

PERSONAL PROFESSIONAL NETWORKS: THEIR EFFECT ON EXTRACURRICULAR WORK BEHAVIORS AMONG IT PROFESSIONALS

Completed Research Paper

Iris Junglas

Florida State University
College of Business
Tallahassee, FL 32306
ijunglas@fsu.edu

Deborah J. Armstrong

Florida State University
College of Business
Tallahassee, FL 32306
darmstrong@fsu.edu

Lakshmi Goel

University of North Florida
Coggin College of Business
Jacksonville, FL 32224
l.goel@unf.edu

Jeanne Harris

Accenture Institute for High
Performance
Chicago, IL 60601
jeanne.g.harris@accenture.com

Abstract

Personal professional networks, or the set of peers an individual socializes with outside of organizational boundaries, are gaining more and more attention in a business environment that is increasingly volatile. Besides blurring the lines between personal and professional lives, personal professional networks require grooming—time often taken away from work. This paper is set out to study the influence of personal professional networks in juxtaposition with organizational commitment on extracurricular work behaviors. Extracurricular work behaviors describe work behaviors that are discretionary and not explicitly linked to an employee's role description within the organization, but uses portions of work time to be conducted.

Analyzing 621 IT professionals across the U.S., we find that an IT professional's dependence on personal professional networks is more predictive of extracurricular work behaviors than organizational commitment; we also find that an IT professional's dependence on personal professional networks has no impact on his turnover intentions.

Keywords: IT professional, personal professional networks, extracurricular work behaviors, turnover, affective organizational commitment

Introduction

Our personal and professional lives are blurring. More and more employees find it difficult to define a clear line of where personal life begins and professional life ends, and vice versa. Smartphones, tablets, and other portable devices make it almost impossible not to work during off times. IT professionals in particular, typically among the first adopters of novel technologies, are often unable to separate their work and personal life (Armstrong et al. 2007; Turel et al. 2011). Sometimes work activities follow them home, and at other times, personal activities follow them into work.

Studies have shown that as many as 20 percent of employees worldwide are addicted to their work and thus spent their free time working (Nauert 2010); simultaneously, studies have shown that employees devote as much as 25 percent of work time on “personal items” (Cheng 2008). Those “items” may include texting or gaming, or they may include building and grooming what we term as a “personal professional network” in the following.

Personal professional networks, or the set of peers that an individual socializes with outside of work to advance one’s job, are gaining more and more precedence in a business environment that is increasingly volatile. In fact, the importance of personal professional networks has been found to be an integral factor in a typical Silicon Valley employee’s day of work (Harris and Junglas 2013). These networks help an individual in numerous ways: from exposure to new ideas and solutions, to having access to leaders in the field, to overcoming work-related issues when stuck on a problem, the existence of personal professional networks has been touted as instrumental in one’s advancement (Dulworth 2006). For IT professionals, personal professional networks can be viewed as the first source of information in a discipline that constantly faces innovations and business challenges. Reports have indicated that IT professionals, more so than others, have an innate need for learning (e.g., Lohman 2009; Tsai et al. 2007; Zawacki 1992). In fact, often these individuals have chosen their profession for exactly this reason. This need, fueled by the continuous innovation of technologies, is more pronounced in the IT profession than in others. This makes IT professionals a unique group to study as any technological phenomenon that has the potential to impact society should be observable among IT professionals first.

In order to develop these personal professional networks, however, an employee—conscientiously or not—has to put in a lot of time and effort. In other words, a good portion of work time is now devoted to growing these networks, and less time is spent toward the organization’s needs and goals.

This paper is set out to study the influence of personal professional networks in juxtaposition with organizational commitment on extracurricular work behaviors. We propose and test a model that develops the notion of “extracurricular work behaviors” and links its intensity to the extent to which an individual feels committed to the organization and to the extent to which he or she is reliant upon the existence of a personal professional network. In order to show evidence for our proposed model, we will sample 621 IT professionals in the U.S.

While numerous studies exist on social networks, they vary significantly in the type and

level of network they are studying. Studies in the IS literature have focused on technology supported interpersonal social networks and knowledge contributions to those networks (e.g., Ahuja and Carley 1999; Jarvenpaa and Majchrzak 2010). Researchers have explored the various factors that influence knowledge contributions to online communities, such as social capital (Maurer et al. 2011), citizenship behavior (Yoon and Wang 2011) and network fluidity (Faraj et al. 2011). Only a few have tackled the category of personal professional networks (e.g., Wasko and Faraj 2005), and those are primarily from the organization's perspective and interests. This work addresses this gap by taking the employees' (i.e., IT professionals') perspective and comparing the influence of individually focused and organizationally focused factors on their turnover intention.

