.

The contributions of this study include several practical implications. The study found no evidence that a single undesired aspect of IT significantly influences one to change professions and thus implies a multidimensional profile. This multidimensional profile includes professional expectancies and realities, and EE situations at the IT professional and, organizational levels. It is possible that some IT workers maintain an inaccurate sense of the realities of their profession such as salary, promotion, and reward expectations. Some interviewees remarked that these expectations were at times vastly incommensurate.

A second implication applies to the IT professional's expectations and the organization's receptivity. When technology works, IT is anonymous. When technology fails, IT is often the scapegoat, and previous track records are quickly forgotten (Glen, 2014). PCT suggests that the contents of the PC are subjective, change over time, and are inaccessible to others (Rousseau, 1995). Therefore, the motivation of organizations to retain their best talent should engage in open communication to identify the needs and condition of the work relationship. However, an IT professional's beliefs, values, and goals are internal. While the organization can control some aspects of the work environment, it is unable to monitor everything.

LIMITATIONS AND FUTURE DIRECTIONS

While the interviewees were seasoned IT professionals, none had left the profession. An obvious remedy to this limitation is for future research to utilize organizational exit interviews, crowdsourcing, and social media (e.g., LinkedIn) to garner potential candidates. A second limitation of the research was the difficulty the interviewees had conceptualizing leaving the IT profession. The majority of their responses tended to focus on the organization.

Future research should investigate the factors that potentially influence IT workers to change careers, and should focus on investigating (1) the IT workers who left the IT profession, (2) the expectations IT workers have of their profession, and (3) the situations that influence turnover.

REFERENCES

1. Ahuja, M. K., McKnight, D. H., Chudoba, K. M., George, J. F., & Kacmar, C. J. (2007). IT Road Warriors: Balancing Work-Family Conflict, Job Autonomy, and Work Overload to Mitigate Turnover Intentions. *MIS Quarterly*, 1-17.

2. Ang, S., & Slaughter, S. (2004). Turnover of Information Technology Professionals: The Effects of Internal Labor Market Strategies. *The DATA BASE for Advances in Information Systems, 35*(3), 11-27.

3. Argyris, C. (1960). *Understanding Organizational Behaviour.* Homewood: Dorsey.

4. Armstrong, D. J., Brooks, N. G., & Riemenschneider, C. K. (2015). Exhaustion from Information System Career Experience: Implications for Turn-Away Intention. *MIS Quarterly, 39*(3), 713-727.

5. Baumeister, R. F., & Leary, M. R. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin, 117*(3), 497-529.

6. Boucher, H. C., & Maslach, C. (2009). Culture and Individuation: The Role of Norms and Seld-Construals. *The Journal of Social Psychology, 149*(6), 677-693.

7. Boudreau, M.-C., & Robey, D. (2005). Enacting Integrated Information Technology: A Human Agency Perspective. *Organization Science, 17*(2), 3-18.

8. Bourdon, S. (2002, 05). *The Integration of Qualitative Data Analysis Software in Research Strategies: Resistances and Possibilities.* Retrieved from Qualitative Research: http://www.qualitative-research.net/index.php/fqs/article/view/850/1847

9. Brooks, J., & King, N. (2012, April 18). Qualitative psychology in the real world: The utility of template analysis. London, England. Retrieved from http://eprints.hud.ac.uk/id/eprint/13656

10. Brooks, N. G., Riemenschneider, C. K., Hardgrave, B. C., & O'Leary-Kelly, A. M. (2011). IT professional identity: needs, perceptions, and belonging. *European Journal of Information Systems, 20*, 87-102.

11. Brown, M. (2017, 04 10). *Dell Technologies Earmarks $416M For Terminations, Pushes Ahead With EMC Cuts.* Retrieved from CRN: http://www.crn.com/news/channel-programs/300084509/dell-technologies-earmarks-416m-for-terminations-pushes-ahead-with-emc-cuts.htm

12. Burke, P. J., & Stets, J. E. (2009). *Identity Theory.* New York, NY: Oxford University Press.

13. Cho, Y.-N., Rutherford, B. N., Friend, S. B., Hamwi, A., & Park, J. (2017). The Role of Emotions on Frontline Employee Turnover Intentions. *Journal of Marketing Theory & Practice, 25*(1), 57-68.

