

Co-worker support, voluntary turnover intention and knowledge withholding among IT specialists: the mediating role of affective organizational commitment

The effect of
co-worker
support

375

Received 10 March 2021
Revised 17 May 2021
30 September 2021
Accepted 1 October 2021

Roman Kmiecik

Centre for New Technologies, Silesian University of Technology, Gliwice, Poland

Abstract

Purpose – The purpose of this paper is to assess the effect of co-worker support on horizontal knowledge withholding and voluntary turnover intention among IT specialists. The study also explores the mediating role of affective organizational commitment.

Design/methodology/approach – The data are drawn from 118 IT specialists from a Polish software company. The model is tested through partial least squares path modeling.

Findings – The results revealed that the negative effect of co-worker support on voluntary turnover intention is fully mediated by organizational affective commitment. Contrary to expectations, co-worker support is not significantly negatively related to horizontal knowledge withholding.

Research limitations/implications – The cross-sectional data, self-reports and small sample size are limitations of this study. The respondents were a relatively homogenous group of employees, so the generalizability of results to other employees and industries is limited.

Practical implications – To increase affective organizational commitment and reduce voluntary turnover intention among IT specialists, managers should create the conditions to enhance co-worker support.

Originality/value – This research clarifies the role of affective organizational commitment, which has proven to be a bridge linking co-worker support and voluntary turnover intention. Moreover, this research investigates the previously unexplored effect of co-worker support on horizontal knowledge withholding.

Keywords Co-worker support, Organizational commitment, Employee turnover, Knowledge withholding

Paper type Research paper

1. Introduction

Working for a software company has unique characteristics that can be challenging for its IT specialists. This work is usually related to the implementation of complex projects (Sang Long *et al.*, 2017) and close cooperation with clients (Segelod and Jordan, 2004). Working to tight schedules and deadlines, pressure to release software in faster cycles and, consequently, long working hours and working on holidays are typical of working in a software company and might be a source of stress for employees (Sahni, 2016). Moreover, the implementation of complex IT projects requires highly specialized knowledge. A number of professionals, including business analysts, project managers, developers and quality assurance engineers, are usually involved in software development (Sahni, 2016). Therefore, the success of software development depends heavily on collaboration and knowledge sharing among team members (Vasanthapriyan *et al.*, 2017). In such working conditions, it is important that



© Roman Kmiecik. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

Baltic Journal of Management
Vol. 17 No. 3, 2022
pp. 375-391
Emerald Publishing Limited
1746-5265
DOI 10.1108/BJM-03-2021-0085

employees can count on support from co-workers, which will facilitate their functioning and coping with job demands. This study investigates whether co-worker support might decrease withdrawal behaviors at workplaces among IT specialists. Withdrawal behaviors are defined as “a set of negative behaviors that employees enact to avoid work tasks under dissatisfying organizational situations” (Qian *et al.*, 2020, p. 3). In particular, this study focused on two withdrawal behaviors that are highly important for projects implementation by a software company: knowledge withholding and employees’ turnover intention.

Perceived co-worker support (PCS) is defined as employees’ beliefs about the extent to which co-workers provide emotional and instrumental assistance (Ng and Sorensen, 2008). As previous research has shown, co-worker support might have a meaningful impact on employees’ behaviors in the workplace, including knowledge sharing and withholding behaviors (Lee *et al.*, 2015). Knowledge withholding (KW) has been defined as “intentional concealment and unintentional hoarding of knowledge for personal gain or contributing less knowledge than is needed” (Serenko and Bontis, 2016, p. 1,201). Because KW is not the simple opposite of sharing knowledge (see Connelly *et al.*, 2012), other streams of research have investigated the relationship between support and KW or hiding (Alnaimi and Rjoub, 2021; Onderwater, 2017; Tsay *et al.*, 2014). However, those studies focused on organizational support, omitting the issue of co-worker support and its impact on KW from co-workers. Therefore, the question remains whether withholding knowledge from co-workers may be due to a lack of support from these co-workers.

The lack of co-worker support may also have an impact on voluntary turnover intention. Voluntary turnover intention is defined as “employees’ willingness or attempts to leave the current workplace voluntarily” (Takase, 2010, p. 4). Voluntary turnover is usually dysfunctional for the organization and the organization should eliminate or at least diminish it (Wells and Peachey, 2011) hence the great interest of researchers in the causes of voluntary turnover intention. In general, empirical studies show a negative relationship between co-worker support and voluntary turnover intention (Ducharme *et al.*, 2007; Karatepe, 2012; Park and Min, 2020), although some studies do not confirm a significant direct relationship (Akgunduz and Eryilmaz, 2018; Self *et al.*, 2020). Because previous studies have provided ambiguous results on this matter, the researchers are looking for factors that may mediate the relationship between these constructs (e.g. De Clercq *et al.*, 2020). Some studies indicate that organizational commitment can mediate the relationship between organizational or supervisor support and turnover intention (Alkhateri *et al.*, 2018; Fazio *et al.*, 2017; Newman *et al.*, 2012). However, it has not been sufficiently investigated whether this effect is also true for co-worker support.

Taking the above discussion into account, the main questions of this study are: what impact does the co-worker support have on KW and turnover intention? What is the role of affective organizational commitment in the relationship between co-worker support and KW or turnover intention? Consequently, the purpose of this study is to investigate the relationships among co-worker support, horizontal KW, affective organizational commitment and voluntary turnover intention among IT specialists. The study aims to identify direct relationships between these construct and the mediating role of affective organizational commitment.

The main contribution of this research to the literature is twofold. First, it investigates a direct and indirect effect of co-worker support on horizontal KW. The relation between these constructs was supported by conservation of resources theory. To the best of the author’s knowledge, no previous studies have examined whether co-worker support is negatively related to KW from co-workers, both directly as well as indirectly, via organizational commitment. Second, this study explains the mechanism by which co-worker support affects turnover intention. Although previous studies have suggested that support can predict voluntary turnover intention, they have focused mainly on organizational or supervisor

support, largely ignoring the role of co-worker support, with a few exceptions (Ducharme *et al.*, 2007; Karatepe, 2012; Park and Min, 2020; Self *et al.*, 2020). Moreover, studies on the relation between co-worker support and turnover intention have provided mixed results (see Tews *et al.*, 2019). A literature review has not identified studies that have explicitly explored the mediating role of affective organizational commitment in the relationship between co-worker support and turnover intention. The present study attempts to fulfill this research gap. Using the organizational support theory, conservation of resources theory and social identity perspective, the paper analyses a direct and indirect relationships between these constructs.

The results of this study can help researchers and managers better understand the consequences of perceived co-worker support and the social mechanism that contributes to voluntary turnover intention and KW among IT specialists. This paper presents the concepts of the constructs and introduces the hypotheses, referring to the social exchange theory, the norm of reciprocity, conservation of resources theory and social identity perspective. It then presents the methodology for the empirical research, followed by results and discussion.