Theoretical Development

In the following sections, we will discuss the theoretical underpinnings of work behaviors, organizational commitment, and dependence on personal professional networks. Successively, we will build the research model as it is proposed and portrayed in Figure 1.

Extracurricular Work Behavior

The term “extracurricular work behavior” was first coined in 1967 in a study that scrutinized the scholastic performance of high-ability students. It was found that underachievers were either engaged in working on other subject areas or nonacademic work, while overachievers were mostly engaged “in social work-related interactions with peers but not in reading or writing” (p. 9, Perkins 1967). Both groups, so the study found, spent considerable amounts of time on behaviors that were not part of their role as a student.

Accordingly, in this paper, we define extracurricular work behavior as an individual's behavior that is discretionary and not explicitly linked to his or her role description within the organization, but uses portions of work time—substantial or not—to be conducted. This behavior is entirely voluntary and not rewarded by the organization in any way. It is, however, often job related, even though, most of the time, it lies outside the core tasks that defines an individual's job role. It is also not intended to be harmful to the organization, as discussed later.

An employee engages in extracurricular work behaviors, for example, when networking with other professionals outside the company. Perhaps he got stuck on a work problem (e.g., chunk of code not working) and is seeking help from a peer or expert in the field. Likewise, an IT professional participating in crowdsourcing endeavors or open source projects are good examples of extracurricular behaviors that may indirectly contribute to an employee's job (e.g., increase my expertise in data modeling or mobile app development), but are not recognized by the organization as central activities pertaining to his or her respective job descriptions. What is essential to this notion is that an employee uses portions of his working hours to pursue these extracurricular activities.

While somehow related, extracurricular work behaviors should not be confused with job autonomy. Job autonomy describes the level of discretion and independence an employee can assume in determining how, when and where his job is done (Bailyn 1993,

Clark 2001). Autonomy has been described in IS literature as empowering individuals and providing them with the freedom to decide how to accomplish assigned tasks (e.g., Ahuja and Thatcher 2005). Particularly in a knowledge economy, and among IT professionals, the level of job autonomy is increasing. However, opposed to extracurricular work activities that consume portions of the work time, job autonomy is about optimizing work time, particularly optimizing how a job is done so as to best fit an individual's cognitive model or schedule.

Likewise, extracurricular work behavior should not be confused with counterproductive work behaviors. While counterproductive work behaviors (or short CWB) are set out to harm the organization and/or its stakeholders (Spector and Fox 2005), extracurricular work behaviors are not. Typical examples of CWB include absenteeism, theft, retaliation, sabotage, and creating a hostile work environment through behaviors that are abusive to others (Spector et al. 2006). Accordingly, counterproductive behaviors can be directed toward the organization as a whole, management, or toward other individuals (Robinson and Bennett 1995).

Extracurricular work behaviors, on the other hand, are neither intended to suppress nor to promote the effective functioning of the organization. They are either pursued because of the behavior per se, or because of personal (but not organizational) objectives, such as career or performance aspirations. In the case of the latter, an individual typically expects some form of personal gain from participating in extracurricular work behaviors (e.g., enhanced reputation as a Java developer). Learning as a form of professional advancement or informational exchanges with other experts in the field as a form of professional networking are just some of those examples. They might also be indicative, however, of the fact that an individual is interested in advancing his career outside the organization. Accordingly, turnover intentions, an attitudinal variable that captures an individual's tendency to leave his current organization within a foreseeable timeframe, should rise. The more an individual partakes in extracurricular work behaviors, so we speculate, the less he is interested in focusing on his given job role and organization exclusively, and the more he is likely to search for another job. We therefore hypothesize:

H1: Extracurricular work behaviors have a positive effect on turnover intentions.

Affective Organizational Commitment

Keeping employees committed to the organization is a top priority for organizations (Hausknecht et al. 2009; Reiche 2008), particularly during the uncertain economic conditions currently being experienced across the world. Organizational commitment describes an employee's psychological attachment toward the employing organization (Allen and Meyer 1996). A high level of commitment is characterized by feelings of belonging, pride and loyalty. Employees who possess high levels of organizational commitment are in congruence with an organization's values; they are also willing to exert effort on behalf of the organization. Often, they tend to be actively involved in the workplace, they feel comfortable in their role and within the organization; and they feel emotionally satisfied with their work and the organization.

Organizational commitment has been found to be negatively predictive of turnover (e.g., Allen and Meyer 1996; Ahuja et al. 2007; Igbaria and Greenhaus 1992; Mobley et al.

