Team and Organizational Identification among Information Systems Personnel: An Exploratory Investigation of Post IT Outsourcing Personnel Impacts

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Abstract

This study examines the impact of social identification of IT employees in IT outsourcing firms. Specifically, we ask: What effect does social identification have on employee attitudes in the wake of major outsourcing initiatives? We examine social identification through the separate dimensions of team identification and organizational identification. The results suggest that when team identification and organizational identification are viewed as two distinct measures of social identity, the effect on the workplace attitudes of IT employees vary.

1. Introduction

There is a great deal of attention currently directed towards retention and growth of IT workforce in North America. In the past few years, there has been a significant trend towards offshoring and outsourcing of IT work to low-cost, foreign locations [9]. This trend has created significant shifts in the demands, roles and responsibilities of IT personnel. A common theme in recent IT literature has focused on organizational responses to globalization of IT workforce and organizational practices including outsourcing and offshoring [9]. However, relatively less attention has been paid to the human dimension of globalization of IT workforce. Practices such as outsourcing and offshoring can be complex and frequently unsettling for IT personnel employed in organizations undertaking such efforts [57]. Restructuring programs, such as outsourcing, can result in lower morale and affect the organizational identities of IT employees. In this article, we examine the team and organizational identification of IT employees in organizations that have undertaken outsourcing efforts. Specifically, we ask:

- What are IT personnel’s team and organizational social identities in IT outsourcing firms?
- What effect does social identification have on employee attitudes such as job satisfaction and turnover intention in IT outsourcing firms?

2. Importance of the research

Research on organizational identity has progressed over the past 20 years to show strong linkages with organizational images, strategic decision-making, and even many key organizational variables at the individual level [14]. Recent attention on IT insourcing [e.g., 28] has led to a need to investigate the behavioral contextual factors (i.e., RPC, Social Identity, Job Satisfaction, and Turnover Intention). Despite the amassing literature on IT outsourcing, there is an aspect that has been largely overlooked – the IT outsourcing survivors. We define IT outsourcing survivors as individuals who remain with and continue to work for the outsourcing organization in the same or very similar roles as they held prior to outsourcing [57]. Thus, the purpose of this study is to examine the relationships among behavioral contextual factors in the aftermath of a major outsourcing initiative, by examining the impacts to IT outsourcing survivors.

In the next few sections, we review extant literature on IT personnel, social identity, job satisfaction and turnover intention. We then present our hypotheses, describe our methods, and subsequently present and discuss our findings.
3. Managing IT Personnel

Researchers have spent more than twenty years studying IT personnel characteristics at individual, group, and organizational levels. At the individual level, IT researchers have examined individual characteristics such as interests and personality, motivation, job paths and career orientations, job satisfaction and turnover. Group and organizational research on IT personnel consists mainly of process and structural group issues, IT leadership issues, and management of IT personnel.

Prior research has shown that an IT employee’s personality, psychological variables and internal motivators can influence (1) the types of jobs and work environments chosen by the employee and (2) the employee’s reactions to changes in the work environment [31, 83]. IT personnel turnover is lower in human capital focused organizations where emphasis is on personnel development and retention [17] and productive IT personnel environments typically foster high feelings of psychological influence among employees [53].

Collectively, what we’ve learned about IT personnel suggests that they are similar to other occupational groups in many ways, including group dynamics, external motivators on productivity, and impact of work environment on work-unit productivity [5, 19, 18]. As a result, there is much debate over whether they are or should be managed differently from other personnel. Yet, there are some differences that must be further considered by researchers as well as several gaps in existing literature on behavioral outcomes of motivation [5].

In this study, we seek to build on prior IT personnel literature by studying the social identities of IT employees in firms that have undertaken major IT outsourcing initiatives. Social identification is the degree to which people define themselves in terms of a collective group, and evaluate their self-worth as an individual in terms of their contribution to the group [3, 71, 72]. We believe that with an understanding of IT personnel social identification, senior management can develop IT outsourcing and personnel management approaches that appeal to the workplace expectations of IT employees, thus minimizing the potential negative social impacts of major IT outsourcing initiatives.

