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Article

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International journal of knowledge management

International Journal of Knowledge Management
Volume 20 • Issue 1

Fostering Competency Development Through Knowledge Sharing Capabilities in Onboarding

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ABSTRACT

The study proposes and empirically validates a theoretical model suggesting that employee competency development during the onboarding period largely depends on the availability of knowledge sharing (KS) channels (both digital and traditional), on the KS culture experienced, and on employee satisfaction with the existing KS practices. The data for the study was collected using an online survey of a large pool of young public service employees working at various government agencies (n= 3,652 respondents). The results of a structural equation modeling analysis of the data provide support for the study's main premise. The implications of these results on the design of effective onboarding processes are discussed.

KEYWORDS

Competency Development, Knowledge Sharing, Onboarding, Personal Competency, Professional Competency

1. INTRODUCTION

Organizations have long been interested in improving the skills and competencies of their human resources. Indeed, when employees develop their knowledge and abilities at work, they become better equipped to perform their job tasks and to effectively cope with the demands of their professional roles. This has consistently been found to be a key step to achieving numerous desirable organizational objectives, such as processes efficiency, customer satisfaction, employee commitment, and employee retention (Dhoopar et al., 2022; Hatch & Dyer, 2004; Shet et al., 2019; Vinarski Peretz, 2020). In this regard, knowledge sharing (KS) stands as a crucial factor that can help bolster the competencies of newly hired employees (De Vos et al., 2015; Meher et al., 2022; Niam & Lenka, 2017). Therefore, uncovering the favorable KS conditions and contexts that facilitate competency development, particularly during the employee onboarding phase, can be revealing for research and practice (Becker & Bish, 2021; Jeske & Olso, 2021).

DOI: 10.4018/IJKM.336278 *Corresponding Author

Onboarding refers to the activities, practices, and policies implemented by organizations to help new employees develop the knowledge, skills, and behaviors needed to succeed in their jobs (Bauer et al., 2007; Klein et al., 2015). Well-designed onboarding programs can promote organizational effective commitment, work engagement (Cesario & Chambels, 2019; Meyer & Bartels, 2017), and job satisfaction (Bauer et al., 2007; Meyer & Bartels, 2017). These can also decrease employee turnover (Bauer et al., 2007; Meyer & Bartels, 2017), which is particularly high during the first six months of employment (Becker & Bish, 2021; Sani et al., 2023). Furthermore, career advancement issues, such as those related to professional growth and development, have been consistently found to be central concerns leading employees to leave their jobs (Work Institute, 2022). Since onboarding is a learning intensive process, it requires that appropriate KS capabilities be put in place (Cesário & Chambel, 2019; Jeske &Olso, 2021; Ostroff & Kozlowski, 1992). In this study, we argue that these capabilities are closely tied to the KS channels that organizations make available to their newly hired employees during the onboarding phase, as well as to the reigning KS environment.

The relevance of knowledge sharing practices during the onboarding phase and their role in helping develop employee competency is not necessarily a new issue. However, most business practices, and particularly, those related to how knowledge is shared in contemporary organizations, are constantly changing, and as a result, onboarding practices must follow suit. Indeed, remote work is increasingly prevalent in modern organizations, and because of this, many companies have had to adapt their onboarding processes to effectively cater to the needs of off-site employees (Sani et al., 2023; Scott et al., 2022). Furthermore, employee preferences have dramatically changed in the last two decades, as digital natives, who are known to be much more technologically savvy than digital immigrants, have integrated the workforce (Vodanovich et al., 2010). Thus, it is crucial for modern organizations to provide current technological means that are aligned with the abilities and aspirations of this new generation of employees. For instance, it is well documented that Generation Z employees tend to prioritize autonomous and self-guided learning (Autry & Berge, 2011; Chillakuri, 2020; Gaidhani et al., 2019). They believe open communication and free-flowing information to be valuable resources to their personal development (Gursoy et al., 2008; Martin, 2005) and professional advancement (Chillakuri, 2020; Jeske & Olson, 2021). They also tend to favor onboarding experiences that are flexible, personalized, and customizable (Jeske & Olson, 2021). Accordingly, an effective onboarding process designed for these young employees must take these preferences into account. Therefore, in addition to traditional onboarding means that have been well-tested over the years, organizations must put in place digital channels, such as enterprise social media (ESM) and/or other information systems (IS) that are specifically designed to facilitate knowledge sharing among employees (Ziden & Joo, 2020). Evidently, the challenge becomes how to find ways to ensure that employees make use of these information systems and that they integrate them in their daily work routines. This generally depends on employees' own motivation to learn and on whether they perceive the information and knowledge available to them to be reliable and valuable (Nair et al., 2021; Veeravalli &Vijayalakshmi, 2022).

