Feeling Marginalized: Turnover of Public-Sector IT Professionals

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ABSTRACT

Current market conditions are decreasing the desirability of IT jobs in the public-sector of the United States. Many IT workers in state and local government are facing layoffs, furloughs, loss of benefits and increased payroll deductions. The present circumstances challenge previous notions of support for those working in the public arena. This diminishes the primary incentives associated with public work. Is it also encouraging the best IT professionals to leave? In this empirical study, it is proposed that job satisfaction, perceived organizational support, affective commitment, perceived supervisor support, and organizational rewards will be inversely related to turnover intention when job embeddedness is low. These assertions were tested following a survey of 348 IT workers from 18 public-sector organizations. The results confirmed the hypotheses. Collectively, the predictors accounted for 57.8% of the variance in turnover intention in the research model. This research discusses the implications of these findings, and reviews limitations and future research directions.

Keywords: Turnover, Information Technology, Public-Sector, Work Environment

1. INTRODUCTION

The years 2010 and 2011 have given way to a robust job market for experienced IT professionals. Many firms are giving raises to their top performers. To fill key positions, many Fortune 500 companies are paying signing bonuses to attract the top talent [1]. The media is once again printing stories of Silicon Valley tech firms bidding for key software engineers [2-4]. Some are offering stock options, onsite fitness centers, cafeteria plans, and extended contracts to retain their staff [5]. In real terms, average salaries for IT workers private-sector rose by 5.2% in the first six months of 2011 [6]. By contrast, one source indicates that compensation for IT workers on the state level has decreased in the past three years [7]. Worse yet, many public-sector IT professionals are facing additional rounds of layoffs, furloughs, payroll deductions and loss of benefits [8-10]. Some state and local governments are restructuring employee pension plans, as they cannot meet their liabilities [11, 12]. Instead of filling vacant positions, many public-sector organizations expect their remaining IT personnel to work longer hours to make up for labor shortfalls [13].

The plight of the public-sector IT worker is a reversal of earlier times. Traditionally, IT workers in public service could expect relatively more job stability and support than their counter parts private-sector [14]. Public-service organizations were long considered places of permanent employment with more stability [15]. These dictums are less certain than they were in the past. Recent fiscal shortfalls and years of overspending have drained public coffers [16]. IT workers in several states were recently forced to work without a paycheck for periods as long as three weeks [17]. To make matters worse, negative publicity for the civil service has increased by approximately 40% since 2009 [18]. Many political analysts have made the overcompensation of public servants a central theme in the past two years [19]. The television, radio, and print media outlets have run a number of articles suggesting that public pensions and benefits are bankrupting the system, and that they should be stripped to a bare minimum [20]. Some political figures have echoed support for these claims, creating further alarm for those already feeling entrenched. In sum, these circumstances, described in the practitioner literature, are creating an unrewarding work environment.

This is problematic because research suggests that public-sector employees emphasize factors other than just their pay [21, 22]. Although salaries are generally lower, civil service careers traditionally offer benefits and other intangibles which may make up for wage differences [23, 24]. Previous studies indicate that public-sector employees place a greater emphasis on factors such as employer support, job stability, flexibility, quality of life, and a reasonable workload [25]. Many choose to work in the public-sector because they believe in the mission of their respective organization [26, 27].

They support their organization in its work, and believe it supports them. In effect, some public-sector employees act as organizational citizens [28]. They see themselves as an extension of the organization and act in its best interests [29]. For these reasons, many are willing to overlook various shortcomings.