4. Social Identity

According to social identity theory, individuals define their concepts of self both as an individual and as a member of one or more social groups [16]. The degree to which individuals identify with a certain social group influences their sense of community and belonging within the group [3]. Therefore, they define themselves in terms of their membership within the group, ultimately, viewing successes and failures of the group as direct impacts to themselves as individuals.

In this study, we examine identification at two levels: organizational identification and team identification. We apply social identity theory to examine the extent to which an IT employee identifies with each level within the organization in order to determine which level appears to be dominant. Organizational identification [e.g., 61, 63] is the extent to which employees define themselves in terms of the organization to which they belong. Team identification is the extent to which IT employees define themselves as members of the same workgroup or unit within the organization [61].

Identification has been linked with employee commitment, motivation, organizational citizenship behavior, job satisfaction and turnover intention [43, 45, 73]. As such, investigating the aforementioned relationships from the perspective of IT employees in an IT outsourcing environment is warranted, especially considering the vast resources organizations have committed to IT outsourcing initiatives.

In an organizational environment, employees may possess multiple social identities. However, changes in the organization and organization dynamics can cause employees’ dominant identity to manifest [21]. This concept of dominant social identity has been explored in studies on mergers and acquisitions [4, 74, 76] whose findings suggest that the employee’s dominant social identity influences how they respond to changes in the work environment. We apply a similar perspective in this study to examine the impacts on employee job satisfaction and turnover intention due to changes in the work environment caused by IT outsourcing.

5. IT Employee Job Satisfaction

Job satisfaction is one of the most widely researched constructs in organizational behavior research, with studies going back at least as far as the Hawthorne studies of the 1920’s and 1930’s. We generally understand job satisfaction as a concept representing the “feelings, attitudes, or preferences of individuals regarding work” [10]. More specifically, it has been defined as “the extent of positive emotional response to the job resulting from an employee’s appraisal of the job as fulfilling or congruent with the individual’s values” [49]. As this definition highlights, job satisfaction includes both as
an affective, emotional response and as a cognitive
evaluation of a particular job [36, 81].

There are multiple antecedents and consequences for job satisfaction. Antecedents most commonly involve various characteristics of the job itself, personal characteristics of the worker, and organizational characteristics. Job characteristics include skill variety, autonomy, feedback, pay and promotion issues, and role stresses [10, 32, 49]. Personal characteristic include achievement motivation, self-esteem, and personality attributes [10]. Organizational characteristics include the culture and climate of the organization. The consequences of positive and negative job satisfaction typically include such things as organizational citizenship behaviors, job performance, productivity, absenteeism, employee turnover, and life satisfaction [62].

Job satisfaction research within the IT literature has largely mirrored the research from other organizational disciplines, drawing from the existing literature in examining the antecedents and consequences of job satisfaction in IT contexts. For instance, Morris et al [49] examine the impact of an ERP implementation on the relationships between five job characteristics (drawn from a classic study by Hackman and Oldham [25] and job satisfaction. The results indicate that the relationships are altered by changes such as technology implementation. Ang and Soh [1] examined the relationship between personal characteristics and job satisfaction and user interface satisfaction, finding that the personal characteristics were not a significant antecedent to job satisfaction.

In this paper, we extend the existing research in information systems by examining the effects of organizational identification and team identification on job satisfaction following the implementation of an IT outsourcing arrangement.

5.1. IT Employee Team Identity and Job Satisfaction

Social identity theory posits that members within the same workgroup will develop a strong sense of team identification due to frequent interaction and common work history with other members of the same team [35]. These situational cues presented to the team fosters a sense “we” among team members, who begin to view themselves in terms of the collective group, rather than as individual members of the workgroup [61]. Prior studies have investigated the relationship between employees’ level of team identification and employee job satisfaction. For example, for co-located and dispersed teams affected by mergers and acquisitions, team identification for software workers is a known determinant of job satisfaction[45]. In accord with social identity theory, we expect a similar relationship to hold in the context of IT outsourcing. Therefore, we posit that:

H1: There is a positive association between IT employees’ level of team identification and the degree of change in their job satisfaction as a result of the IT outsourcing initiative.