2. Background and hypotheses

2.1 Perceived co-worker support

Co-worker support, both formal and informal, is a valuable resource in the organization (Ng and Sorensen, 2008) that supplements formal support received from supervisors (Susskind *et al.*, 2003) and facilitates the proper functioning of employees in the organization (Ng and Sorensen, 2008). The support of colleagues creates positive feelings that increase the ability of employees to cope with organizational challenges (Singh *et al.*, 2019). Perceived co-worker support may take forms of emotional and instrumental support. Emotional support can take the form of empathy, love, care, compassion, comfort and encouragement (Ng and Sorensen, 2008). In turn, instrumental support consists of providing work-related information by co-workers and assistance in the performance of tasks and duties assigned to the employee (Susskind *et al.*, 2003). This research focuses on the instrumental support.

2.2 Psychological withdrawal behaviors

Withdrawal behaviors are “actions intended to place physical or psychological remoteness between employees and their workplace” (Carmeli, 2005, p. 179). In line with this definition, withdrawal behaviors can be physical (such as absenteeism and lateness) and psychological (such as employee silence, showing minimal effort at work and thoughts about leaving current job) (see Erdemli, 2015). The present study is concerned with two psychological withdrawal behaviors, namely KW and turnover intention.

KW is a sign of withdrawal from knowledge sharing behavior. Generally, in the context of knowledge management in an organization, it is seen as counterproductive behavior that is not conducive to building good relationships between employees and the development of the organization. Therefore, it should be limited or even eliminated (see Serenko and Bontis, 2016). A distinction can be made between vertical and horizontal KW. Vertical KW means withholding knowledge from supervisors, while horizontal knowledge withholding (HKW) is withholding knowledge from co-workers. The present paper focuses on the latter.

Voluntary turnover intention and, consequently, actual turnover is a major challenge for an organization that may have severe negative consequences for its functionality (Wells and Peachey, 2011). High turnover may result in production and order delays, as well as other financial costs. This is due to the fact that, with the departure of valuable employees, the organization often loses its knowledge, experience and contacts (Abbasi and Hollman, 2000). The organization is forced to incur costs related to the employment and training of new

employees (Koys, 2001). Relationships with clients, the organization's reputation, employee morale, relationships and communication between other employees can also deteriorate (Abbasi and Hollman, 2000; Akgunduz and Eryilmaz, 2018; Koys, 2001).

2.3 Co-worker support and horizontal knowledge withholding

In line with the norm of reciprocity (Gouldner, 1960), employees who receive support from colleagues should behave in the same way, due to a sense of obligation that tells employees to reciprocate the positive behavior they experience in the workplace. Therefore, if employees receive support from colleagues in the form of transferred knowledge, they feel obligated to offer their knowledge as well (Lee *et al.*, 2015). In contrast, when co-workers are not supportive, employees' motivation to share knowledge may deteriorate. As Bordia *et al.* (2006) noted that evaluation apprehension and criticism from colleagues act as hindrances to knowledge sharing. Previous studies have indicated a negative (Onderwater, 2017; Tsay *et al.*, 2014) or insignificant (Alnaimi and Rjoub, 2021) relationship between perceived organizational support and KW or hiding. However, no studies have analyzed this relationship at the level of relations between co-workers by addressing whether co-worker support is significantly related to HKW.

A negative relation between co-worker support and HKW may be explained by conservation of resources theory. According to this theory, people strive to protect their resources and "when people's resources are outstretched or exhausted, they enter a defensive mode to preserve the self which is often defensive, aggressive, and may become irrational" (Hobfoll *et al.*, 2018, p. 106). Resources are viewed very broadly and include knowledge and social resources; for example, co-worker support (Hobfoll, 2001). A lack of co-worker support means resource deficiencies, in the face of which an employee may seek to conserve his/her other valuable resources, including knowledge, and avoid knowledge sharing, which is perceived as resource expenditure. On the other hand, when an employee receives a lot of support from co-workers, he/she might not feel the need to take action to preserve other resources. Taking the above discussions into account, the present paper assumes that the greater the co-worker support, the less willing employees are to withhold knowledge from co-workers. Hence:

H1. Co-worker support is negatively related to horizontal knowledge withholding.

2.4 Co-worker support and voluntary turnover intention

Co-worker support may influence an employee's decisions regarding further employment in the organization. An employee who receives co-worker support perceives his/her colleagues as kind and cooperative people, and thus gets positive energy from relations with them. Co-worker support can improve the well-being of an employee by reducing stress, role conflict and role overload (Chiaburu and Harrison, 2008). It also improves the work climate and triggers positive feelings and self-esteem, thanks to which the employee has more strength and energy to cope with challenges at work (Singh *et al.*, 2019). Consequently, the employee is more satisfied with his/her job and less likely to search for alternative employment (De Clercq *et al.*, 2020). Conversely, the experience of a lack of co-worker support implies that employees must expend much more energy and effort in order to perform their tasks. Energy is a valuable resource, and according to conservation of resources theory, employees undertake actions to reduce excessive and unjustified energy-draining activities (De Clercq *et al.*, 2020). Hence, excessive preoccupation with job tasks as a result of a lack of co-worker support and desire to reduce energy spent at current workplace may stimulate turnover intention. However, empirical studies have provided mixed results for the impact of co-worker support on turnover (see Tews *et al.*, 2019). Some studies have found a negative relationship between

co-worker support and turnover intention (Ducharme *et al.*, 2007; Karatepe, 2012; Park and Min, 2020), while others have not confirmed the significance of the relationship between these constructs (Akgunduz and Eryilmaz, 2018; Self *et al.*, 2020). To explain that ambiguity, Tews *et al.* (2019) suggested that employees who receive a lot of instrumental support from co-workers might feel that they have a lack of competence to perform their job well, do not fit the job and, consequently, are more likely to voluntarily leave the organization. Koseuglu *et al.* (2020) suggested that job demands might have an impact on the relationships between co-worker support and intention to quit. An employee who has a position with high requirements in terms of knowledge and complexity may require an appropriate work environment, including more co-worker support. Hence, in other words, if an employee holds a knowledge-intensive position and experiences co-worker support, he/she will have lower intention to leave. Based on the above discussion, the present paper assumes that co-worker support has a positive impact on the IT specialists' commitment to the organization and decrease turnover intention. Hence, the following hypothesis is stated:

H2. Co-worker support is negatively related to voluntary turnover intention.

2.5 Affective organizational commitment

Organizational commitment is a multidimensional construct and reflects the degree to which an individual identifies with the organization, participates in, and is involved in the affairs of the organization (Allen and Meyer, 1990; Steers, 1977). Organizational commitment may be manifested in a strong acceptance of the organization's goals, readiness to work hard for the organization and a desire to remain a member of the organization (Steers, 1977). This link between an employee and organization may have a different nature, so a distinction is made among affective, continuance and normative organizational commitment (Allen and Meyer, 1990). Previous studies have suggested that affective organizational commitment is more reliable predictor of turnover than continuance or normative commitment (Labatmediene *et al.*, 2007; Somers, 1995). Therefore, taking the aim of this research into account, this paper has focused only on affective organizational commitment.