1979) and positively associated with organizational citizenship behavior, i.e., behaviors that go beyond an expected job task (Uçanok and Karabati 2013; Williams and Anderson 1991), and job performance (Chen and Francesco 2003).

The organizational behavior literature has developed many conceptualizations of organizational commitment (e.g., Hrebriniak and Aluto 1972). For example, one study identified three dimensions of the commitment construct: affective, continuance, and normative (Allen and Meyer 1990; Meyer et al. 1993). Affective commitment refers to an emotional attachment to the organization, while continuance commitment refers to the perceived costs an individual incurs when leaving the organization; normative commitment represents the perceived obligation an individual has to stay with the organization. Employees with a strong affective commitment remain with the organization because they want to, those with a strong continuance commitment remain because they need to, and those with a strong normative commitment remain because they feel they should (Meyer et al. 1993).

This study is designed to look more closely at the affective component of organizational commitment. Characterized as a strong belief in and acceptance of the organization's goals and values and a willingness to expend efforts on behalf of the organization, affective organizational commitment captures an individual's corporate allegiance; thus it refers to the bond that an individual has with his or her workplace and the extent to which he or she identifies with and enjoys the membership of the organization (Porter et al. 1974; Mowday et al. 1979).

When compared to continuance and normative organizational commitment, affective organizational commitment has been shown to be more closely related to an individual's intention to leave the organization (Riketta and Van Dick 2005). In fact, it has been identified as a key proximal precursor in explaining voluntary turnover intentions by a plethora of studies (e.g., Griffeth et al. 2000; Hom and Griffeth 1995; Joo 2010; Mathieu and Zajac 1990; Michaels and Spector 1982; Mowday et al. 1979; Tett and Meyer 1993)—and particularly among highly skilled professionals (Cho and Huang 2012; Igarria and Greenhaus 1992; Pare and Tremblay 2007; SamGnanakkan 2010). Simultaneously, affective organizational commitment has also been found to be one of the main reasons why employees decide to stay with their current organization (Hausknecht et al. 2009). We therefore reconfirm the association between organizational commitment and turnover intentions, as pointed out by prior research, by stating:

H2: The level of affective organizational commitment negatively influences turnover intentions.

Turbulent economic times can cause many employees to view their professional development as an ongoing necessity. This is especially true for knowledge workers (Barner 1996) and among the younger generations (Kennedy 1998). Studies that have investigated “skills-hungry employees” (Withers 1998) show that their desire for development is mostly driven by uncertainties about employability (Gabriel 1999; Martin et al. 1998). Those employees that want to belong to the organization are also likely to contribute more (e.g., Iverson and Buttigieg 1999). They are expected to be more willing to add to the organization's goals and less likely to engage in extracurricular work activities that do not directly contribute.

Analogously, a study conducted among online community members, using the typology of organizational commitment, argues that members may have psychological bonds to a particular online community based on affect, need, or obligation (Bateman et al. 2011). But if the individual is attached to the organization, i.e., exposing high affective organizational commitment, he or she is less likely to feel a social bond with others in the network and is also less likely to experience a sense of association with the network. Thus, individuals that show high levels of affective commitment are expected to show a low tendency to participate in activities that are not immediately or directly work-oriented. As an employee is committed or attached to the organization, he or she is less likely to engage in extracurricular work behaviors. We therefore hypothesize:

H3: The level of affective organizational commitment negatively influences extracurricular work behaviors.

Perceived Dependence on Personal Professional Network

Researchers, particularly in the organizational behavior realm, have paid considerable attention to networks, and their antecedents and consequences in organizational contexts (Kilduff and Brass 2010). Defined as a social phenomenon in which individuals are “connected by specific ties reflecting interaction and interdependence, such as friendship, kinship, knowledge exchange, and so on” (p. 1329, Carpenter et al. 2012), networks have been studied from multiple perspectives, types, and across a wide range of social structures. For example, numerous studies exist that take an actor-centered role, i.e., they focus on the position of an actor within the network by assessing his centrality (i.e., the extent to which he is linked to other actors in the network, directly or indirectly) as well as the strength and density of these relationships (e.g., Kilduff and Krackhardt 1994). Often, these studies rely on social capital theory to capture and explain the attitudinal and behavioral effects of a network on its participants (Carpenter et al. 2012). In contrast, numerous other studies exist that focus on how networks emerge and evolve over time; they primarily study rules and patterns of networks’ formation and change (e.g., Burkhardt and Brass 1990). Other studies have chosen an exclusively interpersonal perspective by choosing the individual actor as the unit of analysis—as opposed to taking an inter-organizational perspective in which the organization is the object of study (Moliterno and Mahony 2011).

