IT Professionals and their Psychological contract in the IT Profession

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1. Introduction

The last decade has been unstable for the Information Technology (IT) professional. In the early millennium, an increased demand for ecommerce systems appeared in part because of increased use of information and communication technologies (ICT). The escalating need for IT professionals was a positive event in the IT profession. The consensus for a steady and long lasting injection of IT professionals in the field was perceived as long lasting [1]. However, the dotcom bust and the economic recessions of 2001 and 2007 focused efforts on cost cutting, especially in the IT profession. IT was downsized, economic instability created concern in ICT investors [2], and portions of the IT profession were outsourced; in many respects, the value adding IT professional seemed like a passing fad.

IT professionals are often asked to do more with less [3], do less with less [4], and work in highly complex boundary spanning environments [5]. The first few years of the new millennium saw IT jobs outsourced as a possible reaction to recoup investment losses [1]. In addition, organizations continued to reduce IT overhead by retaining enough staff to control operational costs. A possible side effect of this event reduced the number of previously full time IT personnel [5]. Additionally, such adaptive reactions may be evident by increases in employee resentment and stress, eliciting concerns over job security, pay, and the intrinsic value of the profession [6]. Therefore, stability in the IS profession is somewhat mythical.

Recruiting, retaining, and developing competent IT professionals are important concerns among top management [5]. The turbulent IS profession has seen unfairly treated IT professionals experiencing negative side effects during such common events as mass layoffs and the speed of technology change [3]. As the need for skilled IT professionals increases, recently laid-off IT professionals cautiously approach contractual engagements because of past negative experiences [2].

The purpose of this research is to explore the possible influencers to psychological contract violation (PCV) in the IT profession. We address this issue by introducing a new set of concepts derived from existing psychological contract research [7], [8], [3]. These new constructs are psychological contract with the profession (PCP), psychological contract breach with the profession (PCBP), and psychological contract violation with the profession (PCVP). The intent of our research is three-fold. First, this research seeks to discover previously unexplored factors influencing PCVP experienced by IT professionals as relating to their profession. Second, we create a foundation of sufficient evidence to conduct future quantitative research on the discovered concepts. Finally, this study extends current research by presenting and explicating PCVP by focusing on the IT professionals' experiences with their profession. This focus is in opposition to the traditional analysis of the employee/employer relationship. Thus, our study contributes to psychological contract research by extending psychological contract (PC) theory beyond the traditional employee/organization dyad to an introspective condition placing the burden of PC success or failure with the IT professional [3], [9], [10], [11], [12].

2. Literature Review

The ABI/Inform and EBSCOhost databases served as our major resource to identify relevant articles for this study. The IS field has benefited from PC research in topics such as business/IT alignment [13], user resistance in enterprise system implementations [14], and open sourcing [15]. We narrowed our view to the conceptual and empirical articles resulting in four themes of PC, PCB, PCV, and both PCB/PCV. We extracted articles fitting the phenomenon closest to our research. In all, we reviewed 40 articles.

We adopted Rousseau's [16] work on psychological contract theory, extending the model to address the IT professional and the IT profession. Our search for PCB and PCV studies in this context



presented a gap in literature providing justification that our research is unique warranting closer inspection.

The following sections present each theory, and its subcomponents, including specific instances of PCB and PCV. We also draw on and define Affective Events Theory (AET), justifying its appropriateness for this study.

2.1 Psychological Contract Theory

A psychological contract exists as a perceptual and subjective internalization of promises and their reciprocation between two or more agents [7], [16], [17], [18]. First, a PC is perceptual in that agents may have different views of the contract [16]. For example, in a job recruitment event, an organization and potential employee discuss benefits such as job security, job opportunities, prestige, and other advantages, in exchange for hard work and dedicated service. Each agent potentially interprets the discussion differently. The employee may expect immediate reciprocation; the organization may expect five or more years of tenure before reciprocation, such as promotion. Second, subjectivity involves an ontological construction of expectations within each of the agents and is thus, largely inaccessible and susceptible to synchronicity issues [19]. Without complete access to an agent's psychological contract, reciprocation failure is inevitable. Some PC's can contain thousands of items, with only a discrete set being accessible at any one time [20], making reciprocation even more difficult. Finally, two or more agents highlight a relational element such that an agent internalizes a set of promises owed to him from a second agent in return for his effort and commitment. A reciprocation failure can deteriorate the relationship, diminishing agent effort and commitment.