The primary aim of the study is to investigate the relationship between existing KS capabilities in a work environment and how young employees evaluate their competency level after a six-month onboarding period. To this end, the study explores a wide range of KS channels that can be used during the onboarding phase, encompassing both digital and traditional approaches, and assesses their influence on employees' perceptions of competency. It also investigates the role of the prevailing KS culture in shaping these perceptions. Finally, the study assesses the mediating role of employee satisfaction with existing KS practices on these two relationships.

The article is organized as follows. The next section develops the study's research model and hypotheses. This is followed by a section examining the methodological aspects of the study and its findings. The final section discusses these results and highlights their theoretical and practical implications.

2. HYPOTHESES DEVELOPMENT AND RESEARCH MODEL

2.1 Competency Development

Competency development is an important human resource objective aimed at enhancing employees' knowledge and skills needed to effectively perform a job or a work-related activity (Oyebisi Oyefolahan & Dominic, 2013; Naim & Lenka, 2017). A well-designed onboarding process is inherently tied to competency development since it is generally intended to help new hires be more attune with the strategic goals of the organization and be more confident in their ability to contribute to achieving these goals (De Vos et al., 2015; Meher et al., 2021). In this study, we theorize employee competency based on two dimensions: professional and personal. Professional competency pertains to the knowledge and skills necessary for employees to effectively carry out their job-specific responsibilities. On the other hand, personal competency has a more general conceptual domain, and it refers to the various skills and abilities that are not job specific and that are equally valuable to all employees regardless of their role or position. Accordingly, personal competency encompasses a wide range of human skills that are useful to employees in most organizational settings, such as the ability to easily learn, adapt, and change, as well as the ability to effectively manage stress and to showcase creativity and self-confidence when needed (Naim & Lenka, 2017).

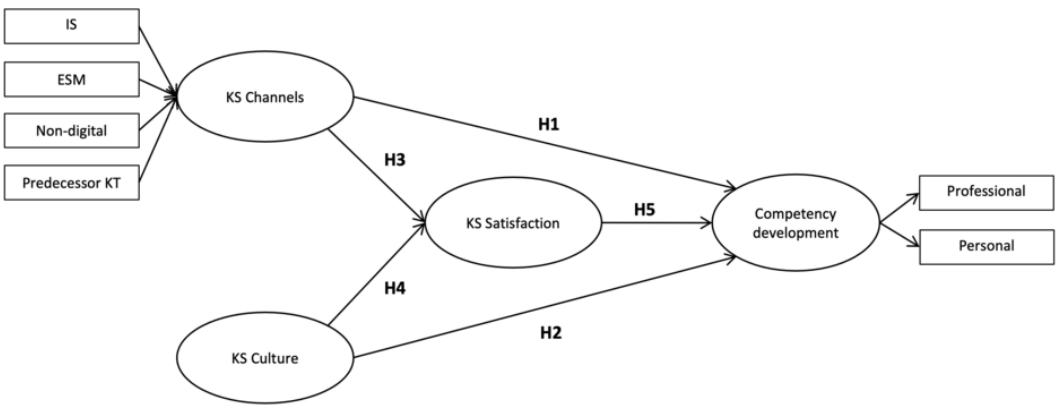
Professional competency and personal competency are two beliefs that reflect an employee's own overall perception of competency. As such, they are two dimensions of a reflective second-order construct, i.e., perceived competency. They represent two different manifestations of this higher-order construct, and their shared variances represent the construct (MacKenzie et al., 2011). That is, the perceived competency second-order construct exists at a deeper level than the two manifestations, so that any changes in the higher-order construct will also lead to changes in its dimensions. Accordingly, following the onboarding phase, an employee who perceives herself/himself to be highly competent will also view her/his professional and personal competency levels to be high, whereas an employee who perceives herself/himself to be marginally competent will also view her/his professional and personal competency levels to be marginal.

The Figure 1 research model presents the antecedent of employee perceived competency and their associations with the second order construct. These relationships and their related hypotheses are discussed in detail in the next paragraphs.