Within this map of studies, this paper focuses on a niche subset of networks: personal professional networks. A personal professional network, as used in this paper, is defined as the set of people that an employee socializes with outside of work to advance one’s job. Such a set might contain former colleagues, business contacts, individuals that one knows from specific communities of interest that she associates with (e.g., trade organizations, developer groups), or simply friends. In this sense, a personal professional network is neither an intra- nor an inter-organizational network, because it resides outside the corporate organization, but it is used to either support or advance a member inside the organization. Personal professional networks are special in the sense that they are social networks, yet are focused on profession-related objectives. Reaching out to peers in the same profession is increasingly possible, as finding communities of interest and linking up to them is made easier through technologies that mimic and support human interactions and exchanges.

The advantages of participating in personal professional networks are multi-fold. Ranging from advancing one's professional learning abilities and enhancing one's professional reputation, to job seeking opportunities, personal professional networks provide a wide variety of benefits—to the extent that individuals grow increasingly dependent on their existence. This dependence is reflected in an individual's belief that personal professional networks are integral for his or her success, and are impossible to live without. Also reflective of this dependence is an individual's perception of receiving job and career assistance from a personal professional network. Individuals understand that the value of a personal professional network extends beyond corporate boundaries and often continues past the lifespan of a career within a specific corporation. Thus, we expect the exposure to information regarding the content and availability of jobs to have an impact on an individual's intention to leave the company. More specifically, we hypothesize that an individual who values and depends upon his personal professional network is more likely to seek out job alternatives. Accordingly, we state:

H4: The level of perceived dependence on personal professional networks positively influences turnover intentions.

This proposition is also somewhat in accordance with a study that examined the effects of intra-organizational networks on turnover intentions (Moynihan and Pandey 2007). While this study focused solely on internal corporate social networks, it showcased an individual's obligation toward coworkers and the support received from coworkers as instrumental in lessening turnover intentions. Accordingly, external networks, such as personal professional networks, should be expected to heighten turnover intentions.

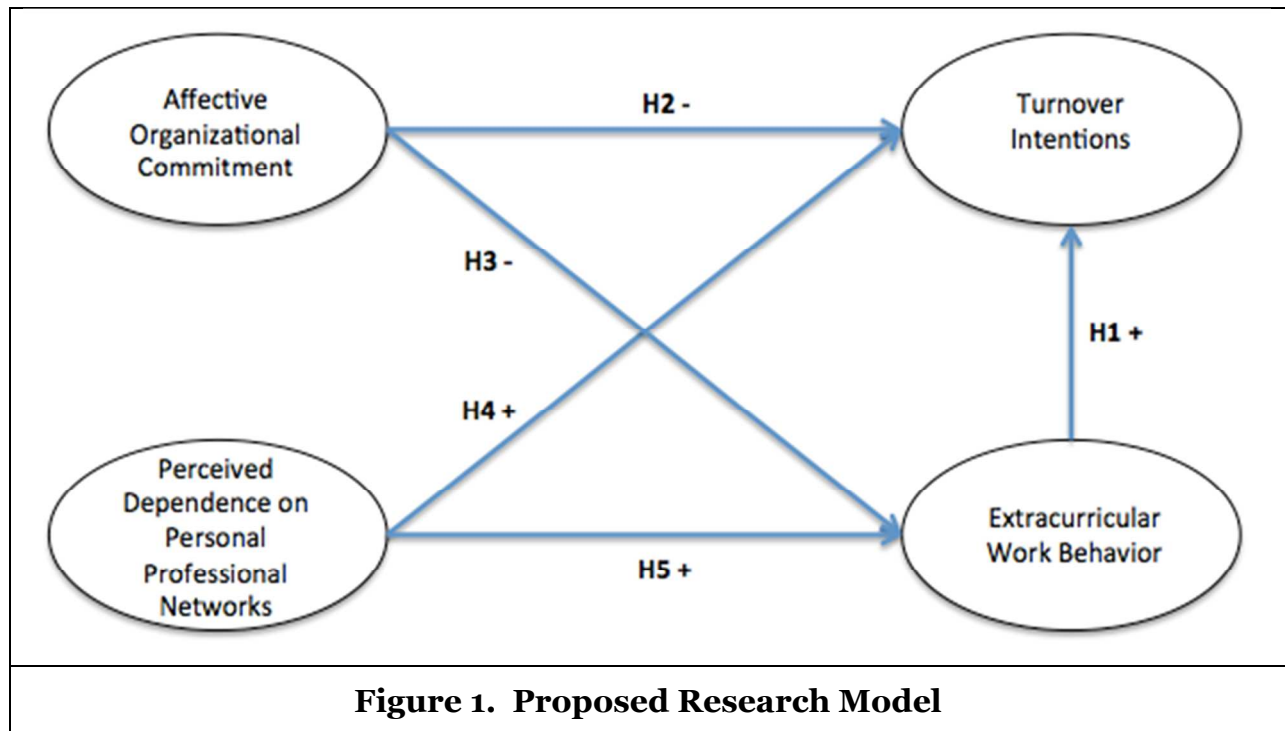
As mentioned previously, the advantages of participating in a personal professional network are multi-fold—disadvantages, however, are rather confined. They primarily comprise the extra effort that an individual has to put into establishing and maintaining the network. A lot of personal time is spent on grooming these networks—and sometimes a lot of work time also. On occasion, individuals might use their personal professional networks in addition to—and sometimes even in lieu of—objectives they are not able to actualize in the jobs they have taken. In this case, an individual might view his or her current job as a “parking lot,” providing a safe haven to look for better job opportunities in the future. In the meantime, personal professional networks can serve as a platform not only to connect, but also to prove oneself.