Psychological contract theory exists in several situations such as periods of economic turmoil where downsizing [21], restructuring, and organizational survival are critical. These situations can create survivor's guilt, anxiousness, and degraded performance [22]. PC theory also appears to receive more attention in practitioner and academic fields [7], [3], [19]. In practitioner situations, the PC may be broken to service a greater need, such as organizational survival. We address unmet promises in the next section.

2.2 Psychological Contract Breach

The psychological contract breach is a complex cognitive and subjective phenomenon whereby an individual is *aware* of unmet promises [8]. The complexity of PCB is quantifying unmet promises and their salience to the individual [8]. Extant research suggests the reduction of employee performance, trust, satisfaction, and organizational commitment [8] emerging from PCB. In addition, significant breaches can be associated with feelings of betrayal and injustice [23].

A perceived missed promise can appear as reneging or an inadvertent failure to uphold obligations. Reneging is a purposeful failing to reciprocate obligations whereas unavoidable circumstances such as a poor performing organization or an economic downturn, inadvertently squelches reciprocation of promises [23]. Incongruence is a divergence of internally kept promises and their salience between the employee and organization, and vice versa [23]. A key cognitive process in a breach is the mental assessment of the event. Since employees are most likely to assume that a promise was reneged [16], [10], an important issue for researchers and practitioners is enabling employees and managers to recognize the appearance of PCB as incongruence. This awareness potentially changes their interpretation of the breach. Communication is important to explain the details of the event.

In the next section, we examine the outcome of missed promises as the input to the succeeding construct, psychological contract violation.

2.3 Psychological Contract Violation

A psychological contract violation occurs when an established agreement, promise, or other consensual reciprocation is unrealized, eliciting mechanisms ranging from strong overt and negative emotions to unobserved repercussions (loss of trust). A PCV may include feelings of anger, distress, injustice, and mistrust arising from the realization that one's organization has failed to fulfill its obligation [8,16], which is conceptually distal from PCB. Extant PCV research addresses negative outcomes of PCB and reduction of job involvement. We found evidence of disparate and incongruent perceptions between workers and their organizations. In a study involving bank managers, perceived reneging or inadvertent missed obligations resulted in employees seeking alternative employment, voicing their discontentment to management, reducing efforts in their roles, and diminishing their loyalty [24]. Similarly, a second instance of PCV investigates how job involvement complicates or mitigates the positive relationship between PCV and dysfunctional personal and organizational outcomes such as depressed mood at work and turnover intention [25].

In the next section, we consider affect as an influencer to psychological contract violation and turnover intention.

3. Affective Events Theory

AET is presented as "a focus on the structure, causes, and consequences of affective experiences at work" and additionally "directs attention away from features of the environment and toward events as proximal causes of affective reactions" [26, p. 11]. The establishment of affect event research appeared as an argument to common orientations of job satisfaction as an emotion descriptor [26]. AET suggest that affect and satisfaction are separate entities such that satisfaction exists as a unitary construct and affect encompasses deeper variations of descriptive power [26]. Thus, an individual's feelings about his job are likely a contextual aggregation of emotions and judgments [26] over time. The dimension of time adds a longitudinal component transcending the ephemeral nature of emotions. Research prior to AET did not contain a longitudinal perspective, basing satisfaction on a temporal factor. Present research includes time as an important factor in determining job satisfaction [26]. Specifically, emotions and moods vary on a number of distal influences such as environment and personal disposition (moods, depression). In short, how one feels about his or her job is contextual to the day, week, month, or year. Therefore, the undulating aspect of distal influences can generate different levels of job satisfaction on different days.

Emotion is an outcome of a cognitive assessment on a conscious or subconscious object. Emotion is temporal and fits into a discrete set of categories such as fear (wide eyes, trembling), anger (furrowed brow, frowning, or showing of teeth), joy/happiness (laughter, smiling), and interest [27], [28]. The most subtle nuances of positive and negative emotions build upon the root emotions, measured in degrees of existence. Extant research organized emotions and their salience and included 112 participants. They rated emotional terms on a four-point scale enumerating familiar and unfamiliar groupings. A cluster analysis of 135 emotion descriptors emerged, dividing this list of words related to love, joy, surprise, anger, sadness, and fear [28]. The result of the cluster

analysis exemplifies the varying but direct descriptors of emotion to an overt physical signal.