But what happens when these intrinsic benefits are diminished? This research considers the impact of these diminished benefits for IT workers in the public-sector. Based on earlier research, it is hypothesized that when the quality of the work environment disintegrates, turnover
ideation increases [30-32]. Specifically, it is proposed that job satisfaction, perceived organizational support, affective commitment, perceived supervisor support, and organizational rewards will be inversely related to turnover intention when job embeddedness is low. This model represents two departures from previous research. First, this research incorporates embeddedness as a moderator. It is predicted that when public-sector IT professionals find it hard to leave their work; they will suppress their desire to leave [33]. However, if they are not embedded within their position, now more than ever, they will consider new opportunities. The present study provides an interesting opportunity to test this assertion. The current instability of the public-sector and the abundance of IT positions private-sector are providing incentives to make changes. As a second departure, the construct, organizational rewards, is included as a predictor of turnover intent [34]. Given the recent concerns regarding payroll and benefit restructuring, it is expected that this variable will be more relevant than in the past. The inclusion of this variable contrasts with previous studies of turnover in the public-sector, which held rewards as static. To sum, the present study tests these assertions by surveying public-sector information technology professionals and conducting a multivariate analysis.

The remainder of this research is ordered as follows: First, the background section provides an overview of turnover research as it relates to the IT field. Next, the proposed research model and antecedents are introduced. To tests the hypotheses, the methods section describes the procedure for collecting data, validating the instrument, and developing the structural equation models. The results section provides an interpretation of the analysis and conveys support for the hypotheses. The discussion section follows. It covers the major scientific and practical implications of this research. Finally, limitations and conclusions are provided.

2. BACKGROUND

Within the IT field, a number of articles have explored the antecedents and results of turnover intention. The majority of these studies employed turnover intention as the dependent variable. Very few measured actual turnover [35, 36]. However, there is widespread support for intention as a precursor to actual behavior in psychology [37] and within turnover studies [38]. Because the empirical evidence supports the relationship [39], this research uses turnover intention as well. A recent meta-analysis [40] of turnover within the IT field identified several major categories of turnover predictors. They are: desire to move, ease of movement, job search, demographics, human capital, motivation, job-related factors, and organizational perceptions. The first category, desire to move, includes the three dimensions of commitment and career and job satisfaction [41, 42]. The second category consists of perceived job alternatives [43]. The demographics group includes age, gender, and marital status. The human capital group includes factors such as education and job and career tenure. The fourth group, motivation, is based on factors which govern career aspirations. This includes constructs such as growth need strength and career orientations [44, 45]. Another category includes job-related constructs such as autonomy, ambiguity, and role conflict [46, 47]. Finally, organizational perceptions such as social support have been identified within the IT context [48]. Collectively, these studies provide utility by laying the groundwork for the present investigation.

Joseph ET. Al. offered a contextual model using more contemporary turnover theories, specifically job embeddedness theory [49].

3. CONCEPTUAL DEVELOPMENT

The present research seeks to understand turnover intention among public-sector IT workers within the current environment. There is no literature that describes the pressure on IT workers to increase performance while rewards are held constant or pushed downward. Therefore, selection of turnover determinants was based on previous theory from three domains: turnover in the IT field, general turnover, and public service research. Construct selection was based on the findings from this extant literature. Five concepts were identified. They are job satisfaction, perceived organizational support, affective commitment, perceived supervisor support, and organizational rewards. Based on previous research, each of these constructs is expected to be inversely related to turnover intention. Additionally, job embeddedness is included as a moderator between the predictors and turnover intention, such that the relationship will be strengthened when embeddedness is lower. The constructs included in this model were specifically selected because they most accurately represent the current conditions which may be driving turnover decisions. The proposed linkages are summarized in Figure 1. Each of the constructs is introduced in the following sections.
3.1 Job Satisfaction