14. Clinton, M. E., & Guest, D. E. (2014). Psychological contract breach and voluntary turnover: Testing a multiple mediation model. *Journal of Occupational and Organizational Psychology, 87*(1), 200-207.

15. Computerworld. (1984, 11 19). DP operations managers lead in salary gains. *Computerworld*, p. 8.

16. Computerworld. (2016, 06 13). *Best Places survey results: What IT workers want, what employers deliver.* Retrieved from Computerworld:

http://www.computerworld.com/article/3079867/bestplaces2016/best-places-by-the-numbers-what-it-workers-want-what-employers-deliver.html

17. Conway, N., & Briner, R. B. (2005). *Understanding psychological contracts at work: A critical evaluation of theory and research.* Oxford: Oxford University Press.

18. Coombs, C. R. (2009). Improving retention strategies for IT professionals working in the public sector. *Information & Management, 46*, 233–240.

19. Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Thousand Oaks, CA: Sage Publications, Inc.

20. Dinger, M., Stepina, L., Thatcher, J. B., Breland, J., & Treadway, D. (2015). Does Professionalism Matter in the IT workforce? An Empirical Examination of IT Professionals. *Journal of the Association of Information Systems, 16*(4), 281-313.

21. Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review, 14*(4), 532-550.

22. Ghapanchi, A. H., & Aurum, A. (2011). Antecedents to IT personnel's intentions to leave: A systematic literature review. *The Journal of Systems and Software, 84*, 238-249.

23. Glen, P. (2014, 5 5). *Paul Glen: Techies and users are in a vicious circle of mistrust*. Retrieved from Computerworld: http://www.computerworld.com/article/2488606/it-management/paul-glen--techies-and-users-are-in-a-vicious-circle-of-mistrust.html

24. Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity.* Englewood Cliffs, CA: Prentice-Hall.

25. Goswami, S. (2014). Work-Life Conflict Among IT Professionals. *Journal of Organizational Behavior, 13*(4), 38-59.

26. Harvey, C. (2017, 08 08). *The 10 'Perks' IT workers Want Most*. Retrieved from InformationWeek: https://www.informationweek.com/strategic-cio/team-building-and-staffing/the-10-perks-it-workers-want-most/d/d-id/1329572?page_number=11

27. Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind.* New York, NY: McGraw-Hill.

28. Igbaria, M., & Baroudi, J. J. (1995). The Impact of Job Performance Evaluations on Career Advancement Prospects: An Examination of Gender Differences in the IS Workplace. *MIS Quarterly, 19*(1), 107-123.

29. Igbaria, M., Parasuraman, S., & Badawy, M. K. (1994). Work Experiences, Job-Involvement, and Quality of Work Life Among Information Systems Personnel. *MIS Quarterly, 18*(2), 175-201.

30. Johnson, B. (1983, 01 31). DP Operations In Good Shape: Afcom Survey. *Computerworld*, pp. 1-2.

31. Joseph, D., Boh, W. F., Ang, S., & Slaughter, S. A. (2012). The Career Paths Less (or More) Traveled: A Sequence Analysis of IT Career Histories, Mobility Patterns, and Career Success. *MIS Quarterly, 36*(2), 427-452.

32. Joseph, D., Ng, K.-Y., Koh, C., & Ang, S. (2007). Turnover of Information Technology Professionals: A Narrative Review, Meta-Analytic Structural Equation Modeling, and Model Development. *MIS Quarterly, 31*(3), 547-577.

33. Kaiser, K. (1983). DP Career Paths. *Datamation, 29*(12), 178-188.

34. Kappelman, L., Nguyen, Q., McClean, E., Mauer, C., Johnson, V., Snyder, M., & Torres, R. (2017). The 2016 SIM IT Issues and Trends Study. *MIS Quarterly Executive, 16*(1), 47-80.

35. Kotter, J. P. (1973). The Psychological Contract: Managing the Joining-Up Process. *California Management Review, 15*(3), 91-99.

36. Kwon, K., & Rupp, D. E. (2013). High-performer turnover and firm performance: The moderating role of human capital investment and firm reputation. *Journal of Organizational Behavior, 34*(1), 129-150.

37. LATimes. (2017, 06 8). *Verizon expected to cut 2,100 jobs at Yahoo and AOL after merger closes*. Retrieved from Los Angeles Times: http://www.latimes.com/business/technology/la-fi-tn-yahoo-verizon-jobs-20170608-story.html

38. Lee, A. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *MIS Quarterly, 23*(1), 67-94.

39. Leidner, D. E., & Kayworth, T. (2006). A Review of Culture in Information Systems Research: Towards a Theory of IT-Culture Conflict. *MIS Quarterly, 30*(2), 357-399.