Affect, however, is a multidimensional and overarching entity to emotional linkage and judgment. It is a situational cognitive assessment at varying levels of job satisfaction. An individual's job satisfaction is more a positive or negative judgment than an ephemeral fluctuation of emotional or moodbased evaluation [26]. Time divides emotions and affect such that affective assessments and outcomes last longer than emotions. Thus, job satisfaction exists in emotion/affect, judgment, proximal influencers, and time. In its initial form, AET "...was intended to provide a roadmap or "macrostructure" to help guide research on emotional experiences at work" [29, p. 15]. We draw from AET since affective events can influence the relationship between individual job satisfaction to turnover intention and actual turnover.

4. Research Model

The proposed research model emerged from the literature review on psychological contract theory [16] and affective events theory [26]. We apply our model by beginning with an event, such as the IT professional experiencing expectation incongruence with their profession. The effected individual processes the incongruence by comparing it to his internal list of expectations. Expectation salience interacts with job satisfaction such that the more significant the expectation, the larger the negative effect [20]. We assert that perceived incongruence on a significant internal expectation is associated with PCB. As a result, the outcome acts as input to PCV where an assessment examines the incongruence to affect/emotion. The type of affect/emotion is a key element in this process such that the more salient an expectation, the higher the degree of negative emotion. Our model, therefore, addresses the following research question: How do IT professionals remain engaged and committed to the IT profession while in the presence of unmet profession expectations, and negative, stressful, and uncertain environments? We examine this phenomenon through the lens of PC and AET theories. We focus on extracting the possible antecedents associated to PCB and PCV.

4.1 IT Psychological contract

A psychological contract in the IT profession (PCP) is defined as an individual's creation of a perceptual and subjective set of promises about the IT

profession. The uniqueness of our research presents psychological contract theory beyond the dyadic relationship by encompassing the IT professional with the IT profession [3]. Absent is the physical organizational-side of the relationship, normally represented by an immediate supervisor, manager, resources manager, vice-president, president. The foundation of the IT professional to IT profession relationship exists as a hermeneutical and ontological intra-relational concept. In contrast to what literature refers to as the responsibility of both the employee and employer to carry out the contract [30], the IT professional is solely responsible for interpreting the nuances and possible promises offered by the profession, including what is realistic. Reciprocation of the IS profession exist primarily from professionals efforts, dedication, commitment (e.g. high pay, opportunity, professional growth).

A psychological contact breach in the IT profession (PCBP) refers to a breach of promises an IT professional has of the profession. Similar to PCB, a failure of the profession to reciprocate held promises is determined by the IT professional.

A psychological contract violation in the IT profession (PCVP) is the perception of missed promises, generating an emotional response to this event. Our use of these new constructs applies specifically to the IT profession.

5. Methodology

5.1 Context and Data Collection

We begin by addressing the phenomenon using the qualitative method. Through the theoretical lenses and their relational and interpersonal dyadic function, our research focuses on the complex and frequent occurrence of PCB and PCV in the IT profession. Based on a recent empirical study examining the antecedents to psychological contract violation within the IT profession [3], our hope is to disentangle potentially unexplained antecedents couched in various ontologies, thus providing a deeper explanation of the phenomenon.

Assessing the phenomenological aspects of PCV in the IT profession required a purposive sampling strategy [31]. We identified and selected appropriate sites and participants, focused criteria, and established a reasonable sample size. Our assumption was that most organizations maintain some form of IT staff. We had access to IT professionals in the convenience store and petroleum industries. Second, we employed criteria-based sampling to narrow our selection to those IT professionals *potentially* experiencing the same phenomenon [31]. Acceptable candidates had five or more years' of IT experience in two or more IT sub-fields. We focused on those participants that fit these criteria because they would most likely have adequate experience and tenure in the profession to have potentially experienced PCB/PCV since these generally develop after spending time in the profession and organization [32].

We generated a participant list using a customer contact database after receiving appropriate permission from the participating firm. Additional firms, outside the customer database, were located and contacted for participants. In all, 333 emails were sent. Interested individuals were contacted using multiple methods, such as email and phone. All organization and participant names in this research are pseudonyms to maintain confidentiality.