2.6 Co-worker support and affective organizational commitment

The organizational support theory (OST) assumes that employees personify the organization – they attribute human characteristics to it and perceive the organization as an entity capable of action (Rhoades and Eisenberger, 2002). According to OST, supervisors are agents of the organization who are responsible for directing, evaluating and supporting employees (Yang *et al.*, 2020). In turn, the norm of reciprocity holds that a person treats well and helps people who reciprocate in the same manner (Gouldner, 1960). In line with OST and the norm of reciprocity, the supervisor support translates into an employee having greater attachment to the organization. Empirical research has confirmed a positive relationship between perceived organizational or supervisor support and affective organizational commitment (Çakmak-Otluoğlu, 2012; Newman *et al.*, 2012; Orgambidez and Almeida, 2020).

Perceived co-worker support may be viewed as the equivalent of perceived organizational support at the team level (Limpanitgul *et al.*, 2014). Co-workers create a workplace environment and affect employee attitudes at work and their well-being (De Clercq *et al.*, 2020). This influence of co-workers may be greater than the influence of the supervisor, which results from more frequent, more intense and easier contacts among co-workers than between the supervisor and the subordinate (Chiaburu and Harrison, 2008), especially in large organizations. Moreover, co-worker support is likely to be more discretionary and based more on reciprocation and turn-taking than supervisor support (Chiaburu and Harrison, 2008). These social interactions between co-workers shape employees' work experiences, and

positive and emotionally satisfying work experience can transfer into an emotional attachment to the organization (Rousseau and Aubé, 2010). Previous empirical research has confirmed the positive relationship between co-worker support and affective organizational commitment (Limpanitgul *et al.*, 2014; Nazir *et al.*, 2016; Rousseau and Aubé, 2010). It is assumed that such relationship also exists among IT specialists, which leads to the following hypothesis:

H3. Co-worker support is positively related to affective organizational commitment.

2.7 Affective organizational commitment and voluntary turnover intention

The social identity perspective on the psychological relationship between the individual and the organization (see Hogg and Terry, 2000) may be used to explain a link between affective organizational commitment and turnover intention. This perspective assumes that individuals define themselves in terms of membership in the organization, which is reflected in the concept of organizational identification (Knippenberg *et al.*, 2007). The more an individual identifies with the organization, the more the interests of the organization are included in the self-concept and the more the individual acts in the best interests of the organization (Knippenberg *et al.*, 2007). This perspective has implications for employee turnover. First, turnover is an action that violates an individual's self-concept. Second, turnover is usually viewed as a behavior against the organization's interests, meaning it is contrary to the concepts of organizational identification and commitment, which require an individual to look after the interests of the organization. Hence, the social identity perspective suggests that affective organizational commitment has a negative impact on turnover intention.

In line with this view, affectively committed employees are likely to show dedication and loyalty toward the organization, as well as willingness to achieve the goals of the organization (Rhoades *et al.*, 2001). Moreover, Allen and Meyer (1990) suggested that strong commitment to an organization decreases the likelihood of employee turnover. The more employees are emotionally connected with the organization, feel part of it and accept its goals, the less likely they are to voluntarily leave the organization.

Previous studies have confirmed a negative relationship between affective organizational commitment and intention to leave (Labatmediéné *et al.*, 2007; Nazir *et al.*, 2016; Torre-Ruiz *et al.*, 2019), and a positive relationship between affective organizational commitment and intention to stay (Redditt *et al.*, 2019). Moreover, some scholars have found that affective organizational commitment is the strongest predictor of turnover and absenteeism, compared with normative and continuance commitment (Somers, 1995). Based on theoretical and empirical evidences, the following hypothesis is stated:

H4. Affective organizational commitment is negatively related to voluntary turnover intention.

2.8 Mediating role of affective organizational commitment

As the research on the direct relationship between co-worker support and turnover intention yielded mixed results, it is necessary to analyze the indirect effect. Previous studies have found that organizational and supervisor support indirectly influences turnover intention or behavior via organizational commitment (Alkhateri *et al.*, 2018; Fazio *et al.*, 2017; Newman *et al.*, 2012). This relationship is explained by the social exchange theory and the norm of reciprocity. If employees receive adequate support from the organization and perceive that the organization cares for them, then they develop a sense of identification with the organization, belonging, obligation and emotional attachment. Consequently, their turnover intention is reduced (Torre-Ruiz *et al.*, 2019). However, scholars are not consistent in terms of

whether this mediation effect of organizational commitment is partial (Fazio *et al.*, 2017) or full (Rhoades *et al.*, 2001). Moreover, it has not been sufficiently studied whether co-worker support, like organizational or supervisor support, has an indirect effect on turnover intention through affective commitment. Nevertheless, previous findings suggest that such relationship might be true. As co-worker support increases affective commitment (Limpanitgul *et al.*, 2014; Nazir *et al.*, 2016) and affective commitment reduces turnover intention (Nazir *et al.*, 2016; Torre-Ruiz *et al.*, 2019), it is natural to conclude that affective commitment might be a bridge linking co-worker support and voluntary turnover intention. Self *et al.* (2020) claimed that, among restaurant managers, co-worker support does not have a significant direct impact on turnover, but organizational embeddedness mediates the relationship between co-worker support and turnover intention. Based on a survey of high-tech personnel, Lin (2020) found that support obtained from co-workers relates negatively to turnover intention through the full mediation of career commitment. Taken together, these findings lead to the following hypothesis:

H5. Affective organizational commitment mediates the relationship between co-worker support and voluntary turnover intention.

Similar arguments can be provided for the relationship between co-worker support, affective organizational commitment and horizontal knowledge withholding. An employee who has a strong emotional connection with the organization willingly acts for its development and success. A manifestation of this may be the willingness to share knowledge with colleagues for the benefit of the organization. Previous empirical research confirms the relationship between affective organizational commitment and knowledge sharing (Luo *et al.*, 2021). On the other hand, employees who do not feel emotionally attached to the organization and its members may be reluctant to undertake an extra-role activity such as knowledge sharing. Moreover, these employees may be more likely to hide or withhold knowledge, as suggested by Chawla and Gupta (2018) research in the IT sector. Thus, in addition to the direct negative relationship between co-worker support and HKW posited in H1, the impact of co-worker support on HKW might also be indirect via affective organizational commitment. Hence, the following hypothesis is stated:

H6. Affective organizational commitment mediates the relationship between co-worker support and horizontal knowledge withholding.

3. Research method

3.1 Data collection and sample

The job of an IT specialist in a software company is usually project-based and requires specialist knowledge (Vasanthapriyan *et al.*, 2017). In such conditions, the ability to work in a group, sharing knowledge and support from colleagues, is important. Therefore, IT specialists working at a software company were found to be suitable respondents for this research.