40. Mael, F. A., & Tetrick, L. E. (1992). Identifying Organizational Identification. *Educational and Psychological Measurement, 52*(4), 813-824.

41. March, J., & Simon, H. (1958). *Organizations.* New York, NY: Wiley.

42. Maslach, C., & Jackson, S. E. (1986). *Maslach burnout inventory manual.* Palo Alto, CA: Consulting Psychologists Press.

43. Menninger, K. (1963). *Theory of psychoanalytic technique.* New York: Basic Books.

44. Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis.* Thousand Oaks: Sage Publications, Inc.

45. Mills, C. (2017, 06 21). *Report: T-Mobile and Sprint are finalizing plans for a merger*. Retrieved from BGR: http://bgr.com/2017/06/21/tmobile-sprint-merger-reports-2017/

46. Mitchell, T. R., Holtom, B. C., Sablynski, C. J., & Erez, M. (2001). Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *Academy of Management Review, 44*(6), 1102-1122.

47. Moore, J. E. (2000). One Road to Turnover: an Examination of Work Exhaustion in Technology Professionals. *MIS Quarterly*, 141-168.

48. Moore, J. E., & Burke, L. A. (2002). How to turn around 'turnover culture' in IT. *Communications of the ACM, 45*(2), 73-78.

49. Morrison, E. W., & Robinson, S. L. (1997). When Employees Feel Betrayed: A Model of How Psychological Contract Violation Develops. *Academy of Management Review*, 226-256.

50. Morrow, P. C., & Wirth, R. E. (1989). Work commitment among salaried professionals. *Journal of Vocational Behavior, 40-56*, 40-56.

51. Ng, T. W., Feldman, D. C., & Lam, S. S. (2010). Psychological contract breaches, organizational commitment, and innovation-related behaviors: A latent growth modeling approach. *Journal of Applied Psychology, 95*(4), 744-751.

52. Payne, S. C., Culbertson, S. S., Lopez, Y. P., Boswell, W. R., & Barger, E. J. (2014). Contract breach as a trigger for adjustment to the psychological contract during the first year of employment. *Journal of Occupational and Organizational Psychology, 88*, 41-60.

53. PC Magazine. (1998, 03 24). High-Tech Salary Surge. *PC Magazine*, p. 10.

54. Ping-Ju Wu, S., Straub, D. W., & Liang, T.-P. (2015). How Information Technology Governance Mechanisms and Strategic Alignment Influence Organizational Performance: Insights from a Matched Survey of Business and IT Managers. *MIS Quarterly, 39*(2), 497-A7.

55. Quesenberry, J. L., & Trauth, E. M. (2012). The (dis)placement of Women in the IT Workforce: An Investigation of Individual Career Values and Organisational Interventions. *Information Systems Journal, 22*(6), 457-473.

56. Reid, M. F., Allen, M. W., Armstrong, D. J., & Riemenschneider, C. K. (2010). Perspectives on challenges facing women in IS: the cognitive gender gap. *European Journal of Information Systems, 19*(5), 526-539.

57. Riemenschneider, C. K., & Armstrong, D. J. (2012). What Influences IT Professional Psychological Contract Violation? *2012 45th Hawaii International Conference on System Science (HICSS)* (p. 10). Grand Wailea: Hawaii International Conference on System Science (HICSS).

58. Robey, D., Smith, L., & Vijayasarathy, L. (1993). Perceptions of conflict and success in information systems development projects. *Journal of Management Information Systems, 10*(1), 129-139.

59. Robinson, S. L., & Morrison, E. W. (2000). The Development of Psychological Contract Breach and Violation: A Longitudinal Study. *Journal of Organizational Behavior, 21*(5), 525-546.

60. Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior, 15*(3), 245-259.

61. Rousseau, D. M. (1995). *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements.* Thousand Oaks: Sage Publications, Inc.

62. Runge, S. (2009, 10 15). *The Art of Scapegoating in IT Projects*. Retrieved from The Project Management Hut: http://www.pmhut.com/the-art-of-scapegoating-in-it-projects

63. Rutner, P. S., Hardgrave, B. C., & McKnight, D. H. (2008). Emotional Dissonance and the Information Technology Professional. *MIS Quarterly, 32*(3), 635-652.