5.2. IT Employee Organizational Identity and Job Satisfaction

Organizational identification [e.g., 61, 63] is the extent to which employees define themselves in terms of the organization to which they belong. Scholars have argued that employees’ jobs have specific characteristics that might correspond to general organizational attributes that in turn contribute employees’ identification with their organization [77]. Van Dick et al. further purport that employees, who more closely identify with the organization, are more likely to perceive changes in organizational conditions as less detrimental because he or she is more likely to view the changes as being vital to the organization’s achievement of its goals. They go on to argue that being highly identified with the organization can likely lead employees to think more positively of the organization, which could ultimately translate into an increase in perceived job satisfaction.

Brief [8] argues that job satisfaction is developed from the employee’s interpretations of the job circumstances, which are influenced by the individual’s personality. Given that Van Dick et al. [75] see identity and identification as antecedents to greater job satisfaction for those who have a strong organizational identity, we proffer the following hypothesis.

H2: There is a positive association between IT employees’ level of organizational identification and the degree of change in their job satisfaction as a result of the IT outsourcing initiative.

6. IT Employee Turnover Intention

Turnover intention is the voluntary or involuntary act of leaving an organization [47, 55, 67]. The loss of highly skilled professionals may be extremely costly for organizations where direct costs are associated with recruiting and training and
indirect costs result in disruptions in team-based work environments and organizational processes [50, 70]. Research in organizational behavior suggests that linking internal and external factors to employee beliefs and behaviors warrants the understanding of the turnover phenomenon [70].

Turnover pertaining to IT personnel has continued to be a major concern for organizations [48, 50]. Various models of turnover have been presented in the literature and have addressed the impact of job satisfaction [68], commitment, organizational identification [56, 77], social norms [40], productivity, and alternative job opportunities.

Furthermore, organizational commitment is a mediator of job satisfaction and other turnover predictors [69]. The discrepancy between employee wants and how the organization satisfies those wants also influences turnover indicators [34]. Other models showed turnover was impacted by person-technology fit and absenteeism [29, 64, 80], organizational commitment, career and job satisfaction, and role stressors [e.g., 31, 32]. In addition, several demographic factors, such as age, marital status, tenure and sex, have also been associated with turnover intentions [41, 59, 60, 65].

Turnover intention is a well-known predictor of actual turnover [70]. The prediction of turnover intention has been continuously linked to social identity theory [e.g., 43, 56, 75, 77]. Research has indicated the usefulness of studying the effects of job satisfaction and organizational identification on turnover intentions through a social identity theory lens [56, 75]. Yet, few have studied the significance of both team and organizational identification on turnover intentions simultaneously, which we seek to do in this study.

6.1. Team Identity and Turnover Intention

Research has demonstrated that the more an individual identifies him or herself with the team, the more he or she will act in accordance with the team’s norms [3, 78]. Further Marks & Lockyer [45] argue that employees focus on their team reduces “subjective uncertainty within an organizational environment,” similar to changes that would be introduced as a result of IT outsourcing. As such, we would expect IT employees that have a strong team identity to have less of a desire to vacate their current position due to their strong ties with their workgroup, enabling them to adjust to the organizational change without breaking those ties. Therefore, the more an IT employee identifies with the team the less likely he or she will to develop intentions to leave the organization due to IT outsourcing.

H3: Higher the team identification of IT employees, the lower will be their turnover intentions.

6.2. Organization Identity and Turnover Intention

When an IT outsourcing initiative impacts the organizational identity of IT employees, the employees experience identity ambiguity or conflict [14] with their pre-IT outsourcing identity and must re-evaluate their identification within the organization. The employees’ re-evaluation either results in feeling a sense of alignment with the “new” environment, or a sense of discrepancy. Since this change has been forced on the employees by the firm, the sense of discrepancy felt by an employee can trigger a sensemaking process [14] that determines how the employee reacts to the change. This sensemaking process can lead the employee to consider departing the organization, thereby indicating their intention to leave the company.

On the other hand, the employee may succeed in developing a sense of alignment with the new, post-IT outsourcing environment. To further this point, Van Dick et al [75] argue that employees’ level of identification with the organization is indicative of his or her self-concept and the degree to which the employee is psychologically intertwined with the organization. Further, Pratt [54] intimates that a strong organizational identity helps to reduce environmental uncertainty [54]. Thus, consistent with Van Dick et al [75], the more an employees identify with their organization, the more their image and self-worth embodies the organization’s characteristics. In light of these arguments, we expect the employees that closely identify with the organization to successfully realign with the new environment and maintain high levels of organizational identification such that they are less likely to develop intentions to leave the company.