One study, for example, has examined a professional network for the legal association in order to understand how individual motivations and social capital influence knowledge contribution to the network (Wasko and Faraj 2005). The study found that individuals have no problems in contributing when they perceive that it enhances their professional reputation, when they have high levels of expertise in the shared practice and a high level of centrality. Surprisingly, the same study found that contributions to the network were independent of reciprocity expectations or levels of commitment toward the network. This finding supports the assumption that individuals use personal professional networks to advance themselves, not the network. They might do so at the expense of their current work, thus committing small or large portions of their work time towards “projects” that are valued by the network, but not rewarded, or even sanctioned, by the employing organization. The more an individual seeks the approval of the network, i.e., the more an individual is dependent on it, the more he or she will

spend working time on non-work related products. Thus, we hypothesize:

H5: The level of perceived dependence on the personal professional network positively influences extracurricular activities.

Figure 1 summarizes our proposed research model. Organizational commitment as well as an individual's perception of his or her dependence on personal professional networks is pivotal in explaining an individual's extracurricular work behaviors and turnover intentions. The figure also illustratively shows that organizational commitment might compete with the value of personal professional networks in its predictive power for extracurricular work behaviors and turnover intentions.



Research Method

The study was part of a comprehensive research project, initiated and championed by the Accenture Institute for High Performance. It was designed to understand and study the breadth and depth of work attitudes, their drivers, benefits and drawbacks, as well as the strategies to manage them. In a first step, we conducted 10 in-depth phone interviews with business and IT executives, soliciting their understanding of employee work attitudes and their shifting affiliation with their own organization. The set of interviewees represented a wide range of industries.

In a second step, we developed and piloted a survey that was intended to capture the extent of extracurricular work behaviors and its antecedents. Measures of extracurricular work behavior and dependence on personal professional networks were developed following the principles as outlined by Moore and Benbasat (1991).

Organizational commitment measures were developed using a modified version of the affective commitment scale created by Meyer et al. (1993).

In a third step, we surveyed 621 full-time U.S. based IT professionals, spanning a wide variety of roles, age groups, and industries (as indicated in Table 1). The majority of IT professionals sampled were either working as corporate IT employees (i.e., a person providing operational support for corporate IT systems, including, for example, financial or HR systems and/or corporate-wide databases, networks or security), software engineers (i.e., a person working on the development of IT products that are customer-facing), or IT product managers (i.e., a person that generates new product ideas in the IT realm, defines requirements, and works closely with engineering and marketing to launch product features). The average age of our respondents was 36 years. IT professionals were chosen for two reasons. First, by virtue of their profession, IT professionals are considered early adopters of technology; thus they are more likely than others to use technological platforms that facilitate and promote network exchanges. Second, IT professionals, also by virtue of their profession, face constant technological changes in the field and are therefore more likely to look outside corporate firewalls for problem solutions, expertise, learning and career advancement than other professions.

Table 1. Demographics		
Sample size		621
Age	Below 30	35%
	31-40	36%
	41-50	16%
	51-60	10%
	Above 60	3%
Organizational revenue	2-9 million USD	31%
	10-99 million USD	31%
	100-999 million USD	13%
	1-10 billion USD	14%
	More than 10 billion USD	11%
Tenure with company	Less than one year	11%
	1-2 years	21%
	3-5 years	31%
	6-10 years	20%
	Longer than 10 years	17%
Gender	Male	69%
	Female	31%
Job role	Corporate IT person	39%

Software engineer	28%
IT product manager	19%
Other IT personnel	14%

Extracurricular work behavior was measured using a 5-point Likert scale, ranging from “not at all” to “very often.” Affective organizational commitment, perceived dependence on personal professional networks, and turnover intentions were measured using a 5-point Likert scale, ranging from “strongly disagree” to “strongly agree.” As control variables, we chose age, job role, and job autonomy because of their prominence in the IT workforce literature.