64. Rutner, P. S., Riemenschneider, C., O'Leary-Kelly, A., & Hardgrave, B. (2011). Work Exhaustion in Information Technology Professionals: The Impact of Emotion Labor. *The DATA BASE for Advances in Information Systems, 42*(1), 102-120.

65. Schein, E. H. (1980). *Organization Psychology.* Englewood Cliffs: Prentice-Hall.

66. Shropshire, J., & Kadlec, C. (2012). I'm Leaving the IT Field: the Impact of Stress, Job Insecurity, and Burnout on IT Professionals. *International Journal of Information and Communication Technology Research, 2*(1), 6-16.

67. Tajfel, H. (1972). La catégorisation sociale. In S. (. Moscovici, *Introduction à la psychologie sociale* (Vol. 1, pp. 272-302). Larousse, Paris.

68. Tajfel, H. (1978). *Social Identity and Intergroup Relations.* Cambridge: Cambridge University Press.

69. Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel, & W. Austin, *Psychology of Intergroup Relations (2ed)* (pp. 7-24). Chicago: Nelson-Hall.

70. Thibodeau, P. (2016, 04 20). *Feeling angry and betrayed, IT workers mount protest*. Retrieved from Computerworld: http://www.computerworld.com/article/3059460/it-careers/feeling-angry-and-betrayed-it-workers-mount-protest.html

71. Trauth, E. M. (2012). Are There Enough Seats for Women at the IT Table. *ACM Inroads, 3*(4), 49-54.

72. Wallen, J. (2011, 02 25). *10 reasons for Quitting IT*. Retrieved from TechRepublic: http://www.techrepublic.com/blog/10-things/10-reasons-for-quitting-it/

73. Zavalloni, M. (1973). L'Identité psychosociale: Un concept à la recherche d'une science. In M. S. (ed.), *Introduction à la psychologie sociale,* (Vol. 2, pp. 245-263). Larousse, Paris.

74. Zetlin, M. (2017, 05). Is IT Having an Identity Crisis. *Computerworld*, pp. 12-19.

75. Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The Impact of Psychological Contract Breach on Work-Related Outcomes: A Meta-Analysis. *Personnel Psychology, 60*(3), 647-680.

APPENDIX

Interview Instrument

1. Please describe your job title and responsibilities for me.
2. How long have you been doing this job?
3. Over the course of your career, how many companies have you worked for in which you had a position in IT?
4. What were the titles for these other positions?
5. This next question deals with IT as the profession; profession as the defining group of jobs such as application programmer, network administrator, systems administrator, Manager/Director of IT, and chief information officer including any certifications, and training necessary for proficiency. Think back over your career in IT, describe a time when you have felt you have not received everything promised to you, in your profession, in exchange for your contributions.
6. Considering your career in IT, describe a time when you've felt the profession has broken its promises even though you've upheld your side of the deal.
7. Again, considering your career in IT, are there specific times when you've felt that almost all the promises made by your profession have been kept?
8. Can you recall a time where you experienced negative feelings toward your profession? If so, can you describe the event(s)?
9. In this next question, I reference the term 'violation' as meaning something specific you believed your field would provide you but never did. Violation also describes how you felt, specifically upon realizing the field did not offer you what you believed it would offer you. For example, a person interested in acting may believe that doing everything right will bring about money, glamor, and notoriety. What they did not expect is the possibility that they won't make it, they receive minor roles or have little work. Can you recall a time, or times, when you felt that your profession has violated its obligations?
10. Were there any shortcomings in your professional career that were emotionally draining? If so, can you describe the specifics of these events and how you felt?
11. What do you see as the advantages of your participation in your current profession?
12. What do you see as the disadvantages of your participation in your current profession?
13. Are there any groups or people who would approve of your participation in your current profession? Why?
14. Are there any groups or people who would disapprove of your participation in your current profession? Why?
15. Are there any other groups or people who come to mind when you think about your participation in your current profession?
16. Is there anything else you associate with your participation in your current profession?
17. Can you recall a time when your experiences failed to match your expectations? If so, specifically, what were your expectations? What did you experience?
18. Explain the good and not-so-good experiences you've had in each position in your profession?
19. Are there any other experiences you can think of that you would like to share?