The study was conducted in November 2019 among IT specialists from a large Polish software company. This company was chosen because it is a large company employing mainly IT specialists, which gave the opportunity to provide a sufficiently large sample size. In addition, the management of this company agreed to conduct the study within the company. A link to the anonymous questionnaire was sent to 788 employees. A reminder to complete the questionnaire was sent out two weeks later. The questionnaire included a question about whether the respondent works as IT specialists (programmer, IT analyst, etc.). This question ensured that the questionnaire was completed by the respondent from the target group. In total, 118 IT specialists returned the completed questionnaire. The response

rate was 15%. Based on the returned questionnaires, 73.7% of the respondents were male and 26.3% were female; 40.7% were below 30 years of age, 51.7% were aged 30–39 and 7.6% were 39 or above. Furthermore, 28.0% of the respondents had been working in the present company for less than two years, 33.1% for 2–5 years, 36.4% for 6–10 years and 2.5% for more than 15 years and 82.2% of respondents held a bachelor’s degree or higher.

3.2 Measures

All of the variables were measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). All items from original scales were used to measure affective organizational commitment, co-worker support and voluntary turnover intention. The back-translation procedure (Brislin, 1986) was used to translate these items into Polish. Affective organizational commitment was measured with six items taken from Rhoades *et al.* (2001). For perceived co-worker support, three items were used from Smith *et al.* (2013). For voluntary turnover intention, three measurement items from Kim’s *et al.* (2017) study were used.

For HKW, four items were created based on scales for KW from Peng (2012) and Stenius *et al.* (2016). In each item for HKW, it was clearly indicated that this item refers to behavior towards co-workers. Measurement items used in this study are shown in Table 1.

3.3 Statistical analyses

Evaluation of the relationships among variables was conducted with partial least squares path modeling (PLS-PM). PLS-SEM is a multivariate analysis method that can be applied in both exploratory and confirmatory research (Chin, 2010). Moreover, PLS-SEM may be particularly used when the sample is relatively small and data are non-normally distributed (Sanchez, 2013). The sample in the present study is relatively small ($n = 118$), and analysis of skewness and kurtosis for the variables suggests that data are non-normally distributed,

Variable	Measurement items
Affective organizational commitment	AOC1. I feel a strong sense of belonging to my organization AOC2. I feel personally attached to my work organization AOC3. I am proud to tell others I work at my organization AOC4. Working at my organization has a great deal of personal meaning to me AOC5. I would be happy to work at my organization until I retire AOC6. I really feel that problems faced by my organization are also my problems
Co-worker support	CS1. My co-workers listen to me when I need to talk about work-related problems CS2. My co-workers help me with difficult tasks CS3. My co-workers help me in crisis situations at work
Voluntary turnover intention	VTI1. I feel I may change my job within 2–3 years VTI2. I often think about quitting my job VTI3. I want to find a new job if possible
Horizontal knowledge withholding	HKW1. I usually do not share my professional knowledge and experience with my co-workers HKW2. I usually do not disclose my ideas to my co-workers HKW3. I usually do not share helpful information with my co-workers HKW4. I share knowledge with my co-workers to a lesser extent than I could

Table 1. Measurement items

indicating that PLS-SEM is suitable for this study. The analyses of PLS-SEM were performed using SmartPLS 3.2.9 (Ringle *et al.*, 2015).

4. Empirical results and analysis

4.1 Measurement model

Within the frame of this study, all constructs are reflective. The reliability and validity of these constructs were examined. For affective organizational commitment, Cronbach's alpha = 0.905, rho_A = 0.927, composite reliability (CR) = 0.928, average variance extracted (AVE) = 0.686. For perceived co-worker support, Cronbach's alpha = 0.831, rho_A = 0.838, CR = 0.898, AVE = 0.747. For voluntary turnover intention, Cronbach's alpha = 0.879, rho_A = 0.901, CR = 0.919, AVE = 0.740. For HKW, Cronbach's alpha = 0.828, rho_A = 0.841, CR = 0.897, AVE = 0.744. Cronbach's alpha, rho_A and CR are above the required value of 0.7 (Dijkstra and Henseler, 2015). Moreover, AVE is above the required value of 0.5 (Hair *et al.*, 2011), establishing convergent validity. The results of cross-loading analysis indicate that all items are loaded higher on their respective construct than on other constructs. Furthermore, in accordance with Fornell–Larcker criterion, the correlation coefficients between variables are less than the square root of the AVE for each variable (Table 2). The HTMT (the Hetrotrait–Monotrait ratio of correlations) values are less than 0.85 (Henseler *et al.*, 2015), confirming discriminant validity. Thus, the measurement model has good quality as both reliability and validity measures were satisfactory.

4.2 Structural model

In order to test the statistical significance of the path coefficients, a bootstrapping procedure was performed and t-statistics, *p*-values and bias corrected confidence intervals were determined. Table 3 indicates that contrary to expectation, perceived co-worker support is not significantly related to neither HKW ($\beta = -0.216$; $t = 1.254$; $p = 0.210$) nor voluntary turnover intention ($\beta = -0.027$; $t = 0.334$; $p = 0.738$). Therefore, H1 and H2 are not supported. The influence of perceived co-worker support on affective organizational commitment is significantly positive ($\beta = 0.390$; $t = 4.265$; $p < 0.001$). In turn, the influence of affective organizational commitment on voluntary turnover intention is significantly negative ($\beta = -0.642$; $t = 8.850$; $p < 0.001$). Consequently, H3 and H4 are supported.

To evaluate the mediating role of affective organizational commitment, a PLS analysis was conducted for a model without link between affective organizational commitment and voluntary turnover intention. In this model, the direct effect of perceived co-worker support on voluntary turnover intention was reduced ($-0.027 \rightarrow -0.282$) and became significant ($p < 0.01$). This result suggests a full mediation of affective organizational commitment. Moreover, Table 3 shows that, in the mediation model, the direct effect of perceived co-worker support on voluntary turnover intention is insignificant, while the indirect and total effects of perceived co-worker support on voluntary turnover intention are statistically significant.