Job satisfaction is defined as a pleasurable emotional state resulting from the appraisal of one’s job [50]. One of the oldest constructs in the organizational behavior paradigms, job satisfaction is an accepted determinant of employee behavior [50-55]. Job satisfaction is not only an indicator of employee well-being and psychological health [56], but also numerous organizational outcomes such as work attendance, intention to remain in the organization, motivation to transfer learning, turnover intention, and actual turnover [42, 57, 58]. Literature, both in and out of the IS field, suggests that the connection between job satisfaction and work-related behavior is small but significant [40, 50, 59, 60]. Across studies, the proportion of variance in turnover behavior explained by levels of satisfaction is generally found to be significant [39, 61]. One longitudinal study showed that employees who changed jobs had higher levels of satisfaction in their new positions than workers who did not make employment changes [55]. It is surmised that employees expect their job to provide a mix of features (pay, benefits, promotion, or autonomy) for which each employee has certain preferential values. The range and importance may vary across individuals, but when the accumulation of unmet expectations becomes sufficiently large, there is less job satisfaction and greater probability of withdrawal behavior [62]. Unchecked, this may eventually lead to turnover [58]. Indeed, a number of previous studies indicate that low job satisfaction is a determinant of turnover intention [63-66].

Conversely, happier people are more likely to find intrinsic value in their work, and work harder than those who realize only formal compensation [67, 68]. To sum, certain aspects of the work environment decrease job satisfaction, which in turn increases employee motivation to leave the firm. Therefore, the following hypothesis is conveyed:

**HYPOTHESIS 1:** Job satisfaction will negatively influence turnover intention.

3.2 Perceived Organizational Support

Perceived organizational support (POS) is defined as the degree to which an individual believes that the organization values his or her contribution and cares about
his or her well-being [34, 69]. Perceived organizational support is an assurance that the firm will provide assistance when it is necessary to effectively carry out one’s job and to deal with stressful situations [70]. A number of antecedents of POS have been identified. One widely supported determinant is procedural justice; employee perceptions of the fairness in the ways used to determine the distribution of resources among employees [71]. A related factor is perceptions of office politics [72]. Other types of antecedents involve recognition. They include recognition [71], job security [73], autonomy [74], role stressors [75], and training [76]. These conditions impact the individual’s perceptions of the organization’s collective support. Based on the composition of their perceptions, workers will feel obligated to reciprocate their support through enhanced commitment and performance. Previous studies have identified several outcomes of perceived organizational support. They include affective commitment [34, 68], emotional support [77], mood [78], job involvement [79, 80], and performance [78]. When perceptions of organizational support are negative, the consequences include fatigue [81], burnout [60, 82], anxiety [81, 83], withdrawal behavior [84], turnover intention [73, 85], and turnover [76, 86]. Based on the extant literature, it is expected that those IT workers who perceive negative support will eventually decide to leave their respective organizations. Therefore, the following hypothesis offered for testing:

**HYPOTHESIS 2:** Perceived organizational support will negatively influence turnover intention.

### 3.3 Affective Commitment

Affective commitment is defined as an employee’s emotional attachment to and involvement in an organization [87]. Some of the antecedents of affective commitment include organizational rewards, procedural justice, job satisfaction, and supervisor support [34, 88]. A range of behavioral outcomes have been linked to affective commitment. They include employee retention, job performance, work quality, and personal sacrifice on behalf of the organization [89]. Employees’ emotional bonds with their organizations are considered an important determinant of dedication and loyalty [90].

Affectively committed employees are characterized as having a sense of belonging and identification which increases their involvement in the organization’s activities, their willingness to pursue the organization’s goals, and their desire to remain with the organization [41]. Affective commitment has also been associated with absenteeism and turnover [88]. In fact, many studies have reported a significant association between commitment and turnover intention [91-97]. Based on the extant literature, the following hypothesis is conjectured:

**HYPOTHESIS 3:** Affective commitment will negatively influence turnover intention.

The extant literature further indicates that perceived organizational support is a determinant of affective commitment. In an earlier study [42] it was determined that the emotional component of organizational commitment is shaped by individual perceptions of the organization. Specifically, it was found that perceived organizational support has a significant impact on affective commitment (and thus mediating the relationship to turnover intention) [98]. In order to confirm this relationship within the present context, the following hypothesis is proffered:

