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The Art of Work Autonomy: A Test of Its Influence on Job Embeddedness

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Abstract

Mitchell, Holtom, Lee, Sablynski, and Erez (2001) demonstrated that Job Embeddedness is connected to intent to leave and voluntary turnover in employment. Previous researchers have also found that Work Autonomy predicts variables similar to Job Embeddedness (Mitchell et al., 2001). We investigated the factors that impact why people stay at their jobs by examining the relationship between Work Autonomy and Job Embeddedness. Data from 190 currently or previously employed participants were collected. As hypothesized, Work Autonomy was strongly correlated with on/off-the-job fit, on/off-the job sacrifice, on-the-job links and overall Job Embeddedness. However it was not correlated with off-the-job links. Implications for employee turnover in organizations and for the measurement of Job Embeddedness are discussed.

Keywords: work autonomy, job embeddedness, voluntary turnover

Introduction

Employee turnover has been a key issue in organizational psychology and management for decades. Many past turnover studies have indicated that the cost of turnover is very high for organizations. Understanding the factors that impact why people stay at their jobs will help us to understand how to minimize the personal and organizational costs of leaving the organization.

A fairly new theory that enriches our knowledge of voluntary turnover is the Job Embeddedness model. The “theory of staying” concluded that the greater a person’s connections to an organization and community, the more likely it was that he/she would remain in the organization. Mitchell, Holtom, Lee, Sablynski & Erez (2001) defined Job Embeddedness as compatibility of one’s work and community, social contacts of one’s work and community, and costs of leaving one’s job and community. Job Embeddedness was connected to intent to leave, “voluntary turnover”, job satisfaction, organizational commitment, job alternatives, and job search (Mitchell et al., 2001). However, little research thus far has investigated the influence of Work Autonomy on Job Embeddedness. The purpose of the current study is to explore the relationship between Work Autonomy and Job Embeddedness. More specifically, we first review both Job Embeddedness and Work Autonomy in the past literature, and then discuss the logic behind linking the two theories.

Job Embeddedness

Job Embeddedness consists of three aspects: Links (interpersonal relationships in the organization in which one works and within the community that one lives); Fit (compatibility of personal values and career goals, both on and off the job); and Sacrifice (perceived cost of leaving the job, from both an organizational and community perspective). This concept was developed by Mitchell et al. (2001), based on several studies using employees of eight grocery stores and a hospital as participants. They found that Job Embeddedness accounted for significant unique variance in the prediction of voluntary turnover beyond organizational commitment and job satisfaction. In addition, Holtom & O’Neil (2004) found support for the Mitchell et al. (2001) findings by testing this theory in a heath care setting where nursing turnover is traditionally very high. Another study, conducted by Lee, Sablynski, Burton & Holtom (2004) used the construct “Job Embeddedness” (both on-the-job and off-the-job embeddedness) to test its influence on several variables: organizational citizenship, job performance,
volitional absences, and voluntary turnover. They found that off-the-job embeddedness was significantly predictive of subsequent voluntary turnover and volitional absences, whereas on-the-job embeddedness was not. Additionally, embeddedness moderated the effects of absences, citizenship, and performance on turnover (Lee et al., 2004). In contrast, Johnson, Sachau, & Englert (2010) conducted a study in the United States Air Force Office of Special Investigations (AFOSI) and found that organizational embeddedness was significantly correlated with turnover intentions. However, off-the-job embeddedness was not included in this study due to the nature AFOSI (officers and enlisted personnel were asked to move very frequently). Moreover, on-the-job embeddedness was significantly predictive of organizational citizenship and job performance, whereas off-the-job embeddedness was not. To further develop the measurement of Job Embeddedness, Crossley, Bennett, Jex, & Burnfield (2007) conducted a longitudinal study, integrating the Job Embeddedness construct with a traditional model of voluntary turnover. After they controlled for a few variables (ie., job attitudes and job satisfaction) from traditional models of turnover, they found that Job Embeddedness still predicted voluntary turnover. Thus, studying reasons for both staying and leaving may help to build an understanding of retention.