Variable	Mean	SD	1	2	3	4
1 Affective organizational commitment	4.521	1.464	<i>0.828</i>	0.425	0.228	0.745
2 Perceived co-worker support	5.989	1.039	0.388***	<i>0.864</i>	0.296	0.327
3 Horizontal knowledge withholding	1.784	1.032	-0.189	-0.261*	<i>0.860</i>	0.159
4 Voluntary turnover intention	3.225	1.556	-0.654***	-0.276**	0.110	<i>0.863</i>

Note(s): * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. The italic diagonal elements represent the square root of AVE. Values below the diagonal are the construct correlations. Values above the diagonal are the HTMT values

Table 2. Descriptive statistics, construct correlations and results for discriminant validity

Path	Direct Effect	95% BCa CI	Indirect effect	95% BCa CI	Total effect	95% BCa CI
Perceived co-worker support → Horizontal knowledge withholding	-0.216 <i>p</i> = 0.210	[-0.496; 0.177] Nsig				
Perceived co-worker support → Voluntary turnover intention	-0.027 <i>p</i> = 0.738	[-0.186; 0.124] Nsig				
Perceived co-worker support → Affective organizational commitment	0.390 <i>p</i> = 0.000	[0.190; 0.551]Sig				
Affective organizational commitment → Voluntary turnover intention	-0.642 <i>p</i> = 0.000	[-0.762; -0.474] Sig				
Affective organizational commitment → Horizontal knowledge withholding	-0.111 <i>p</i> = 0.467	[-0.388; 0.183] Nsig				
Perceived co-worker support → Affective organizational commitment → Voluntary turnover intention	-0.027 <i>p</i> = 0.738	[-0.186; 0.124] Nsig	-0.250 <i>p</i> = 0.000	[-0.384; -0.125] Sig	-0.277 <i>p</i> = 0.002	[-0.436; -0.082] Sig
Perceived co-worker support → Affective organizational commitment → Horizontal knowledge withholding	-0.216 <i>p</i> = 0.210	[-0.496; 0.177] Nsig	-0.043 <i>p</i> = 0.474	[-0.159; 0.077] Nsig	-0.259 <i>p</i> = 0.069	[-0.515; 0.045] NSig

Table 3. Structural model results

Note(s): BCa CI = bias corrected confidence interval; Sig. = a significant direct effect at 0.05; Nsig. = a non-significant direct effect at 0.05. Bootstrapping based on *n* = 5,000 subsamples

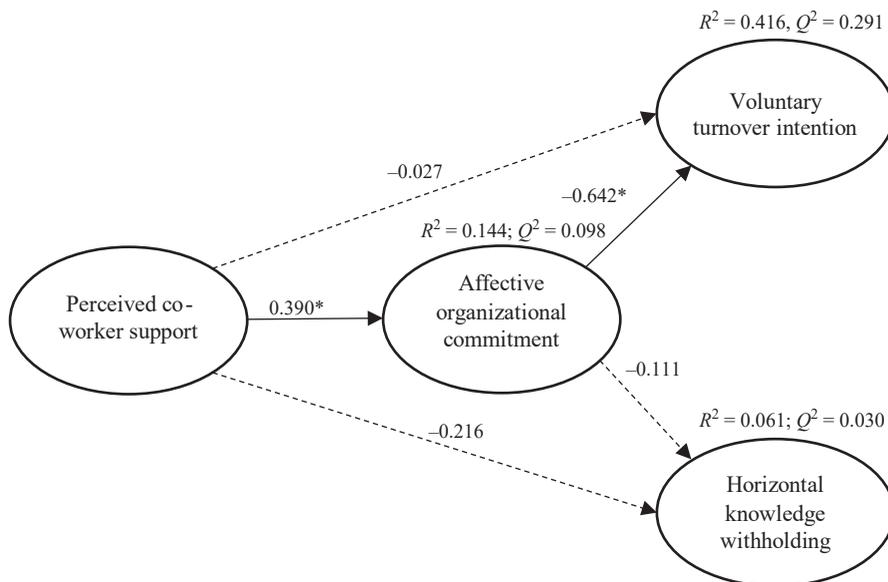
In addition, to determine the size of the indirect effect in relation to the total effect, the variance accounted for (VAF) value was analyzed (Carrión *et al.*, 2017). The value of VAF is 90%, which indicates a full mediation (Nitzl *et al.*, 2016). This result confirms that the relationship between perceived co-worker support and voluntary turnover intention is fully mediated by affective organizational commitment. Thus, H5 is supported.

To test whether affective organizational commitment mediates the effect of perceived co-worker support on HKW, a model without link between affective organizational commitment and HKW was tested. In this model, the direct effect of perceived co-worker support on HKW was reduced (-0.216 → -0.261), but it was still insignificant (*p* = 0.051). In the mediation model, the direct, indirect and total effects of perceived co-worker support on HKW are insignificant. This result indicates that affective organizational commitment does not mediate the relationship between perceived co-worker support and HKW. Thus, H6 is not supported (see Figure 1).

5. Discussion

5.1 Theoretical contributions

This study is probably the first to explicitly explore the mediating role of affective organizational commitment in the relationship between co-worker support and turnover intention. The study shows how co-worker support serves as a protective factor toward voluntary turnover intention in an IT specialist perspective. The results of this study do not confirm that co-worker support is directly related to turnover intention, which is contrary to



Note(s): * $p < 0.001$. The dotted line shows that the coefficient was not significant. R square adjusted. Q^2 predictive relevance

Figure 1.
Results of structural model

some previous findings (Ducharme *et al.*, 2007; Karatepe, 2012; Park and Min, 2020). However, this study indicates that the effect of co-worker support on voluntary turnover intention is fully mediated by affective organizational commitment. It is partly in line with previous studies, which have suggested that organizational support via organizational commitment reduces employees' willingness to look for alternative employment (Alkhatari *et al.*, 2018; Fazio *et al.*, 2017; Newman *et al.*, 2012). The findings of the present study indicate that employees who experience help from co-workers might maintain positive energy and bond with their organization. Hence, loyalty and attachment to the organization is created not only by supervisors, who are perceived as agents of the organization, but also by co-workers. This finding is consistent with previous empirical studies on the link between co-worker support and affective commitment (Limpanitgul *et al.*, 2014). Furthermore, some scholars have claimed that the impact of co-workers on attachment to the organization may be stronger than the impact of supervisors (Chiaburu and Harrison, 2008). It can be assumed that such an effect may be observed particularly in large organizations where contacts between supervisors and subordinates are weaker than in small organizations.

Moreover, this study used a social identity perspective to theoretically justify the relationship between affective organization commitment and turnover intention. Previous studies have not used an underlying theory to support this relationship, possibly assuming that the relationship is logical. This study also confirmed empirically that IT specialists who are emotionally connected to the organization, feel they are part of it and identify with its goals are less likely to leave the organization. This is consistent with previous studies conducted among non-IT specialists (Labatmediene *et al.*, 2007; Torre-Ruiz *et al.*, 2019). Hence, affective commitment is an important factor to consider in order to retain IT specialists.