**HYPOTHESIS 4:** Perceived organizational support will positively reinforce affective commitment.

Previous studies have also inferred that job satisfaction is a determinant of affective commitment [99]. Furthermore, it is also expected that affective commitment mediates its path to turnover. Affective commitment is based on the emotions resulting from an employee’s appraisal of his or her job. A high degree of job satisfaction correlates with increased levels of affective commitment, while dissatisfaction with one’s job leads to low affective commitment. Based on this evidence, it is appropriate to extend an additional hypothesis:

**HYPOTHESIS 5:** Job satisfaction will positively reinforce affective commitment.

### 3.4 Perceived Supervisor Support

Perceived supervisor support (PSS) is defined as employees’ perceptions that their supervisor values their contributions and cares about their well-being [100]. Although perceived organizational support and perceived supervisor support are correlated, they have been shown to be distinct constructs [101]. Supervisors have an important role in developing employees’ perceptions of the organization [102]. This has been noted in previous studies of leader-member exchange [103-105]. Existing theory indicates that supervisor attachments have distinct effects on important outcomes [106, 107]. This includes work performance [108], job quality [109], mood [78], and commitment [110]. In addition, perceived supervisor support has been found to directly impact turnover cognitions, apart from attachments and attitudes related to the organization itself [111]. This is supported by a number of previous studies which linked supervisor support to turnover cognitions and behavior [49, 76, 112-116]. Thus, the following hypothesis is prescribed:

**HYPOTHESIS 6:** Perceived supervisor support will negatively influence turnover intention.
3.5 Organizational Rewards

Organizations use rewards such as compensation and benefits as a means of demonstrating their support for employees. The availability of appropriate rewards is a critical source of work motivation [117]. It remains an important element in employment relationships [118]. Increases in organizational rewards may elicit employees’ reciprocation of effort to their organization [119]. This may be manifested in greater willingness to stay with the firm and contribute to its collective goals. Studies have shown that organizations’ recognition of employee contributions motivates individuals to expend extra effort in various aspects of their jobs to further the organization [120, 121]. An inverse relationship between organizational rewards and turnover has also been supported [76]. As firms decrease their portfolio of rewards, employees withdraw their effort. Based on the degree of the change, they may become detached and emotionally distance themselves from the program. Continued declines in performance rewards will ultimately lead to separation from the firm [122]. Given the relative disparity between public and private firm compensation, and the unsteadiness of public pensions, it is expected that declines in organizational rewards will lead to turnover among public-sector IT workers. Based on this evidence, it is expected that:

HYPOTHESIS 7: Organizational rewards will negatively influence turnover intention.

3.6 Job Embeddedness

Embeddedness is defined as the combined forces that keep a person from leaving an organization, community, or group [123]. It is composed of contextual and perceptual forces that bind people to the location, people, and issues within a given entity. Specifically, job embeddedness refers to how enmeshed a person is in the organization where he or she works [49]. Job embeddedness plays a role in employee turnover because people don’t always act rationally [124]. They may make decisions based on prescreened alternatives and act on pre-scripted behaviors. This is most common following a shocking or jarring event, such as receiving an unanticipated job offer, being overlooked for promotion, or experiencing a family issue [125]. Job embeddedness prohibits turnover by absorbing shocks [49, 124]. Although it has been supported as a moderator and direct antecedent of turnover intention [126], it has received relatively little attention within the IT field. Because high rates of turnover, shorter organizational tenure, and frequent moves are characteristic of the IT profession, it may be that job embeddedness is less relevant in the business arena [127]. However, public-sector workers historically generate lower rates of turnover, creating more opportunity to become embedded [128, 129]. It is expected that IT professionals in the public domain, as with other public-sector workers, will be impacted by job embeddedness [130]. Specifically, job embeddedness is predicted to influence the role of benefits such as job satisfaction, commitment, rewards, and support on turnover intention. Having already perceived some loss of benefits, it is proposed that public-sector IT workers will be inclined to leave when they face a significant change or shock in the work environment. Given the current instability in the public-sector, this scenario seems especially likely. Therefore, the final hypothesis is prescribed:

HYPOTHESIS 8: Job embeddedness will moderate the relationship between each of the predictors and turnover intention, such that the relationship is stronger when job embeddedness is lower.