Addressing affiliation between the interviewer and participants, 65% were 'strangers' [33], 26% were indirectly affiliated (i.e. some prior contact), and the remaining 9% of participants were directly affiliated (i.e. academic colleagues with significant industry experience). The representation of 'voices' [33] involved gathering different perspectives to achieve triangularity [34], consistency of experience, and reduction of elitist perspectives [35]. Interviews included a variety of questions concerning how IT professionals felt about the IT profession, their positive and negative experiences, and their assessments on their membership in the IT profession. The construction of the semi-structured interviews allowed the interviewer to examine certain responses at a deeper level. The interview duration was set to last 45 minutes to minimize social dissonance. Ensuring confidentiality and anonymity, each participant reviewed and signed a consent form explaining the purpose of the study, the method of data collection, and their rights as a participant. All interviews were recorded, transcribed, and reviewed for completeness.

5.2 Data Analysis

We began our coding process by using the theory base, which focused the coding task. Content analysis satisfies the constant comparative process, supplying instances meeting existent codes and generating new codes. Our purpose was to examine the data for unique instances of the relationship between the IT professional to the IT profession necessary to build a

contextual but comprehensive schema defining the phenomena. Epistemologically, we employ the post-positivistic method of analysis such that there is no singular perspective but rather the application of existent and applicable theories against the many potential ontological *realities* amongst our participants [31].

We analyzed the interview data using open coding [36], organized a three-member research team to both aid in "definitional clarity" [35], and to enforce an unbiased perspective. The goals of the coder group were to establish inter-coder reliability, data validity, and consistency. Similar to [37], the unit of coding was a combination of a word and phrase. Each research member coded the interview with an initial code set as a guide for validation purposes. During the independent coding process, new codes were added, deleted, and refined. The team assembled to discuss the coding task and to debate the schema validity. Once the final taxonomy was in place, each member coded a subset of the remaining interviews.

5.3 Demographic and descriptive Statistics

The table below outlines the interview data by industry.

Table 1 Participant Industries (n=23)

Industry	% of Respondents
Convenience store	29%
Supply Chain	13%
Petroleum	13%
Industry	13%
Academic	13%
Software	4%
Military	4%
Investment	4%
Entrepreneur	4%
Contract	4%

5.4 Qualitative Taxonomy

Our analysis of the interview data produced 27 unique categories. The establishment of the potential antecedents involved a process of examining the outcome of our qualitative process and focusing on the number of references for each category. We sorted the categories and observed the top eight categories most referenced, in both unique interviews and actual references of the condition. Although some interviews had multiple references to a category, only the most relevant were retained. Due to space limitations, we

begin by examining two of the possible antecedents: learning opportunities and interpersonal relationships.

5.5 Learning Opportunities

Learning opportunities present a way to learn new skills by attending professional or academic education events. It also presents an avenue for professional growth. There are positive and negative forms of learning opportunities found in our analysis. A positive learning opportunity, for example, can be new certifications, new technologies, or the ability to become involved in the development of a new technology project. Conversely, a negative learning opportunity may be the constant upgrading of technical knowledge and skills. About 17% of the interviewees indicate the quick change of technology is unreasonably frequent. Keeping up with new technologies can appear burdensome, as in the following example.

"Oh, man I just learned this, and now I have to learn something else." Interview 19

However, the majority of responses in this category were largely positive. Typical responses listed challenge and learning as a benefit of the profession.

"It doesn't matter that I'm getting old. I still want to learn. It's not the money I crave. It's challenge." Interview 9

From these and additional findings in our analysis, learning opportunities could explain why IT professionals remain in the field. The absence of learning opportunities could trigger PCBP. Several comments from our participants with accountancy and manufacturing experience indicated IT is a more ideal because of the rate of change.

Our analysis suggests learning opportunities resonate differently among the IT professionals. Some participants see learning situations as a negative outcome of the profession, choosing to fixate on the fields less appealing aspects. However, the majority of interviewees considered change and challenge as positive attributes.