The above Job Embeddedness studies were conducted in hospital, grocery, organizations and banking industries within the United States. In order to extend the generalizability of the concept, Holtom & Inderriden (2006) tested the Job Embeddedness model across multiple, diverse industries. Studies of Job Embeddedness have also been conducted in culturally diverse environments (ie., Hispanic, individualistic, and collectivist cultural environment) (Mallol, Holtom, & Lee, 2007; Ramesh & Gelfand, 2010). Moreover, Tanova & Holtom (2008) explained the concept of voluntary turnover using Job Embeddedness in four European countries. Their findings supported past work by Mitchell et al. (2001) and Johnson et al. (2010).

Job Embeddedness also plays an important role in socialization tactics and new employees' turnovers. On-the-job embeddedness is negatively related to turnover and mediates relationships between some socialization tactics and turnover among new employees (Allen, 2006). High new employees' turnover rate increases the costs for organizations (recruitment, selection, and training costs). Socialization tactics (the methods organizations use to assist newcomers adaptation to the new experience, to reduce the uncertainty and anxiety, and to obtain desired or necessary attitudes, behaviors, and knowledge of the new organization) enable organizations to actively embed new employees; collective, fixed, and investiture tactics were positively related to on-the-job embeddedness.

Moreover, Holtom et al. (2006) believed that organizations could increase human and social capital by applying Job Embeddedness theory and offered plenty of success examples. Leaving a job can be very stressful for employees. Issues like uncertainty, transition adjustments, and disrupted social networks could lead to high personal costs. Furthermore, organizational costs could also be tremendous. The most critical issues for organizations were attraction and retention of valued employees. Organizations were beginning to become aware that social capital was a vital resource for their success. Creating social capital involved social relationship that forms both outside and inside of the organization. Additionally, many past studies indicated that one strategy to increase firm value is by establishing human capital. We believe that establishing human capital might involve having autonomy at work.

**Work Autonomy**

Three types of Work Autonomy have been defined as: “(1) Work Method Autonomy-the degree of discretion/choice individuals have regarding the procedures (methods) they utilize in going about their work; (2) Work Scheduling Autonomy-the extent to which workers feel they can control the scheduling/sequencing/timing of their work activities; and (3) Work Criteria Autonomy-the degree to which workers have the ability to modify or choose the criteria used for evaluating their performance.” (Breaugh, 1985). Breaugh (1985) suggested that Work Autonomy scales needed to be further explored and investigated. Breaugh and Becker (1987) and Breaugh (1989; 1999) conducted more studies and obtained more information about validity and reliability to the Work Autonomy scales. Additionally, in a non-Western context, Sadler-Smith, El-Kot & Leat (2003) looked at work autonomy facets and its validity in a few Egyptian organizations. Overall, the scale for Work Autonomy was considered consistent and relatively stable.

Hackman & Oldham (1976) suggested that people would be more likely to be motivated if they had work autonomy--the substantial freedom, independence and discretion. Specifically, the overall potential of a job to prompt internal work motivation was measured by the Motivating Potential Score (MPS) which included five dimensions: MPS= [(Skill Variety+ Task Identity+ Task significance)/3] x Autonomy x Feedback. A near-zero score of a job on either autonomy or feedback would reduce the overall MPS to
near-zero. Further, it had been shown that people performed better on task if it began with high Work Autonomy (Niessen & Volmer, 2010). Thus, it seems worthwhile to further explore the valuable role of work autonomy in motivation of staying at one's work.

Work Autonomy also influenced turnover intention in different work settings and different cultures. A turnover study was conducted using 227 employees from a Humane Society for Animal Welfare situated in the Northeastern United States. Gagne (2003) found that autonomy support predicted lower volunteer turnover. Moreover, Ahuja, Chudoba, Kacmar, McKnight, & George (2007) investigated the turnover model in the Road Warriors (RW) context. “Road Warriors” are defined as individuals who hold IT positions, who are from a primarily IT-based or IT-driven company, and who work at the client site for the sole purpose of IT support. The researchers found that autonomy was positively connected to organizational commitment and negatively related to work exhaustion. Autonomy might be experienced differently among virtual workers, depending on the characteristics of work environment. In another culture-Egypt-work scheduling autonomy was also found to be associated with job commitment (Sadler-Smith, El-Kot & Leat, 2003).