2.2 The Availability of KS Channels

Onboarding is a learning intensive process that begins as soon as employees enter their new work environment (Cesário & Chambel, 2019; Jeske &Olso, 2021; Ostroff & Kozlowski, 1992). It involves

Figure 1. Research model



different types of activities and channels that aim to inform, welcome, and guide new hires (Klein & Heuser, 2008). Although the length of this process may vary from a few weeks to several months, a six-month period is generally considered necessary to ensure that an employee is fully integrated in an organization (Meyer & Bartels, 2017). Whether onboarding activities are focused on the provision of basic information about company rules and regulations, or on the transfer of functional domain specific knowledge, they always depend on the firm's existing knowledge sharing capabilities. Indeed, newly hired employees gain access to organizational knowledge using various sources that include "non-interpersonal" ones, such as onboarding handbooks and digital knowledge repositories, and "interpersonal" ones, such as those related to the knowledge they gain from interacting with managers and coworkers (Cesário & Chambel, 2019; Godinho et al., 2023; Ostroff & Kozlowski, 1992). Furthermore, accessing the job specific knowledge of employees that have previously occupied similar or the same position (i.e., predecessor's knowledge), has been shown to be an important means to help new hires gain the competencies required to fulfill their role and responsibilities more rapidly (Elias &Farah, 2020).

To develop its knowledge-sharing capabilities, an organization can put in place numerous channels and practices, some of which rely on traditional face-to-face interactions, such as mentoring, in-class training, and communities of practice. It can also build IT infrastructures that facilitate the effective execution of important knowledge-processing activities by its employees—activities such as codification, memorization, and transmission (Adalberto et al., 2020; Ryan et al., 2010; Charband & Navimipour, 2016). These infrastructures, consisting of tools, systems, platforms, and automated solutions, have been shown to enhance the development, application, and distribution of explicit knowledge (Chong et al., 2010, Tahleho & Ngulube, 2022). These include traditional knowledge-management systems, such as extranets, intranets, collaboration platforms, and document management systems that employees can use to find, share, and exchange relevant knowledge. However, in the past few years, many organizations have gradually started integrating ESM into their existing IT infrastructure to further increase their knowledge-sharing capabilities (Al-Mawali & Al-Busaidi, 2022; Gaál et al., 2015; Yarbrough & Ramos Salazar, 2023). ESM are known to facilitate communication, information sharing, collaboration, professional development, and networking, among numerous other benefits.

In sum, given their important role in promoting and facilitating knowledge sharing within the organization, both digital and traditional channels can be valuable during the onboarding phase. This suggests that the availability of all these channels, be they through traditional forms, knowledge management systems, or ESM tools, is likely to improve competency development. Hence, we propose the following hypothesis:

H1: The perceived availability of KS channels during the onboarding phase positively influences the employee's perception of competency.

2.3 KS Culture

Among the numerous organizational conditions that have been found to affect employees' behavior towards KS and consequently to shape competency development (Naim & Lenka, 2017), organizational culture is one of the most influential social variables (Halisah et al., 2021; Osupile & Makambe, 2021). For example, when examining the impact of organizational learning culture on organizational effectiveness, Meher et al., (2022) found that an effective learning culture leads to an increase in KS activities that in turn enhances employee competency. A fruitful knowledge sharing culture solicits positive responses from employees and increases their willingness to share experiences, knowhow, and practical knowledge with their colleagues. It also establishes the rules for social interactions and creates norms regarding what is and is not acceptable when sharing knowledge among colleagues (Wiewiora et al., 2013; Ajmal & Koskinen, 2008). In organizations whereby a strong KS culture

exists, employees tend to be motivated to share their ideas and insights with others because they see this type of behavior to be natural and expected (Intezari et al., 2017, McDermott & O'dell, 2001). As a knowledge sharing culture facilitates the transfer and acquisition of knowledge, it has also been shown to improve the development of new competencies and to help sharpen existing ones (Trivellas et al., 2015). We, therefore, expect that the strength of the reigning KS culture in an organizational setting will have a significant impact on competency development. Hence, the following hypothesis:

H2: The KS culture experienced during the onboarding phase positively influences the employee's perception of competency.