4. METHODS

In order to test the previously-described hypotheses, it was necessary to conduct a field survey of IT professionals. The collected data were analyzed using traditional survey methods and subjected to a multivariate analysis with a series of structural equations. The results are interpreted in terms of path strength for each proposed relationship.

4.1 Sample & Procedure

To test the research model, the field study method was employed and a research instrument was created for gathering data. The target population was comprised of public-sector employees currently working in the information technology field. The sample consisted of the IT workers within the university system of a state in the southeastern United States. The university system included 18 loosely-federated universities and colleges. These universities and colleges are in urban and rural settings and have enrollments between two thousand and thirty thousand students. Given the varied missions, independence, and make-ups, the sample is being drawn from the public sector of an industry as opposed to a tightly formed organization. The computing function within each of the universities and colleges encompasses the business processes that organizations would have along with specialized fields within each of the teaching units. Because of the size, scope, and broad requirements of the university computing function, the sample provides an encompassing cross-section of IT functions and skills but within in the public-sector. By keeping the sample from one state, the between state variance is eliminated. The only groups of IT workers excluded from the study were contractors, outside consultants, and those classified as temporary laborers. Included in the study were individual contributors, managers of IT workers, and IT project managers. Clerical workers employed within IT departments were excluded. These individuals were not included in this study of turnover as their employment with the organization is temporary by nature. This was later determined to exclude approximately
those included in the sample were given packets which contained a cover letter, a paper copy of the survey, and a pre-addressed, stamped return envelope. The cover letter introduced the survey and the researchers. It also explained that the survey was confidential and that the results would be published in an academic journal. No inducements or gratuities were offered. Those who elected to participate completed their surveys and returned them by U.S. mail.

4.2 Instrumentation

The survey consisted of questions which operationalized the constructs in the research model. The measures were adopted from previously-validated measures. Job satisfaction consisted of six global indicators [131]. Since its inception, the measure has been used in a number of studies and is well-supported [132]. Perceived organizational support included eight formative scales that were previously defined [69]. Six reflective items were used to operationalize affective commitment [87]. The validity of this measure has been confirmed in subsequent studies [133]. Perceived supervisor support includes six formative scale items that were defined in an earlier study [106]. Turnover intention was invoked using four reflective scales [60]. Job embeddedness consisted of seven previously-validated, reflective items [124]. Organizational rewards included five global measures developed in a previous study. The instrument also contained several constructs not related to this study. Finally, demographic information was also collected.

5. RESULTS

After allowing four weeks for surveys to be returned, the data was tabulated into an electronic spreadsheet in order to calculate demographics and purge incomplete responses. Of the 884 distributed surveys, 348 were returned. This generated a 39.4% response rate, sufficiently large to minimize non-response bias, even according to the most stringent standards [134]. Some 21 incomplete questionnaires were dropped. An additional 8 surveys were rejected because a response set was detected [135, 136]. A response set is the tendency among subjects to respond to questions automatically and independent of the content of the items [137]. This resulted in a final sample of 319. As summarized in Figure 2, the average IT worker in the study is 32.3 years old, is male, and has been in his current position for 1.2 years. This profile is consistent with the state-wide demographics of all employees of the University System (as reported by the Office of the Chancellor). In addition, a test of common methods variance (CMV) was conducted [138]. In this test, the first factor from the principal components analysis was introduced into a partial least squares model as a control variable. Because the injected factor did produce changes in explained variance it can be assumed that CMV is not problematic.

![Fig 2: Sample Demographics](image)

The validity of the measures was assessed prior to model testing. As previously indicated, job satisfaction, affective commitment, and turnover intention were found to be reflective, while perceived organizational support and perceived supervisor support were categorized as formative. These determinations were made in accordance with pre-established rules for classifying construct measures as formative or reflective [139]. The classifications made in this paper are consistent with previous studies. Because the model contains formative constructs, a components-based approach for structural equation modeling was appropriate [140]. The Smart PLS software package [141] was used to conduct the partial least squares (PLS) analysis.