H4: Higher the organizational identification of IT employees, the lower will be their turnover intentions.

6.3. Job Satisfaction and Turnover Intention

Negative or reduced job satisfaction can also be an indicator of turnover intentions in an employee [62]. McKnight, Phillips, and Hardgrave [46] examines the effects of five job characteristics (drawn from the study by Hackman and Oldham [25]), and four workplace characteristics on job
satisfaction and work exhaustion, and the effect of job satisfaction and work exhaustion on turnover intentions among programmer analysts and system support staff. Their results showed that workplace characteristics were a better indicator of turnover intention than job characteristics among programmers, with the opposite being true for support personnel. Consistent with prior research on job satisfaction and turnover intention, we would expect the relationship to hold in the context of IT outsourcing. Therefore, we posit the following:

H5: There is a negative association between IT employees’ job satisfaction and their post-IT outsourcing turnover intentions.

7. Research Method

We adapted existing measures for all survey items. We measured team identification and organizational identification using items developed by Ashforth & Mael [3]. We measured job satisfaction using items developed by Moore [48]. For job satisfaction, respondents indicated the degree to which their job satisfaction hadchanged, as a result of the IT outsourcing initiative, using a seven item Likert scale where 1 = Decreased Greatly, 4 = Remained the Same, and 7 = Increased Greatly. We measured turnover intention using items developed by Kickul et al. [38]. For turnover intention, respondents indicated their answers to questions using a seven item Likert scale with anchors of 1 = Strongly Disagree and 7 = Strongly Agree. The control variables used in this study were respondents’ age, gender, and organizational tenure. We also gathered firm demographic measures of firm size and industry.

7.1. Data Collection

We collected the data by distributing a self-administered, web-based questionnaire to IT employees of a cross-section of North American firms. We identified respondents by sending requests to major IT discussion boards, members of IT professional organizations, and through networking with colleagues. We sent recruitment materials to potential survey respondents via email. The email included the study objectives, request for participation, and a link to the statement of informed consent and the online survey. We did not collect any identifiable information from survey respondents. Our dataset included only those respondents whose companies had outsourced a part of the Information Systems function within the last five years. Surveys included in this dataset were those for which the survey respondents indicated “Yes” to the first question of the survey, which asked “Has your company recently (within the past five years) entered into any major initiative to outsource a part of its Information Systems (IS) function?” We also asked respondents to provide a brief description of the type of IT outsourcing initiative undertaken by their organization.

Our research sample consisted of 305 usable responses. For the purposes of this study, we focused our analysis on IT management and professional employees. Our sample consisted of 121 IT managers (39%) and 184 IT professionals (61%). For the purposes of our study, IT professionals included job roles such as systems analyst, network engineer, database administrator, but not including roles such as software programmer or help desk analyst (which are considered to be IT operations roles) [15, 19]. To gather this information, survey respondents indicated both their job category and their actual job title.

<table>
<thead>
<tr>
<th>Item</th>
<th>JS</th>
<th>OrgID</th>
<th>TI</th>
<th>TmID</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS1</td>
<td>0.95</td>
<td>0.25</td>
<td>-0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>JS2</td>
<td>0.95</td>
<td>0.30</td>
<td>-0.46</td>
<td>0.16</td>
</tr>
<tr>
<td>JS3</td>
<td>0.95</td>
<td>0.33</td>
<td>-0.45</td>
<td>0.14</td>
</tr>
<tr>
<td>OrgID1</td>
<td>0.31</td>
<td>0.85</td>
<td>-0.27</td>
<td>0.34</td>
</tr>
<tr>
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<td>0.89</td>
<td>-0.28</td>
<td>0.37</td>
</tr>
<tr>
<td>OrgID3</td>
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<td>0.90</td>
<td>-0.24</td>
<td>0.36</td>
</tr>
<tr>
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<td>-0.29</td>
<td>0.95</td>
<td>-0.02</td>
</tr>
<tr>
<td>TI2</td>
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<td>-0.28</td>
<td>0.97</td>
<td>0.06</td>
</tr>
<tr>
<td>TI3</td>
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<td>0.95</td>
<td>0.00</td>
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<tr>
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<td>0.40</td>
<td>-0.11</td>
<td>0.83</td>
</tr>
<tr>
<td>TmID2</td>
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<td>0.00</td>
<td>0.93</td>
</tr>
<tr>
<td>TmID3</td>
<td>0.09</td>
<td>0.22</td>
<td>0.15</td>
<td>0.79</td>
</tr>
</tbody>
</table>