Research on the antecedents of knowledge withholding is scarce, and scholars have called for further research in this area (Alnaimi and Rjoub, 2021; Tsay *et al.*, 2014). In response to

these calls, the present paper explored the impact of co-worker support on HKW among IT specialists. It turned out that co-worker support did not show a significant negative relationship with HKW. Moreover, affective organizational commitment does not mediate the relationship between co-worker support and HKW. These results are contrary to hypotheses H1 and H6. However, it is worth noting that the p -value for the path coefficient between perceived co-worker support and HKW was very close to the significance limit ($p = 0.051$ in the model without affective organizational commitment as a mediator; $p = 0.069$ for the total effect in the mediation model). This is, to my knowledge, the first study to examine this effect. Nevertheless, previous research on relationships between perceived organizational support and KW or hiding also provided ambiguous results, indicating a negative (Onderwater, 2017; Tsay *et al.*, 2014) or insignificant (Alnaimi and Rjoub, 2021) relationship between these constructs. On one hand, in line with the norm of reciprocity (Gouldner, 1960), employees may be not willing to share knowledge with co-workers who are unwilling to provide instrumental support. On the other hand, employees who deny their co-workers the necessary knowledge may act to their own disadvantage and jeopardize success. The implementation of complex projects in software companies forces IT specialists to emphasize teamwork and provide information that is key to completing the project and meeting deadlines (Vasanthapriyan *et al.*, 2017). Thus, these two mechanisms may partially balance each other and mean that the relationship between co-worker support and HKW is not clearly negative. Another explanation for the lack of clear and significant negative relationships between co-worker support and HKW may come from work conditions. The company in which the research was conducted places great emphasis on a friendly atmosphere in the workplace, and ensures high earnings and non-wage benefits. Employee turnover in this company in 2020 was almost half the industry average, which may indicate that employees are satisfied with the working conditions. As previous research has shown, job satisfaction and positive affect at work are positively related to knowledge sharing among project members (Sang *et al.*, 2019). Moreover, employees who are satisfied with their jobs are less likely to engage in undesirable knowledge behaviors, including knowledge hiding. Hence, if the employer creates very favorable working conditions, less co-worker support may not be such a strong stimulus for HKW.

5.2 Implication for practice

This study has significant implications for managerial practices as it illustrates the importance of co-worker support among IT specialists. The findings indicate that a software company can increase affective organizational commitment and reduce voluntary turnover intention of IT specialists by increasing co-worker support. By providing instrumental support, co-workers create an environment in which employees are emotionally attached to the organization and want to remain in it. Therefore, the organization should make efforts and create the conditions to enhance co-worker support. Various means can be used to achieve this. First, the importance of co-worker support should be clearly communicating across organizations. Organizational leaders should actively promote co-workers as a key source of support in the organization. They can foster a supportive and collaborative organizational culture by recognizing and rewarding supportive behaviors (Singh *et al.*, 2019). Improving co-worker support in order to retain employee might be less expensive than other activities such as increasing employees' wages.

In knowledge-intensive companies, technical knowledge is enormously valuable to employees and to the company (Bryant and Terborg, 2008). Peer mentoring is a useful method for triggering co-worker support and reducing knowledge withholding. Peer mentoring is a relationship between co-workers in which a mentor provides new knowledge and skills to a protégé (Bryant and Terborg, 2008). A peer mentor, who holds a comparable position to the protégé, can provide both emotional and career support (Ensher *et al.*, 2001).

Peer mentoring plays an important role in the process of employee socialization and the transfer of tacit knowledge (Bryant, 2005). One of the varieties of mentoring is intermentoring (Michna *et al.*, 2018). Intermentoring assumes that a mentor and a protégé swap their roles, which may have a positive effect on mutual trust and the tendency to share knowledge. Therefore, managers in a software company should promote effective peer mentoring through, for example, mentor training and an incentive system.

5.3 Limitations and future directions

This study has some potential limitations. First, the study was conducted among only 118 IT specialists of one software house. IT specialists in this software company are likely to have a lot in common with IT specialists at other software companies. However, the generalizability of results to other employees and industries is limited. Future researchers may address this limitation by collecting data from different industries. Second, self-report data were used in this study. This is an appropriate approach when the nature of the studied variables is subjective or interpersonal, as in this study. However, a single source might have contributed to common method bias (CMB), although tests indicated that a significant CMB is absent in this study. Future research may include multiple sources and archival measures, such as actual turnover. Third, this study is cross-sectional, which may put the causal relationship into question. Using a longitudinal study could prove whether co-worker support decreases voluntary turnover intention and actual turnover.

Future research needs to further investigate the relationship between co-worker support and KW. In this study, this relationship was very close to the significance limit (the direct effect is -0.261 , $p = 0.05$ in the model without affective organizational commitment as a mediator; the total effect is -0.259 , $p = 0.069$ in the mediation model). It is recommended that this relationship be tested on a larger research sample. Moreover, moderation variables may be included in this relationship; for example, agreeableness, which was found to moderate the relationship between perceived organizational support and knowledge hiding (Onderwater, 2017). It is also worth investigating whether job satisfaction and workplace well-being weaken the negative relationship between co-worker support and KW.

References

- Abbasi, D.S.M. and Hollman, D.K.W. (2000), "Turnover: the real bottom line", *Public Personnel Management*, Vol. 29 No. 3, pp. 333-342.
- Akgunduz, Y. and Eryilmaz, G. (2018), "Does turnover intention mediate the effects of job insecurity and co-worker support on social loafing?", *International Journal of Hospitality Management*, Vol. 68, pp. 41-49.
- Alkhateri, A., Abuelhassan, A., Khalifa, G., Nusari, M. and Ameen, A. (2018), "The impact of perceived supervisor support on employees turnover intention: the mediating role of job satisfaction and affective organizational commitment", *International Business Management*, Vol. 12 No. 7, pp. 477-492.
- Allen, N.J. and Meyer, J.P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, Vol. 63 No. 1, pp. 1-18.
- Alnaimi, A.M.M. and Rjoub, H. (2021), "Perceived organizational support, psychological entitlement, and extra-role behavior: the mediating role of knowledge hiding behavior", *Journal of Management and Organization*, Vol. 27 No. 3, pp. 507-522.
- Bordia, P., Irmer, B.E. and Abusah, D. (2006), "Differences in sharing knowledge interpersonally and via databases: the role of evaluation apprehension and perceived benefits", *European Journal of Work and Organizational Psychology*, Vol. 15 No. 3, pp. 262-280.