The psychometric properties of the reflective constructs were first considered. First, the factor loadings were calculated in order to assess convergent and discriminate validity. Such loadings indicate if items cross-load or fail to significantly load on their respective latent variable [142]. The convergent validity of items is established when items load about .70 on their respective construct and when the average variance extracted (AVE) for each measure is above the .50 threshold. As depicted in Table 1, the requirements for convergent validity are met. The requirements for discriminate validity are based on the average variance (AVE) extracted for each construct. Discriminate validity may be assessed via two points of...
observation. First, it may be noted when the square root of the AVE is greater than a particular construct’s inter-correlation with other construct. It is also identified when item loadings are greater for their respective construct than for other constructs in the model. As indicated in Table 2, the conditions for discriminate validity are exceeded.

The reliability of reflective constructs was then considered. For each construct, the internal consistency measure was examined. Those variables which exceeded the threshold of .70 were judged to possess sufficient reliability [143, 144]. As presented below (Table 2) the internal consistency measure for each construct was above .90, which indicates that the constructs possess sufficient reliability.

Having confirmed the suitability of the reflective constructs, it was necessary to ensure the validity of the formative measures. Formative construct validity is based on correlations between items and constructs [145]. A modified multi-trait, multi-method (MTMM) matrix of correlations was constructed so that convergent and discriminate validity could be inspected [146]. Convergent validity is based on indicators that load significantly on their respective latent variables. Discriminate validity is established when item-construct correlations are greater than cross-loadings on other constructs. As outlined in Table 3, the MTMM confirms the discriminate and convergent validity for the formative measures.

Table 1: Psychometric Properties of Reflective Measures

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>SAT</th>
<th>AFF</th>
<th>TURN</th>
<th>JE</th>
<th>OR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction (SAT)</td>
<td>SAT1</td>
<td>0.887</td>
<td>0.677</td>
<td>0.676</td>
<td>0.615</td>
<td>0.620</td>
<td>0.650</td>
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<td></td>
<td>SAT2</td>
<td>0.894</td>
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<td></td>
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<td>0.609</td>
<td>0.488</td>
<td>0.504</td>
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<td>Affective Commitment (AFF)</td>
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<td>0.612</td>
<td>0.682</td>
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<td>0.546</td>
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<td>0.682</td>
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<td>Turnover Intention (TURN)</td>
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<td>0.555</td>
<td>0.909</td>
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Square-rooted AVE on Diagonal; RELI = Composite Reliability

Table 2: Correlations among Reflective Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>RELI</th>
<th>SAT</th>
<th>AFF</th>
<th>TURN</th>
<th>JE</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>0.91670</td>
<td>0.80648</td>
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<tr>
<td>Affective Commitment</td>
<td>0.92946</td>
<td>0.73796</td>
<td>0.82961</td>
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<td></td>
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<tr>
<td>Turnover Intention</td>
<td>-0.92428</td>
<td>-0.70708</td>
<td>-0.64209</td>
<td>0.89646</td>
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<tr>
<td>Job Embeddedness</td>
<td>0.93031</td>
<td>0.61266</td>
<td>0.73834</td>
<td>-0.57559</td>
<td>0.81055</td>
<td></td>
</tr>
<tr>
<td>Organizational Rewards</td>
<td>0.91212</td>
<td>0.61551</td>
<td>0.62730</td>
<td>-0.56134</td>
<td>0.59409</td>
<td>0.82485</td>
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</table>