JS = Job Satisfaction; OrgID = Organizational Identification; TI = Turnover Intention; TmID = Team Identification

Table 1. Factor Loadings

7.2. Analysis

We used partial least squares (PLS), a latent structural equation modeling (SEM) technique, to test the hypothesized relationships in our research model. PLS is a second-generation path analysis technique that uses a correlational, principal component-based approach to estimation [2, 11, 44, 52]. Prior studies cite PLS for its robustness in conducting causal-predictive analysis and its ability to handle deviations from normality [2, 11, 44, 52]. We chose PLS
because of its robustness in handling deviations from normality. We modeled each multi-item construct as reflective of the latent variable [33]. Because our structural model has no more than three structural paths to any one construct, our sample size is well beyond the sample size recommendation of 5 to 10 times the largest number of structural paths to any one construct [12, 13].

7.3. Measurement Validation

We assessed the validity and reliability of the items and constructs in our model. We assessed the validity and reliability of the items and constructs by examining the loadings of items on their respective latent variable [30]. The higher loadings imply that there is more shared variance between the construct and its associated items than error variance [30]. As represented in Table 1, all items loaded heavily and significantly (at $p < .05$) on their respective constructs; the results are indicative of individual item reliability.

Consistent with prior studies [7, 37], we assessed the reliability of our scales using composite reliability ($\rho$) [82]. Composite reliability is preferred over Cronbach’s alpha because it offers a better estimate of variance shared by the respected indicators and because it uses the item loadings obtained within the nomological network [26, 37]. Furthermore, composite reliability is perceived as a stronger reliability assessment when compared to Cronbach’s $\alpha$, and is considered a more conservative test of reliability [22]. As indicated in Table 2, the composite reliability scores for all scales (.89 and above) exceed the minimum threshold level of .70 [39, 51], thus indicating the reliability of the scales used in this study.

### Table 2 Correlation Matrix and Composite Reliability (CR) Scores

<table>
<thead>
<tr>
<th>Construct</th>
<th>CR</th>
<th>AVE</th>
<th>JS</th>
<th>OrgID</th>
<th>TI</th>
<th>TmID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction (JS)</td>
<td>.90</td>
<td>.90</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Identification (OrgID)</td>
<td>.91</td>
<td>.78</td>
<td>.31</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover Intention (TI)</td>
<td>.97</td>
<td>.92</td>
<td>.09</td>
<td>.30</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>Team Identification (TmID)</td>
<td>.89</td>
<td>.72</td>
<td>.14</td>
<td>.64</td>
<td>.02</td>
<td>.55</td>
</tr>
</tbody>
</table>

Note: Items on the diagonal (in bold) represent the square root of the AVE.

7.4. Results of Hypothesis Testing

We analyzed the research model with SmartPLS 2.0 M3 [58]. SmartPLS is a path modeling tool that is well-cited for highly complex predictive path models [27, 79]. For simplicity we present the test results of our model in stages. We used the bootstrap resampling technique with 200 samples to estimate the significance of the path coefficients. The PLS path coefficients for the research model are in Figure 1. In accordance with prior studies, we tested the effects of all control variables on the latent variables in the research model, and since we found none of the effects to be significant they are not shown.

In Hypothesis 1 (H1) we hypothesized that team identification would have a positive relationship with job satisfaction. The results indicate that the degree to which an individual identifies with his or her team or workgroup has no significant effect on whether that individual’s job satisfaction was impacted negatively...
or positively in the wake of IT outsourcing ($\beta=0.01$, ns), providing no support for H1.

Hypothesis 2 (H2) addressed the impact of organizational identification on job satisfaction. The results indicate that organizational identification has a significant and positive effect on job satisfaction levels in the wake of IT outsourcing ($\beta=0.32$, $p < 0.01$), thereby providing support for H2.