The relationship between work autonomy and job embeddedness

Previous researchers have found that work autonomy predicts similar variables as Job Embeddedness (i.e., work- family conflict, motivation, turnover, and organization commitment) (Ahuja et al., 2007; Mitchell et al., 2001). Furthermore, increasing organizational and supervisor support might increase Job Embeddedness. Giosan (2005) suggested that people who perceive that the organization supports them and those who believe that their skills are transferable are more likely to become embedded. In other words, the more employees’ needs are met, the more likely they are to feel bonded or fit to the organizations. Psychological need fulfillments (need for autonomy, competence, and relatedness) partially mediate the relations between perceived person-environment fit, employee commitment, and job performance. The person-environment fit consists of personal-organization fit, person-group fit, and job demands-abilities. The self-determination theory posits that individuals have three basic psychological needs (needs for autonomy, competence, and relatedness) (Greguras, & Diefendorff, 2009). In order to enhance Job Embeddedness, Lee et al (2004) suggested that building community, developing a sense of belonging, establishing deep ties among employees and deepening social capital which might be able to increase through maximization of work scheduling and work method autonomy.

Flexible work seems to play an essential role in decreasing the rate of voluntary turnover. Employees who are satisfied with their jobs and committed to the organization are less likely to leave voluntarily, and will perform better on the job if their preferences in staffing and scheduling are met (Holtom, Lee, & Tidd, 2002). Additionally, Corssley et al. (2007) believed that offering flexible scheduling and family friendly programming may enhance employees’ embeddedness (i.e., social connections to others within the community). Maertz, Stevens, & Campion (2003) tested the turnover model for the Mexican maquiladora workers and found a negative relationship between work flexibility and voluntary turnover. Flexible work enables employees to develop more connections or links both inside and outside the organization. Specifically, it allows individuals to adapt work roles to their strengths and schedules. Further, employees with high involvements in the organization will perceive a greater sacrifice to leave the organization. Thus, flexible work might increase the links, fit, and sacrifice both on and off the job (Holtom & Inderrieden, 2006).

Alternatively, employees with higher control and autonomy might feel less dependent on the support provided by their organizations and therefore feel less obligated to stay in the organizations. Aube, C., Rousseau, V., & Morin, E. (2007) used a stressful work setting like prisons and found that Perceived Organization Support (the degree to which employees perceive their employer to be concerned with their well-being and to value their contributions to the organization) and Affective Commitment (attachment to and identification with an organization) are strongly correlated, but they have weaker effects if one’s internal locus of control and autonomy are high.

Current Study

Currently, there is only a limited collection of research involving the association between Work Autonomy and Job Embeddedness, and the existing literature involves mixed information about these two constructs. Moreover, the concept of Job Embeddedness is still under development and the researchers have suggested testing its relationship to similar constructs (Mitchell et al., 2001). Therefore, we have undertaken a systematic explanation of how Work Autonomy affects Job Embeddedness.
Hypotheses

General Hypothesis: Work autonomy is positively related to overall Job Embeddedness
Hypothesis 1a: Work autonomy is positively related to on-the-job Fit.
Hypothesis 1b: Work autonomy is positively related to off-the-job Fit.
Hypothesis 2a: Work autonomy, is positively related to on-the-job Links.
Hypothesis 2b: Work autonomy, is positively related to off-the-job Links.
Hypothesis 3a: Work autonomy, is positively related to on-the-job Sacrifice.
Hypothesis 3b: Work autonomy, is positively related to off-the-job embeddedness Sacrifice.

Method

Participants
Participants were undergraduate students enrolled in Psychology courses at San Francisco State University who were either currently employed (part-time/full-time) or previously employed (part-time/full-time). Participants meeting these employment criteria were also recruited from the general public. A total of 205 participants completed an online survey. Participants included 142 females (69.3%) and 61 males (29.8%) with a mean age of 27.45 years (SD=8.53). Two participants did not report their gender. The sample was ethnically diverse, with 59.5% Caucasian, 14.1% Asian American, 8.8% Hispanic, 8.8% Multi-Racial, 2.0% African American, and 6.3% did not report their ethnicity.