The research model was tested using SmartPLS (Ringle et al. 2005). PLS was favored over covariance-based SEM for several reasons. Among others, PLS is not contingent upon the normality of the data and its interval format and is deemed appropriate for testing theories in early stages of development (Fornell and Bookstein 1982).

Measurement Model

In order to assess the strength of the measurement model, convergent and discriminant validity analyses were conducted. As Tables 2, 3 and 4 indicate, the measurement model shows adequate support on both accounts. All constructs satisfied requirements for item loading (greater than .70), composite reliabilities (greater than .70) and the average variance extracted (greater than .50). For each construct, the average variance extracted was also greater than their respective correlations (see Table 3); and the cross-loadings indicate that items load on the respective construct that they intend to measure (see Table 4).

Construct	Variable Name	Questionnaire Item	Mean	STD	Item Loading
Affective organizational commitment (Scale: 5-point Likert, ranging from strongly disagree to strongly agree)	ORG1	I find that my values and my company's values are very similar	3.70	.89	.88
	ORG2	It is important to me that I can identify with the company I work for	3.82	.85	.72
	ORG3	My professional allegiance is with my company	3.72	.90	.89
Perceived dependence on personal professional networks	PPN1	I receive a lot of assistance form my personal professional network	3.33	1.11	.80
	PPN2	I rely heavily on career advancement through my	3.22	1.14	.89

(Scale: 5-point Likert, ranging from strongly disagree to strongly agree)		personal professional network			
	PPN3	I consider my personal professional network integral to my success	3.45	1.09	.84
	PPN4	My job would be impossible to do if I didn't have my personal professional network available	3.14	1.15	.79
Extracurricular work activities (Scale: 5-point Likert, ranging from not at all to very often)	EX1	During a typical day, I network with others outside the company even though it's not prescribed in my job role	2.78	1.06	.87
	EX2	I participate in crowdsourcing	2.52	1.15	.84
	EX3	I use parts of my working hours to work on non-work related projects	2.76	1.17	.71
Turnover	TURN1	I am likely to take steps securing a job in a different company within the next two years	3.00	1.23	1

Table 3. Correlation Matrix and Reliabilities					
	Affective organizational commitment	Perceived dependence on personal professional networks	Extracurricular work behaviors	Turnover	Composite Reliability
Affective organizational commitment	.67				.86
Perceived dependence on personal professional networks	.33	.69			.90
Extracurricular work behaviors	.14	.43	.65		.85
Turnover	-.12	.25	.37	1	1

*The diagonal contains the square root of the Average Variance Extracted (AVE)

Table 4. Cross-loadings

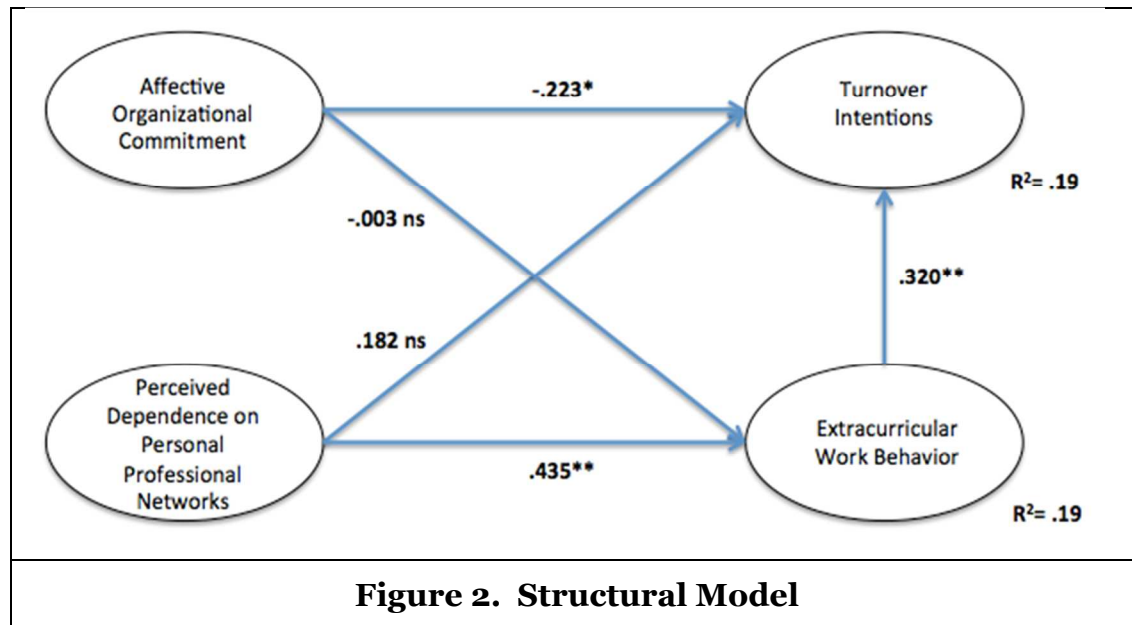
	Affective organizational commitment	Perceived dependence on personal professional networks	Extracurricular work behaviors	Turnover
ORG1	.88	.34	.16	-.09
ORG2	.72	.21	.06	-.05
ORG3	.89	.22	.09	-.14
PPN1	.30	.80	.28	.20
PPN2	.25	.89	.38	.25
PPN3	.32	.84	.36	.17
PPN4	.23	.79	.41	.20
EX1	.11	.40	.87	.32
EX2	.17	.38	.84	.32
EX3	.05	.25	.71	.25
TURN1	-.12	.25	.37	1