5.6 Interpersonal Relationships

We define interpersonal relationship (IR) as the positive or negative social interaction between two or more parties. We apply this definition to IT professionals and their users. We consider IR as a critical IT job element because of the frequent and dynamic aspects of communications, to include individual personalities [38]. A main function of an IT

professional is to ensure accessibility and functioning of systems for their users. Users are dependent, largely, on the responsiveness and skillset of the IT professional. In a system crisis, both are involved, socially, in troubleshooting. Some interactions can be tense because of a perceived time crunch and/or user emotional state. Interpersonal relationships are therefore an important dimension to the IT profession. In the following instance, an IT professional maintains a mental image of a particular set of *difficult* users.

"...there are times, particularly when you are dealing with faculty members that they are unreasonable...." Interview 22

Some users present themselves as over demanding, pushy, discontent, and abrasive. Therefore, the *right* support method is critical to maintaining positive relationships.

Users often perceive IT as a utility (i.e. always 'on'). An outage of any digital equipment residing between services and users falls into the purview of technologists. The unfortunate reality is that in some circumstances, an outage may be beyond IT control, such as a Wide Area Network (WAN) outage. Although the interaction between the WAN provider and IT proceeds, users are unable to get to their services and are therefore typically frustrated that the utility is unavailable as represented by the following quotes.

"...generally it comes back to IT because everything is supposed to work..." Interview 23 "...if everything's running fine you're doing a

good job, but if everything's broken it's your fault." Interview 13

"...people are impatient, everybody is impatient, and technology is – everybody wants it, wants it to work right now". Interview 22

Some IT professionals describe the user experience as genuinely positive; a chance to meet new people, as in the following quote.

"So then you get to meet those folks and kind of see what's going on, on the front lines and kind of learn what their life is like." Interview 2

Our analysis found support for positive, 26%, and negative, 35%, interpersonal relationships with IT professionals and users. Some interviews addressed IR experiences in a more neutral manner, not referring to any specific interactions between people and were not included in this analysis. However, what is common in most interviews is the importance of communication.

"...honestly, communication is probably the biggest reason that some people don't succeed in this field..." Interview 22

The next section addresses psychological contract breach in the IT profession based on the coded interview data.

5.7 IT Psychological Contract Breach

Recall that PCBP is a cognitive assessment of an external stimulus, in the IT profession, such that one's expectations are misaligned, forcing a cognitive assessment of the event. Assessments are a sense making process comparing an event or stimulus against an internally stored expected outcome. Expectant outcomes exist in an individual's ontology, beliefs, values, desires, and experience. Ontologically, comparison of reality (an unmet promise) against previous experience and the ideal situation commences. Events that counter embedded formation of expectancies can trigger a cognitive assessment potentially triggering perturbations against the mental formulation of the event.

The emergence of PCBP appeared in 38% of the interviews. Two prominent experiences, expectation of rewards and expectation incongruence, resided in the perceived reciprocation in exchange for commitment. We uncovered PCBP between an IT professional and management. The following quote exists here as one of many instances as the interviewee repeatedly mentioned several instances of PCBP in relation to perceived work effort. Perception management's ambivalence toward the participant position creates a negative perturbation. The absence of what the individual deemed worthy promotions led to a negative response from management to the interviewee.

"I need you to do [your current job] because you're not doing a good enough job at it." Interview 6

In the above situation, the interviewee believes he is performing his duties well. He also believes he is justified in discussing promotion possibilities. When the interviewee approaches management about such opportunities, the response he receives is assessed as incongruent with his psychological contract. This event begins the assessment process, as addressed by PCBP. As discussed later in this study, this particular interviewee exhibited turnover intentions as a logical next step to this event. Therefore, the output of the PCBP assessment was PC incongruence where management and the interviewee are not accordant.

In another case, one interviewee was verbally promised a specific IT position once a suitable replacement for his job was found. Management indicated that in four weeks, the participant would have the position. In the end, management reneged on their promise and the interviewee left the company, as indicated below.

"...four weeks came, to the day and I walked in to 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.' I said 'Ok, I quit'." Interview 20

In the next section, we address the processing of PCBP output to that of emotion. According to psychological contract theory, one possible outcome of the PCB is an intense emotional response to missed promises. Although PCVP exists as the emotional/affective eventuality of PCB, we argue that the type of emotion/affect assigned to PCBP either leads to PCVP or enables an individual to reassess their psychological contract.