In Hypothesis 3 (H3), we hypothesized a negative relationship between team identification and turnover intention. The results indicate that the degree to which an individual identifies with his or her team or workgroup has no significant effect on an individual’s turnover intentions ($\beta=0.16$, ns), thus providing no support for H3.

In Hypothesis 4 (H4), we hypothesized a negative relationship between organizational identification and turnover intention. The results indicate that the degree to which an individual identifies with the organization has a significant effect on that individual’s turnover intentions, indicating that higher organizational identification was associated with decreased turnover intentions ($\beta=0.21$, $p < 0.10$), providing support for H4.

In Hypothesis 5 (H5), we hypothesized a negative relationship between job satisfaction and turnover intention. The results indicate that an increase or decrease in job satisfaction is a significant predictor of an individual’s turnover intentions ($\beta=-0.43$, $p < 0.001$) such that increased job satisfaction post IT outsourcing was linked to decreased turnover intentions, thereby supporting H5.

8. Discussion and Conclusion

To develop the research model for this study, we examined prior literature on social identity theory, job satisfaction and turnover intention as well as prior studies on IT personnel characteristics. We suggested that there would be a relationship between the degree to which IT employees identified with their organization and both their degree of job satisfaction and turnover intentions in the wake of IT outsourcing. Our results indicated that these relationships were both significant. This implies that organizations seeking to improve job satisfaction and reduce turnover intentions following an outsourcing initiative would be well-served to pursue initiatives intended to monitor and strengthen surviving employees’ level of identification with the organization moreso than the level of identification with one’s team or working group. In addition, our results suggest that programs specifically aimed at job satisfaction should reduce employee turnover intentions. Future research should address the timing and effectiveness of such initiatives.

Since employees possess multiple social identities, we also proposed a relationship between the degree to which IT employees identified with their team and their degree of job satisfaction and turnover intentions. However, our results indicated that team identification was not a significant antecedent to either outcome variable. Our results also showed that job satisfaction is negatively related to turnover intentions in the wake of IT outsourcing initiatives, as hypothesized. These findings are consistent with Van Dick et al. [76], who found that employees who highly identified with the organization reported greater job satisfaction and fewer turnover intentions.

Our results support our contention that social identity theory is applicable in the IT outsourcing context in which the organizational change resulted in changes to the IT workforce; however, organizational identity had more impact than team identity as a determinant of employees’ job satisfaction and turnover intentions. This suggests that when employees experience organizational change introduced by IT outsourcing, they are more likely to rely on their strong ties with the organization to adjust to the new workplace environment.

However, our findings contradict those of Marks and Lockyer [45], who found that team identification supplanted organizational identification as the greater determinant of affective outcomes. Instead we found the effects of team identification on both job satisfaction and turnover intentions to be non-significant in an IT outsourcing context. One reason for the contradiction could be that employees who more closely identify with their team are likely to perceive structural changes as a threat to their job security. Because such employees’ sense of self and value are tied to their membership in a defined team [66], any actual or perceived changes to the team structure could affect feelings and emotions pertaining to the satisfaction with their job and their ongoing commitment to their organization [61]. Another reason for the contradiction could be due to the characteristics of the IT personnel in their study. Participants in the Marks and Lockyer study were software programmers, whereas our study focused on IT professionals and managers. This is a key difference since the internal career orientations of IT personnel have been shown to impact job outcomes, such as job satisfaction and turnover [83]. Further studies may be useful for examining this difference in more detail. We intend to further explore the differences between occupational groups such as IT
professionals vs. IT management and present our findings as a post-hoc analysis.

Our study has several limitations, providing opportunity for future research. The present study focused solely on social identification at the organizational and team levels, although other levels may also influence employee behavior (i.e., role identification). A future study could also examine the interrelationship between social identity and other psychological or behavioral factors, such as psychological contracts. Both psychological contracts and social identity (i.e., organizational identification) have been linked with outcomes such as employee commitment, motivation, organizational citizenship behavior, job satisfaction and turnover intention [i.e., 6, 42, 45, 73]. We believe that with an understanding of IT personnel psychological and social impacts, senior management can develop recruitment and management approaches that appeal to the workplace expectations of IT employees and improve IT outsourcing outcomes.

9. References

Information Technology Workers: Examining Empirically


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