Structural Model

With an adequate measurement model in place, a structural analysis was conducted, assessing the strength of the relationships between constructs as well as the model's predictive power (see Figure 2). The variance explained in both extracurricular work behavior and turnover is 19 percent. Against expectation, affective organizational commitment is not a predictor of extracurricular work behavior (hypothesis 3). In other words, the extent to which an individual feels committed to an organization has no impact on the amount of effort an individual puts into non-work related activities while working. Affective organizational commitment has, however, and in accordance with prior research, a negative effect on an individual's intention to leave the organization (hypothesis 2, $\beta = -.223$, $p < .01$). This also applies for extracurricular work behaviors. The latter exhibits a positive effect on turnover intentions, indicating that individuals who partake in extensive extracurricular activities are more likely to leave the organization than those that do not (hypothesis 1, $\beta = .320$, $p < .001$).

The structural model also supported the notion that an individual's level of perceived dependence on personal professional networks has a significant impact on the extent to which he or she partakes in extracurricular activities (hypothesis 5, $\beta = .435$, $p < .001$). More specifically, the more an individual relies on his or her personal professional network, the more likely he or she is to spend significant portions of work on non-work related activities. However, and against expectations, the level of network dependence is not predictive of turnover intentions (hypothesis 4). In other words, the existence or non-existence of a personal professional network has no effect on an

individual's intention to leave the organization.



Discussion

The study examined the role of personal professional networks on turnover intentions and extracurricular work behaviors, i.e., on behaviors that take place during working hours, but relate only remotely, or not at all, to the work content as prescribed by an individual's job description. Simultaneously, the study also scrutinized the role of affective organizational commitment, i.e. an individual's emotional attachment to an organization, on turnover intentions and extracurricular work behaviors. Numerous findings can be drawn from the study.

First, the level of organizational commitment an IT professional holds toward his or her organization has no impact on the amount of effort he or she dedicates to extracurricular work behaviors. In other words, it is irrelevant if an employee possesses high or low levels of organizational commitment, the amount of working time spent on non-work related tasks stays the same.

This is an interesting finding as organizations that are interested in reducing, or even eliminating, extracurricular work behaviors will not be able to do so by solely trying to increase the level of affective organizational commitment. Given that affective organizational commitment is a concept that has attracted a lot of research attention in the past and has a well-established set of antecedents to choose from, including for example role stress (Hunter 2007) or empowerment (Bruce et al. 2004), this study points out that its impact on extracurricular work behaviors is negligible. IT professionals will continue to participate in outside behaviors, irrespective of their sense of commitment.

While this behavior seems somewhat contradictory (after all, an employee is equally

loyal to two entities), an explanation might be found in the notion of integrative thinking. Integrative thinkers have "... the predisposition and the capacity to hold two diametrically opposing ideas in their heads. An then, without panicking or simply settling for one alternative or the other, they're able to produce a synthesis that is superior to either opposing idea" (p. 6, Martin 2007). This ability to hold conflicting models simultaneously has not been studied in the context of work behaviors. However, it seems to be a defining characteristic of the IT professionals sampled in this study, and maybe even of knowledge workers in general. IT professionals might not only be able to deal particularly well with semi-structured or unstructured problems as part of their daily routine, but might also be equipped with the cognitive ability to exercise various forms of loyalty without difficulty. While left for future research to examine, this might be a defining feature of the future IT workforce.