Table 3: Inter-Item and Item-to-Construct Correlation Matrix

PSS = Perceived Supervisor Support; POS = Perceived Organizational Support

<table>
<thead>
<tr>
<th>Construct</th>
<th>PSS1</th>
<th>PSS2</th>
<th>PSS3</th>
<th>PSS4</th>
<th>PSS5</th>
<th>PSS6</th>
<th>PSS</th>
<th>POS1</th>
<th>POS2</th>
<th>POS3</th>
<th>POS4</th>
<th>POS5</th>
<th>POS6</th>
<th>POS7</th>
<th>POS8</th>
<th>POS</th>
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<tbody>
<tr>
<td>PSS1</td>
<td>-</td>
<td></td>
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</tr>
<tr>
<td>PSS2</td>
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<td>-</td>
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<td></td>
<td></td>
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<tr>
<td>PSS3</td>
<td>0.586</td>
<td>0.855</td>
<td>-</td>
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<td></td>
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<td></td>
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<tr>
<td>PSS4</td>
<td>0.578</td>
<td>0.756</td>
<td>0.756</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PSS5</td>
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<td>0.681</td>
<td>0.638</td>
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<td>0.609</td>
<td>0.593</td>
<td>0.628</td>
<td>0.667</td>
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<tr>
<td>POS1</td>
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<td>0.485</td>
<td>0.482</td>
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<td>0.385</td>
<td>0.305</td>
<td>0.495</td>
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<td>POS2</td>
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<td>0.478</td>
<td>0.413</td>
<td>0.446</td>
<td>0.432</td>
<td>0.331</td>
<td>0.477</td>
<td>0.716</td>
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<td>0.452</td>
<td>0.454</td>
<td>0.440</td>
<td>0.333</td>
<td>0.338</td>
<td>0.471</td>
<td>0.558</td>
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<tr>
<td>POS5</td>
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<td>0.472</td>
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<td>0.546</td>
<td>0.758</td>
<td>0.818</td>
<td>0.756</td>
<td>0.551</td>
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<tr>
<td>POS6</td>
<td>0.410</td>
<td>0.531</td>
<td>0.479</td>
<td>0.518</td>
<td>0.464</td>
<td>0.348</td>
<td>0.550</td>
<td>0.771</td>
<td>0.715</td>
<td>0.719</td>
<td>0.575</td>
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<td>0.515</td>
<td>0.387</td>
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<td>0.756</td>
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<td>0.469</td>
<td>0.444</td>
<td>0.355</td>
<td>0.513</td>
<td>0.790</td>
<td>0.755</td>
<td>0.684</td>
<td>0.539</td>
<td>0.809</td>
<td>0.790</td>
<td>0.767</td>
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<tr>
<td>POS</td>
<td>0.397</td>
<td>0.577</td>
<td>0.535</td>
<td>0.548</td>
<td>0.509</td>
<td>0.406</td>
<td>0.740</td>
<td>0.877</td>
<td>0.867</td>
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<td>0.926</td>
<td>0.909</td>
<td>0.915</td>
<td>0.893</td>
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</table>
After confirming the suitability of the measures, the proposed model linkages were evaluated using bootstrap sampling [140]. The results of the analysis are presented in Table 4. As expected all the hypothesized paths between turnover intention and its antecedents were found to be statistically significant. Furthermore, the links from job satisfaction and perceived organizational support to affective commitment were supported. Collectively, the determinants account for 57.8% of the variance in turnover intention and 67.4% of the variance in affective commitment. The mediating effects of affective commitment were tested by following a previously-defined procedure [147]. Having confirmed the impact of job satisfaction and perceived organizational support on turnover intention, it was determined that their indirect path via affective commitment makes the direct effects statistically insignificant. Finally, moderation tests were found to sustain hypothesis 8. The moderating role of job embeddedness on job satisfaction, perceived organizational support, affective commitment, and perceived supervisor support and organizational rewards was confirmed at a .05 alpha level.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Coefficient</th>
<th>T Value</th>
<th>P-value</th>
<th>Supported?</th>
</tr>
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<tbody>
<tr>
<td>H₁</td>
<td>SAT → TURN</td>
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<td>H₂</td>
<td>POS → TURN</td>
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<td>1.968</td>
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<td>H₃</td>
<td>AFF → TURN</td>
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<td>2.409</td>
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<td>H₅</td>
<td>POS → AFF</td>
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<td>4.528</td>
<td>.0001</td>
<td>✓</td>
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<tr>
<td>H₆</td>
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<tr>
<td>H₇</td>
<td>OR → TURN</td>
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<tr>
<td>H₈</td>
<td>Moderations</td>
<td>--</td>
<td>--</td>
<td>.0163</td>
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</table>