Procedure
The present study used survey methodology and word of mouth to acquire information from participants. Participants were recruited via an online survey-hosting website (SurveyMonkey.com) where they completed the online survey. The study link was also posted on the Psychology department’s online participant pool system and social network websites (i.e., Facebook, Couchsurfing.org). Participants were informed that they would be answering questions about their work, community environment and some demographic questions. Upon completion of questionnaires, participants were debriefed online.

Measures

Job Embeddedness. Participants’ work and community environment were measured using the Job Embeddedness scale (Mitchell et al., 2001). This measure consists of three embeddedness subscales-Links, Fit, and Sacrifice—with 40 items that employ multiple response formats: (a) Likert scale (rated on 7-point Likert-type scales ranging from 1 (strongly disagree) to 7 (strongly agree), (b) yes/no, and (c) self-report.

On-the-job Fit. The on-the-job fit subscale includes nine items on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: “I feel like I am a good match for this company”. The sum of nine items formed one’s fit in his/her organization. Higher scores of on-the-job fit indicate a better fit in his/her organization.

Off-the-job Fit. The off-the-job fit subscale includes five items on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: “This community is a good match for me”. The sum of five items formed one’s fit in his/her community. Higher scores of off-the-job fit indicate a better fit in his/her community.

On-the-job Links. Seven items were used to measure each participant’s organizational links: (a) “How long have you been in your present position?” (b) “How long have you worked for this company” (c) “How long have you worked in this industry?” (d) “How many coworkers do you interact with regularly?” (e) “How many coworkers are highly dependent on you?” (f) “How many work teams are you on?” (g) “How many work committees are you on?” All items were recoded, standardized and the sum of the standardized items was computed for each participant to form their links in organizations. Higher scores of on-the-job links indicate that someone has a greater amount of social contact at work.

Off-the-job Links. Six items were used to measure each participant’s community links: (a) “Are you currently married?” (b) “If you are married, does your spouse work outside the home?” (c) “Do you own the home you live in?” (d) “My family roots are in this community” (e) “How many family members live nearby?” (f) “How many of your close friends live nearby?” Again, all items were recoded, standardized and the sum of the standardized items was computed for each participant to form their links in community. Higher scores of off-the-job links indicate that someone has a greater amount of social contact in one’s community.

On-the-job Sacrifice. The on-the-job sacrifice subscale includes ten items on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: “I would sacrifice a lot if I left this job”. The sum of ten items was used to estimate one’s sacrifice in
his/her organization. Higher scores of on-the-job sacrifice indicate that someone has more to lose if one leaves his/her job.

**Off-the-job Sacrifice.** The off-the-job sacrifice subscale includes nine items on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: “Leaving this community would be very hard.” The sum of three items was used to represent one’s fit in his/her community. Higher scores of off-the-job sacrifice indicate that someone has more to lose if one leaves his/her community.

**Work Autonomy.** The Work Autonomy Scale was used to measure how much work autonomy one has. (Breaugh, 2007). This measure consists of nine items that employ a 7-point continuum Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: “I am allowed to decide how to go about getting my job done (the methods to use)”. The sum of nine items was used to represent one’s work autonomy. Higher scores of work autonomy indicate one’s a greater amount of freedom at work.

**Results**

The first goal of this study was to explore the descriptive statistics of the items used to measure Work Autonomy and Job Embeddedness. In our sample, individuals tended to be above the midpoint 7-point of the scale ($M = 4.77; SD = 1.11$). The Cronbach’s alpha was in the acceptable range ($\alpha = .77$). As expected, there was a strong positive correlation between the nine items used to measure Work Autonomy and the three subscales used to measure Job Embeddedness ($r [205] = .50, p < .01$). Furthermore, we examined the relationship between Work Autonomy and Job Embeddedness by conducting correlation analyses.

**The relationship between Work Autonomy and Job Embeddedness**

We were interested in the relationship between Work Autonomy and Job Embeddedness. In particular, it was hypothesized that work autonomy is positively related to Job Embeddedness. Table 1 shows the correlation results between Work Autonomy and Job Embeddedness. Specifically, Work Autonomy showed a positive correlation with Job Embeddedness with a medium effect ($r = .31$).