Second, and almost a juxtaposition to the previous, the level of dependence an IT professional feels toward his or her personal professional network has a significant impact on the extent to which he or she uses work time for extracurricular tasks. In contrast to organizational commitment, personal professional networks have a significant positive effect on an individual's work behaviors.

This highlights two factors. First, the valence an IT professional places on his or her personal professional networks; and second, the perceived benefits an IT professional gains from a personal professional network might possibly outweigh the benefits he or she perceives to receive from his or her organization. In other words, when compared to organizational commitment, a personal professional network has the potential to supplant the organization's influence on an individual when it comes to extracurricular work behavior. Just as in the medieval guild model where associations of partisans controlled the practice of a craft and craftsmen were associated with their respective guild rather than with their employer, it seems conceivable that personal professional networks may take over as the point of reference for professional progression in the IT field. Overall, IT professionals might feel more strongly associated with their profession and seek approval, recognition, and advancement from this source rather than from the company they work for. While, admittedly, this describes an extreme case, its conceivability, however, is supported by the next finding.

Third, we found that the extent to which employees depend on their personal professional network has no direct impact on turnover intentions. In other words, an IT professional's perceived affiliation with, and contribution to, a personal professional network does not influence his or her turnover intentions. It also means that IT professionals do not, at least not primarily, use personal professional networks to change jobs, but rather for other purposes. These purposes seem to include issues of problem solving—as inferred from the interviews conducted as part of the exploratory phase of this research—and are less about gathering details about a potential job. One explanation, yet again, could potentially be found in the notion of integrative thinking. As IT professionals are mostly interested in tackling and solving unstructured and semi-structured problems, they are often more interested in their learning and developing expertise (and reputation) than in changing corporate affiliations (Kaplan and LeRouge 2007; Tsai et al. 2007).

In combination with the previous finding and considering the current war for talent, this

means that companies should not try to win allegiance from a corporate or proprietary perspective. Rather, it seems more appropriate to change the rules of engagement in such a way that personal professional networks are acknowledged as an everyday part of working, and that they might even be tapped into for innovative solutions.

As we expected the personal usage of technology to increase in importance, particularly among the Gen Y and Millennial generations now comprising large percentages of most workforces, we anticipate personal professional networks to grow accordingly. Reaching out to peers in the same profession is increasingly possible, as finding communities of interest and linking up to them is made easier through technologies that mimic and support human interactions and exchanges.

As a fourth finding, and in accordance with a plethora of prior research, we found that the level of organizational commitment shows a significant negative impact on turnover intentions. This relationship, while hypothesized many times before, was supported by this research study and serves a nomological test for a model that introduces two new variables to the study of networks: dependence on personal professional networks and extracurricular work behaviors.

Limitations

As in every research project, this study also has limitations. First, we confined our sample to that of IT professionals. In order to achieve generalizability of the results, future studies should examine a broader set of employees, spanning different roles, industries and geographic locations. While this study explained 19 percent of the variance in the dependent variables, future research may explore the influence of other related constructs on turnover intention and extracurricular work behaviors, such as job embeddedness, job satisfaction, and perceived job alternatives (e.g., Joseph et al. 2007) as well as network embeddedness and social capital (e.g., Fuhrer and Cucchi, 2012; Grewal et al. 2006).

Second, we predominantly used perceptual items for the purpose of measurement. Perceptual measures, while often used in IS, suffer from well-documented problems. Particularly the psychological bias introduced by either under- or overestimating a construct of interest is of major concern. In order to mitigate self-reported bias (such as self-serving attribution bias), this study could benefit from complementary methods of measurement. For example, combining self-reported measures with technologically recorded measures (such as access logs) or with ratings from supervisors could increase the accuracy, and thus mitigate the measurement bias. Given the cost and effort involved, this study relies on future research to consider this issue.

Conclusion

Personal professional networks are gaining more and more attention in a business environment that is increasingly volatile. Our study found that an IT professional's dependence on personal professional networks is more predictive of extracurricular work behaviors, i.e., on behaviors that take place during working hours, but relate only remotely, or not at all, to the work content as prescribed by an individual's job description, than organizational commitment.

With the lines between personal and professional lives blurring, employers will have to face new challenges on how to keep IT employees committed, how to keep their extracurricular activities down to a minimum and how to retain the best talent despite the existence of personal professional networks. This will require drastic measures from HR departments as few organizations have existing policies in place that protect employers and employees from the unique risks inherent to external social networks (Ray 2012; Caley 2007).

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