5.11 IT Psychological Contract Violation

As previously stated, PCV describes the feelings of anger, distress, injustice, and mistrust arising from the realization that one's organization has failed to fulfill its obligation [8]. PCV exists as a logical 'next step' succeeding the assessment of an external event (antecedent) by PCBP. Robinson and Rousseau (1994) suggest differentiating unmet expectations (PCB) and PCV are dissimilar in their functions. Using Rousseau's PCV as a foundation, we define PCVP as the unmet expectations of the IT professional from the IT profession, including potentially unrealistic expectations. An individual's response to an unmet expectation may result in job or even profession turnover intentions. However, PCVP, like PCV, addresses more intense feelings such as employee disrespect or violating a code of ethics [8]. However, inherent in PCVP is the attachment of a negative emotion representing PCBP. Therefore, PCBP assesses the event the outcome PCBP acts as input to PCVP and PCVP attaches a negative emotion from the intensity of the detected PCBP.

The existence of PCVP in our analysis appeared in 35% of the interviews. One of the more common responses is the perceptions one has toward their organization regarding job promotions. As presented in PCB, one interviewee expressed intense feelings of their lack of upward progress in the firm.

"I've given you so much, and obviously you're not recognizing it.' ...if that's the way it's going to be, then I'm going to start leaving at 5:00 every day from now on. I'm not going to stay here until 6:00. And if I'm 30 minutes late in the

morning, I'm not going to worry so much about it." Interview 6

The interviewees' quote appropriately identifies with PCV (although with the organization). After several discussions with management, the employee feels the reciprocation of advancement and skillset are lacking and therefore is limiting his growth as an IT professional. Examining the precursor to the PCV outcome, this particular interviewee assessed management's lack of reciprocity for his strong organizational commitment. In the end, the interviewee actually investigated alternatives to being in the IT field.

Another example of a direct PCVP instance involves a discrepancy between an established hiring policy and the firm's actual response to the policy. The situation involved the prospect of hiring the interviewees' son into their organization. Company policy dictates that as long as the family member does not report to any other family member, there is no conflict of interest. As indicated in the quote below, the family member was not hired because the interviewee was employed at the firm. His perception is that management ignored the hiring policy.

"It made me disappointed that they would do something like that....it really, you know, made me mad." Interview 4

Again, this appears as a violation against the firm rather than a direct violation against the firm. We assert an indirect influence on the profession.

In another common situation, IT professionals are duty-bound to respond to critical, and often non-critical, failures during regular and off work hours. Specifically, addressing issues during off hours has the potential for more intense negative outcomes, as indicated in the following instance.

"I call it a violation because at times, you just don't want to deal with it" Interview 2

In sum, the clustering of data in PVCP provides evidential instances of the assignment of an emotion from the result of the PCBP process

6. Discussion

6.1 Synthesis of Antecedents

The *why* of this research focuses on IT professionals and their perceptions of met and unmet reciprocations from the IT profession. This discourse presents discrete antecedents to the phenomenon. In this section, we consider the implications of possible external and internal antecedents to PCBP and PCVP,

assembling our model using the theoretical foundations of psychological contract theory [7], contract breach, and violation [8], and our construct of the psychological contract breach and violation within the profession.

6.2 Formation of Breach in the IS Profession

Recall that psychological contract breach in the IT profession is a cognitive assessment of influencers to a breach in subjective contract with the IS profession. The significant part of this section is to determine the existence of contract inconsistency/reneging by presenting the results of our findings. Our findings represent a series of antecedents we believe are possible influencers to the development of PCBP.

A salient item for processionals is learning opportunities. Although some perceived this as a disadvantage, many believed learning to be an advantage. Most interviewees indicated that the absence of such an opportunity could change their view of the field as less desirable. Extant research suggests the lack of learning opportunities affects an individual's affective normative commitment [39], including goal achievement, skill development, and satisfaction [40]. The absence or minimization of learning opportunities in the IT profession could result in PCBP. We therefore propose the following.

Proposition 1: The absence of learning opportunities for IT professionals in the IT profession will be negatively associated with PCBP.

The interactional relationship component of our study revolves around interviewees interacting with their users and management. The majority of these interactions appeared to be negative; everything from one-on-one interactions to managements downplay of the benefits of the IT profession, as one interviewee puts it "just another cog in the wheel." Negative interactions, 43% of the interviews, between IT professionals and their users can have profound outcomes such as poor performance, and unmet organizational and career capital goals [41]. Similarly, user acceptance of technology is significant when the boundaries between them and IT professional were minimal [42] Therefore, we propose the following.