- Brislin, R.W. (1986), "The wording and translation of research instruments", in Lonner, W.J. and Berry, J.W. (Eds), *Field Methods in Cross-Cultural Research*, Sage Publications, Thousand Oaks, CA, pp. 137-164.
- Bryant, S.E. (2005), "The impact of peer mentoring on organizational knowledge creation and sharing: an empirical study in a software firm", *Group and Organization Management*, Vol. 30 No. 3, pp. 319-338.
- Bryant, S.E. and Terborg, J.R. (2008), "Impact of peer mentor training on creating and sharing organizational knowledge", *Journal of Managerial Issues*, Vol. 20 No. 1, pp. 11-29.
- Çakmak-Otluoğlu, K.Ö. (2012), "Protean and boundaryless career attitudes and organizational commitment: the effects of perceived supervisor support", *Journal of Vocational Behavior*, Vol. 80 No. 3, pp. 638-646.
- Carmeli, A. (2005), "The relationship between organizational culture and withdrawal intentions and behavior", *International Journal of Manpower*, Vol. 26 No. 2, pp. 177-195.
- Carrión, G.C., Nitzl, C. and Roldán, J.L. (2017), "Mediation analyses in partial least squares structural equation modeling: guidelines and empirical examples", in Latan, H. and Noonan, R. (Eds), *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*, Springer International Publishing, Cham, pp. 173-195.
- Chawla, R. and Gupta, V. (2018), "Relationship of individual and organizational factors with knowledge hiding in IT sector organizations", *International Journal of Social Sciences Review*, Vol. 7 No. 2, pp. 209-216.
- Chiaburu, D.S. and Harrison, D.A. (2008), "Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance", *Journal of Applied Psychology*, Vol. 93 No. 5, pp. 1082-1103.
- Chin, W.W. (2010), "How to write up and report PLS analyses", in Esposito Vinzi, V., Chin, W.W., Henseler, J. and Wang, H. (Eds), *Handbook of Partial Least Squares: Concepts, Methods and Applications*, Springer, Berlin, pp. 655-690.
- Connelly, C.E., Zweig, D., Webster, J. and Trougakos, J.P. (2012), "Knowledge hiding in organizations", *Journal of Organizational Behavior*, Vol. 33 No. 1, pp. 64-88.
- De Clercq, D., Azeem, M.U., Haq, I.U. and Bouckennooghe, D. (2020), "The stress-reducing effect of coworker support on turnover intentions: moderation by political ineptness and despotic leadership", *Journal of Business Research*, Vol. 111, pp. 12-24.
- Dijkstra, T.K. and Henseler, J. (2015), "Consistent partial least squares path modeling", *MIS Quarterly*, Vol. 39 No. 2, pp. 297-316.
- Ducharme, L.J., Knudsen, H.K. and Roman, P.M. (2007), "Emotional exhaustion and turnover intention in human service occupations: the protective role of coworker support", *Sociological Spectrum*, Vol. 28 No. 1, pp. 81-104.
- Ensher, E.A., Thomas, C. and Murphy, S.E. (2001), "Comparison of traditional, step-ahead, and peer mentoring on protégés' support, satisfaction, and perceptions of career success: a social exchange perspective", *Journal of Business and Psychology*, Vol. 15 No. 3, pp. 419-438.
- Erdemli, Ö. (2015), "Teachers' withdrawal behaviors and their relationship with work ethic", *Eurasian Journal of Educational Research*, Vol. 15 No. 60, pp. 201-220.
- Fazio, J., Gong, B., Sims, R. and Yurova, Y. (2017), "The role of affective commitment in the relationship between social support and turnover intention", *Management Decision*, Vol. 55 No. 3, pp. 512-525.
- Gouldner, A.W. (1960), "The norm of reciprocity: a preliminary statement", *American Sociological Review*, Vol. 25 No. 2, pp. 161-178.
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: indeed a silver bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139-152.

- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Hobfoll, S.E. (2001), "The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory", *Applied Psychology*, Vol. 50 No. 3, pp. 337-421.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.-P. and Westman, M. (2018), "Conservation of resources in the organizational context: the reality of resources and their consequences", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 5 No. 1, pp. 103-128.
- Hogg, M.A. and Terry, D.J. (2000), "Social identity and self-categorization processes in organizational contexts", *The Academy of Management Review*, Vol. 25 No. 1, pp. 121-140.
- Karatepe, O.M. (2012), "The effects of coworker and perceived organizational support on hotel employee outcomes: the moderating role of job embeddedness", *Journal of Hospitality and Tourism Research*, Vol. 36 No. 4, pp. 495-516.
- Kim, S., Tam, L., Kim, J.-N. and Rhee, Y. (2017), "Determinants of employee turnover intention: understanding the roles of organizational justice, supervisory justice, authoritarian organizational culture and organization-employee relationship quality", *Corporate Communications: An International Journal*, Vol. 22 No. 3, pp. 308-328.
- Knippenberg, D.V., Dick, R.V. and Tavares, S. (2007), "Social identity and social exchange: identification, support, and withdrawal from the job", *Journal of Applied Social Psychology*, Vol. 37 No. 3, pp. 457-477.
- Koseoglu, G., Blum, T.C. and Shalley, C.E. (2020), "Gender similarity, coworker support, and job attitudes: an occupation's creative requirement can make a difference", *Journal of Management and Organization*, Vol. 26 No. 5, pp. 880-898.
- Koys, D.J. (2001), "The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: a unit-level, longitudinal study", *Personnel Psychology*, Vol. 54 No. 1, pp. 101-114.
- Labatmediènè, L., Endriulaitienè, A. and Gustainienè, L. (2007), "Individual correlates of organizational commitment and intention to leave the organization", *Baltic Journal of Management*, Vol. 2 No. 2, pp. 196-212.
- Lee, S., Yoo, Y. and Yun, S. (2015), "Sharing my knowledge? An interactional perspective", *Journal of Managerial Psychology*, Vol. 30 No. 8, pp. 986-1002.
- Limpanitgul, T., Boonchoo, P. and Photiyarach, S. (2014), "Coworker support and organisational commitment: a comparative study of Thai employees working in Thai and American airlines", *Journal of Hospitality and Tourism Management*, Vol. 21, pp. 100-107.
- Lin, C.-P. (2020), "Exploring career commitment and turnover intention of high-tech personnel: a socio-cognitive perspective", *The International Journal of Human Resource Management*, Vol. 31 No. 6, pp. 760-784.
- Luo, C., Lan, Y., Robert, Luo, X. and Li, H. (2021), "The effect of commitment on knowledge sharing: an empirical study of virtual communities", *Technological Forecasting and Social Change*, Vol. 163, p. 120438.
- Michna, A., Kmiecik, R. and Brzostek, K. (2018), "Development of knowledge management processes in a small organization: a case study", *INTED2018 Proceedings, Presented at the 12th International Technology, Education and Development Conference*, Valencia, Spain, pp. 3107-3114.
- Nazir, S., Shafi, A., Qun, W., Nazir, N. and Tran, Q.D. (2016), "Influence of organizational rewards on organizational commitment and turnover intentions", *Employee Relations*, Vol. 38 No. 4, pp. 596-619.
- Newman, A., Thanacoody, R. and Hui, W. (2012), "The effects of perceived organizational support, perceived supervisor support and intra-organizational network resources on turnover