**The relationship between Work Autonomy and On-the-Job Embeddedness**

To describe the relationship between work autonomy and On-the-Job Embeddedness we examined the correlations between (a) Work Autonomy and organizational/ on-the-job links; (b) Work Autonomy and organizational/ on-the-job fit; and (c) Work Autonomy and organizational/ on-the-job sacrifice. Overall, Work Autonomy was significantly correlated with on-the-job fit ($r [204] = .24, p = .001$), and on-the-job sacrifice ($r [204] = .31, p < .001$); however Work Autonomy only showed modest correlations with on-the-job links ($r [205] = .14, p < .05$).

**The relationship between Work Autonomy and Off-the-Job Embeddedness**

To describe the relationship between Work autonomy and Off-the-Job Embeddedness we examined the correlations between (a) Work Autonomy and community/ off-the-job links; (b) work autonomy and community/ off-the-job fit; and (c) Work Autonomy and community/ off-the-job sacrifice. In sum, work autonomy was significantly correlated with off-the-job fit ($r [204] = .24, p = .001$), and off-the-job sacrifice ($r [205] = .31, p < .001$); In contrast, Work Autonomy was not significantly correlated with off-the-job links ($r [205] = -.02, n.s.$).

**Discussion**

As expected, participants’ work autonomy scores were highly correlated with their on/off-the-job embeddedness. In line with hypothesis 1a/b and 3a/b, our findings showed that work autonomy is positively correlated with on/off-the-job fit and on/off-the-job sacrifice. In other words, the amount of freedom at work affected the compatibility of one’s work and community and costs of leaving one’s job and community, supporting Holton & Inderrieden’s (2006) prior findings.

In addition, our findings supported hypothesis 2a that the amount of freedom at work did have an effect on people’s connections at work which supported Corssley et al.’s (2007) prior findings. However, the results showed that the effect between freedom at work and one’s connections at work was very small. The small effect size might be explained by Aube et al.’s (2007) prior findings that people who have more control over their work feel less dependent on their co-workers or their organizations. Therefore, people who have higher work autonomy might have less links at work.

However, hypothesis 2b was not supported. Results revealed that work autonomy was not correlated with off-the-job links. In other words, no relationship was found between freedom at work and the number of social contacts within one’s community. Maertz, Stevens, & Campion (2003) and Corssley et al. (2007) argued that flexible work is beneficial for
employees to develop more connections or links outside the organization. Furthermore, the Cronbach’s alpha for off-the-job links items was below the acceptable range ($\alpha=.31$). This might explain why hypothesis 2b was not supported.

**Limitations and Future Research**

Certain limitations in the current study may provide potentially useful avenues for future research. First, we note that some of the questions might not apply to some of the jobs. For example, we asked in our survey: “how many work teams are you on?” and “how many work committees are you on?” Many jobs don’t have teams or committees, which would explain why it was difficult to gather the information from participants. Approximately 62% of the participants left those two questions either blank, “N/A” or none. This is one problem which future research should develop a Job Embeddedness scale that applies to most jobs.

Second, we sampled a wide range of occupations. Firm size and job positions might be potential confounds for which we did not control. Cenker, William, & Pearson, Michael. (1993) focused their study on the role of firm size and job positions which they found that firm size and job position affect accountants’ perceived work autonomy. Additionally, higher positions were linked to higher perceived autonomy. Moreover, people who worked in the larger firms were more satisfied with respect to autonomy than people from the smaller firms. Future research should consider investigating and including firm size and job position in the Job Embeddedness scale.

**Practical Implications**

Our findings indicated that the compatibility of one’s work and community, costs of leaving one’s job and community, and number of social links at work were enhanced when employees perceived more autonomy at work. Earlier we noted that turnovers were costly for organizations. Organizations should maximize the autonomy at work. Furthermore, work autonomy is a useful element for organizations to evaluate employees’ job satisfaction and their embeddedness at their job.

**Conclusion**

This study helps us better understand the influence of Work Autonomy on Job Embeddedness and the ways in which Work Autonomy helps Job Embeddedness to better predict turnovers. More importantly, Work Autonomy might indirectly minimize the personal and organizational costs of leaving the organizations.

**References**


Table 1: Pearson correlations between work autonomy and job embeddedness

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<td>.42**</td>
<td>.13</td>
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<tr>
<td>6 Off-the-job Fit</td>
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<td>1.29</td>
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Note. ** p < .01; * p < .05