*p<.05; **p<.01; ***p<.001

![Fig 3: Structural Model]
6. DISCUSSION

In the era of government instability, IT workers are an interesting case. As with any other public sector employee, they are subject to layoffs, furloughs, loss of benefits, and payroll deductions. More importantly, tacit benefits associated with public-sector work are rapidly disintegrating. In this research, we found that job satisfaction, perceived organizational support, affective commitment, perceived supervisor support, and organizational rewards are particularly important to IT professionals working in government. Further, job embeddedness moderates their relationship with turnover intention. The study indicates that as the factors which draw many individuals into public service are eroded, turnover intention will increase. At the same time, private sector demand for IT professionals is increasing. The net result is that public-sector IT workers have little motivation to remain in their current positions, and plenty of intriguing job opportunities in the private-sector.

It is expected that the exodus of talented IT professionals into the private-sector will continue [129]. This leads into the question of who will replace them. Those who have seen their parents, friends, and relatives lose their pensions and benefits would doubt the long term commitment of public organizations to their employees. People previously considering encore careers in public service may reconsider their perceptions of job satisfaction and commitment among public-sector workers. Unable to appeal to future organizational citizens and/or deliver generous benefits, the most salient route for public-sector recruiting will involve overt enticements such as increased salaries. Having tarnished the perception of being a stable, supportive place to work, this may be the only immediate option. Given the level of competition for skilled IT labor in the private sector, this could be very costly.

Is it possible for the public-sector to rebuild its reputation among IT workers? Although market demands, salary increases, and structural changes could lure IT workers back into the public sector, it is less likely that they will form long-term organizational commitments.

7. LIMITATIONS

Although this study was conducted in keeping with current IS research practices, it is not completely without limitations. First, the study uses intention as a surrogate for actual behavior. It is generally more desirable to measure actual performance. However, previous studies of IT worker turnover have confirmed the use of turnover intention as an acceptable predictor of actual turnover [40]. Another possible limitation concerns the sample. Although a large sample was drawn from individuals across a state-wide system, it is possible that the results may vary among states. Thus, there is a potential risk the findings may lose generalizability. Given the size of the state and the number of employees in this public-sector system, it is expected that its IT workforce is a representative cross-section. Therefore the sample frame seems reasonable enough for interpretation across state and local agencies.

8. CONCLUSION

Beside quantitative benefits, public-sector IT workers reported a loss of commitment, support, and satisfaction with their jobs. This combined with an abundance of lucrative opportunities in private industry are making their jobs less desirable. Previously, employees were more likely to act as organizational citizens and believe their long-term interests were tied to those of their organization. For many, this is no longer the case. Instead of looking out for the best interests of the organization, many IT workers are retreating from their previous beliefs and are considering exit strategies. If unchecked, these conditions will make it increasingly difficult to attract and retain talent. This research provides value by calling attention to this relevant, timely issue. It was determined that the tenets of organizational citizenship are a critical factor in retaining IT workers. When job satisfaction, perceived organizational support, affective commitment, perceived supervisor support, and organizational rewards decrease, public-sector IT workers begin to consider leaving their positions. Although noteworthy, this research is only a first step towards addressing this problem. Future research should be aimed at reversing the decline of organizational citizenship if a skilled labor shortage is to be averted.

REFERENCES


[34] G. Pare and M. Tremblay, "The influence of high-involvement human resources practices, procedural justice, organizational commitment, and citizenship behaviors on information technology professionals' turnover intentions," 2007.