Proposition 2: Negative interactions between the IT professional and users, in the IT profession, will be positively associated with PCBP.

In the next section, we propose the outcome of an antecedent event to a response from a contract breach.

In this section, we examine the output of PCBP as the input to PCVP. The focus is to determine the significance of the IT professionals' reaction to a breach of contract. How do IS professionals react to a PCBP? How significant is the breach to their position on the IS profession? Does the IS professional react immediately to an unrealized expectation, or is the significant reaction deferred? We incorporate AET [26] to explore the possible outcomes of a negative emotional attachment, from PCBP, to PCVP. The systemization of AET in our context is to determine the attachment of the emotion to the event, eventually forging a possible path of behavior.

PC violation can have a significant impact on employee commitment and performance [8]. PCB breach assessments can alter an individual's behavior ranging from nominalization to turnover. Turning our focus on AET, emotion and affect exist as two distinct concepts: emotions are temporal and affect is longitudinal [26]. We examine both of these conditions to determine coping mechanism to unmet expectations.

Proposition 3: PCBP can generate negative emotions and is positively associated with PCVP.

The degree of emotion or affect centers on the importance of the missed expectation. At this point, PCVP has occurred and the determination of a behavioral path in response to the assessment emerges. Should the expectation be significant enough therefore generating a largely negative emotion, the professional may entertain thoughts of turnover or develop a coping mechanism. Therefore, we propose the following.

Proposition 4: Negative emotion will be positively associated with judgment or affect-based behaviors.

In the next section, we present the theoretical and practical implications of our research. We present our contributions to psychological contract theory, and perspectives of these contributions to practitioners.

7. Implications

Our exploratory research offers several theoretical and practical implications. We extended PC theory to the IT profession. We also investigated the potential duality of experiences and outcomes between IT professionals and their organizations, and profession. Our contribution exists in centering the success and failure of the psychological contract to the IT professional. We present a window to future exploration of the IT professional and the contributing

6.3 Response to Contract Breach

factors that lead to IT profession turnover and, paradoxically, why IT professionals remain in the field despite the many possible instances of PCBP and PCVP.

Practitioner implications include learning opportunities and its contribution to IS professional commitment. Several interviewees indicated challenges and profession flexibility, such as the many IT specialties, were instrumental to profession commitment.

8. Limitations and Conclusion

The concepts of our study are non-trivial such that further research and development is necessary. The importance of this research relates to practitioner calls for the retention of their skilled IT staff. In addition, our findings are exploratory such that the identification of an absolute set of antecedents explaining IT professionals' commitment to the field despite any unrealized reciprocations from the field is beyond the scope of this study. To provide some initial explanation for the phenomenon in our research, future research will operationalize the model and test the validity and explanatory power of the antecedents explicated from the interview data.

The level of analysis in our work is the IT professional group and we caution when generalizing from our relatively small dataset. Although 33 interviews were conducted, only 23 were used in this study. Generalizability is a major limitation of this exploratory study. First, the diversity of our data set is limited by gender and industry. The majority of the participants were males working in the conveniencestore industry. Even though extra efforts were made to balance the gender makeup by identifying and interviewing female IT leaders, the gender demographic of the sample is not equivalent. Future research will continue to emphasize the inclusion of females since we believe they will have a similar but distinct perspective on the IT profession. Second, we interviewed IT professionals who are still in the profession. The outcome will be different with those who left the IT profession and future research will address this group of individuals. Locating participants who once worked in IT and are now in another field was beyond the scope of the budget and time allotments for this particular study.

If the goal of retaining IT professionals is the calling of both academic researchers and practitioners, problem identification is only the first step. With extant research dedicated to the retention of valued workers, its current presence is a signal that more

research is necessary. This study provided possible antecedents influencing PCBP, PCVP, and ultimately emotion or affect based behavioral outcomes. PC in its extended form focuses specifically on the events leading to IT professionals' discontent and divergence from the field. The core of PC is the emotional and affect based outcomes of unmet promises. Future research will include communications theory and personality factors. Without effective communication, the existence of PCB and PCV is an almost certainty.

9. References

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