- intentions: a study of Chinese employees in multinational enterprises”, *Personnel Review*, Vol. 41 No. 1, pp. 56-72.
- Ng, T.W.H. and Sorensen, K.L. (2008), “Toward a further understanding of the relationships between perceptions of support and work attitudes: a meta-analysis”, *Group and Organization Management*, Vol. 33 No. 3, pp. 243-268.
- Nitzl, C., Roldan, J.L. and Cepeda, G. (2016), “Mediation analysis in partial least squares path modeling: helping researchers discuss more sophisticated models”, *Industrial Management and Data Systems*, Vol. 116 No. 9, pp. 1849-1864.
- Onderwater, J. (2017), *The Effect of Perceived Organizational Support on Knowledge Hiding: The Moderating Roles of Agreeableness, Conscientiousness and Need for Power*, Tilburg University, available at: <http://arno.uvt.nl/show.cgi?fid=144028>.
- Orgambidez, A. and Almeida, H. (2020), “Supervisor support and affective organizational commitment: the mediator role of work engagement”, *Western Journal of Nursing Research*, Vol. 42 No. 3, pp. 187-193.
- Park, J., Min, H. and Kelly (2020), “Turnover intention in the hospitality industry: a meta-analysis”, *International Journal of Hospitality Management*, Vol. 90, p. 102599.
- Peng, H. (2012), “Counterproductive work behavior among Chinese knowledge workers”, *International Journal of Selection and Assessment*, Vol. 20 No. 2, pp. 119-138.
- Qian, X., Zhang, M. and Jiang, Q. (2020), “Leader humility, and subordinates’ organizational citizenship behavior and withdrawal behavior: exploring the mediating mechanisms of subordinates’ psychological capital”, *International Journal of Environmental Research and Public Health*, Vol. 17 No. 7, p. 2544.
- Redditt, J., Gregory, A.M. and Ro, H. (2019), “An examination of organizational commitment and intention to stay in the timeshare industry: variations across generations in the workplace”, *International Journal of Hospitality and Tourism Administration*, Vol. 20 No. 2, pp. 206-225.
- Rhoades, L. and Eisenberger, R. (2002), “Perceived organizational support: a review of the literature”, *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 698-714.
- Rhoades, L., Eisenberger, R. and Armeli, S. (2001), “Affective commitment to the organization: the contribution of perceived organizational support”, *Journal of Applied Psychology*, Vol. 86 No. 5, pp. 825-836.
- Ringle, C.M., Wende, S. and Becker, J.-M. (2015), *SmartPLS 3*, SmartPLS GmbH, Boenningstedt, available at: <http://www.smartpls.com>.
- Rousseau, V. and Aubé, C. (2010), “Social support at work and affective commitment to the organization: the moderating effect of job resource adequacy and ambient conditions”, *The Journal of Social Psychology*, Vol. 150 No. 4, pp. 321-340.
- Sahni, J. (2016), “An assessment of employee perception regarding workplace stress-causes and remedies: evidence from software industry”, *International Journal of Management, IT and Engineering*, Vol. 6 No. 7, pp. 23-39.
- Sanchez, G. (2013), *PLS Path Modeling with R*, Trowchez Editions, Berkeley.
- Sang, L., Xia, D., Ni, G., Cui, Q., Wang, J. and Wang, W. (2019), “Influence mechanism of job satisfaction and positive affect on knowledge sharing among project members: moderator role of organizational commitment”, *Engineering, Construction and Architectural Management*, Emerald Publishing, Vol. 27 No. 1, pp. 245-269.
- Sang Long, C., Chan, L., Tan, K. and Fei, G. (2017), “Work family conflict on job satisfaction: moderating or direct effect of social support exist among IT professionals?”, *International Journal of Human Resource Studies*, Vol. 7 No. 1, pp. 170-191.
- Segelod, E. and Jordan, G. (2004), “The use and importance of external sources of knowledge in the software development process”, *R&D Management*, Vol. 34 No. 3, pp. 239-252.

- Self, T.T., Gordon, S. and Ghosh, A. (2020), "Increasing management retention: the mediating role of organizational embeddedness on coworker support and turnover intention", *International Journal of Hospitality and Tourism Administration*. doi: [10.1080/15256480.2019.1708224](https://doi.org/10.1080/15256480.2019.1708224).
- Serenko, A. and Bontis, N. (2016), "Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding", *Journal of Knowledge Management*, Vol. 20 No. 6, pp. 1199-1224.
- Singh, B., Selvarajan, T.T. and Solansky, S.T. (2019), "Coworker influence on employee performance: a conservation of resources perspective", *Journal of Managerial Psychology*, Vol. 34 No. 8, pp. 587-600.
- Smith, J., Ryan, L., Fisher, G.G., Sonnega, A. and Weir, D. (2013), *Psychosocial and Lifestyle Questionnaire 2006-2010*, The HRS Psychosocial Working Group, Ann Arbor, MI.
- Somers, M.J. (1995), "Organizational commitment, turnover and absenteeism: an examination of direct and interaction effects", *Journal of Organizational Behavior*, Vol. 16 No. 1, pp. 49-58.
- Steers, R.M. (1977), "Antecedents and outcomes of organizational commitment", *Administrative Science Quarterly*, Vol. 22 No. 1, pp. 46-56.
- Stenius, M., Hankonen, N., Ravaja, N. and Haukkala, A. (2016), "Why share expertise? A closer look at the quality of motivation to share or withhold knowledge", *Journal of Knowledge Management*, Vol. 20 No. 2, pp. 181-198.
- Susskind, A., Kacmar, K. and Borchgrevink, C. (2003), "Customer service providers' attitudes relating to customer service and customer satisfaction in the customer-server exchange", *Journal of Applied Psychology*, Vol. 88 No. 1, pp. 179-187.
- Takase, M. (2010), "A concept analysis of turnover intention: implications for nursing management", *Collegian*, Vol. 17 No. 1, pp. 3-12.
- Tews, M., Michel, J. and Stafford, K. (2019), "Abusive coworker treatment, coworker support, and employee turnover", *Journal of Leadership and Organizational Studies*, Vol. 26 No. 4, pp. 413-423.
- Torre-Ruiz, J.M.de la, Vidal-Salazar, M.D. and Cerdón-Pozo, E. (2019), "Employees are satisfied with their benefits, but so what? The consequences of benefit satisfaction on employees' organizational commitment and turnover intentions", *The International Journal of Human Resource Management*, Vol. 30 No. 13, pp. 2097-2120.
- Tsay, C.H.-H., Lin, T.-C., Yoon, J. and Huang, C.-C. (2014), "Knowledge withholding intentions in teams: the roles of normative conformity, affective bonding, rational choice and social cognition", *Decision Support Systems*, Vol. 67, pp. 53-65.
- Vasanthapriyan, S., Xiang, J., Tian, J. and Xiong, S. (2017), "Knowledge synthesis in software industries: a survey in Sri Lanka", *Knowledge Management Research and Practice*, Vol. 15 No. 3, pp. 413-430.
- Wells, J. and Peachey, J. (2011), "Turnover intentions: do leadership behaviors and satisfaction with the leader matter?", *Team Performance Management*, Vol. 17, pp. 23-40.
- Yang, W., Hao, Q. and Song, H. (2020), "Linking supervisor support to innovation implementation behavior via commitment: the moderating role of coworker support", *Journal of Managerial Psychology*, Vol. 35 No. 3, pp. 129-141.

Corresponding author

Roman Kmiecik can be contacted at: roman.kmiecik@polsl.pl

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com