2.4 Satisfaction With KS Practices

While the presence of knowledge sharing channels is widely recognized as an essential factor for competency development, alone it may not be sufficient. In fact, some employees may choose to disregard these channels or find ways to bypass them (Ferneley et al., 2006). To ensure active engagement with knowledge systems, employees must first believe the information and knowledge present in these tools to be dependable and valuable (Nair et al., 2021; Veeravalli & Vijayalakshmi, 2022). For instance, Ghobadi et al., (2017) explored employees' collaborative behaviors during job development activities and discovered that the sharing of knowledge among peers was influenced by these employees' satisfaction with the quality and usefulness of the shared knowledge. They defined knowledge sharing satisfaction as the overall satisfaction derived from previous knowledge sharing experiences and focused on the perceived quality and usefulness of the shared knowledge.

User satisfaction is a fundamental and universal measure of information system success (Seddon & Kiew, 1994; Al-Fraihat et al., 2020) that is applicable to all computer technologies within the organization, including KS channels (Wixom & Todd, 2005). Hence, we anticipate that competency development beyond the employee onboarding phase will hinge on the level of contentment and approval that employees experience regarding the various means and platforms available to them for exchanging and accessing information and knowledge in their work environment. As mentioned earlier, satisfaction is not solely determined by the technical capabilities of the knowledge-sharing tools, but also by the social practices and contexts in which these tools are utilized. In other words, their impact is contingent upon how users comprehend these tools and their functionalities, as well as how they choose to adapt and integrate them to meet their task requirements (Cheikh-Ammar, 2018; Karahanna, 2018; Sun et al., 2019).

Additionally, given that the existing KS culture plays a pivotal role in encouraging employees to share their knowledge and skills, it is expected that this positive environment can motivate employees to share valuable ideas and insights; thereby, enhancing the perceived usefulness and quality of the shared knowledge (Ahmad & Karim, 2019; Muhammed & Zaim, 2020). We expect that a higher level of satisfaction will motivate employees to actively seek and leverage this knowledge for learning and development, as demonstrated by Ghobadi et al., (2017). Consequently, our proposed model explores satisfaction as a mediating factor. Therefore, we propose the following hypotheses:

H3: The perceived availability of KS channels during the onboarding phase positively influences employee satisfaction with the KS environment.

H4: The KS culture experienced during the onboarding phase positively influences employee satisfaction with the KS environment.

H5: Satisfaction with the KS environment positively influences the employee's perception of competency after the first six months of work.

3. METHOD

3.1 Data Collection

Data for this study was collected from 44 provincial government agencies in the Canadian province of Quebec via an online survey. Respondents were public sector employees under the age of 35 who accepted to participate in a larger study on knowledge-sharing practices in the Quebec public sector. Responses were collected from November 2019 to the end of January 2020. A total of 16,515 invitations were sent out by e-mails, 7,579 questionnaires were returned, and 3,652 (22%) were considered complete and usable for the analysis.

3.2 Construct Measures

Items measuring KS culture and perceived competency were adapted from previous research (Nguyen, 2019; Naim & Lenka, 2017) and assessed using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). The presence of KS channels was operationalized in this study as a formative construct with 4 indicators: Digital KS tools, Enterprise social media, traditional KS channels, and predecessor knowledge transfer (KT). To measure the presence of the first 3 indicators, respondents were provided with a list of possible channels and asked to select those they had access to during their onboarding process. The number of selected items served as an indicator of the level of availability for the related KS channel (See Table 1). Predecessor KT was assessed on a 5-point Likert scale using one item that evaluates the extent to which the knowledge of an employee's predecessor was believed to be passed on to the survey respondent. General satisfaction with available KS capabilities was measured with 3 items, also on a 5-point Likert scale. Age, gender, government experience, and experience in current role were used as control variables. All measurement items are presented in the Appendix.

3.3 Results

3.3.1 Descriptive Statistics

The 3,652 respondents worked in 44 different public sector organizations, mostly as administrative assistants/technicians (43.6%) or domain specific experts (40.7%). Both types of jobs require precise degrees and/or professional qualifications. Among the respondents, 67.3% were female and 32.5% male (with 0.2% selecting "other"), and their average age was 28.8 years. Although most respondents were regular full-time employees (57.8%), some had temporary work contracts (20.7%), and others were part-time students or interns (21.5%). On average, respondents had close to 4 years of experience

Table 1. Presence of knowledge-sharing channels

Enterprise Social Media	%	Digital KS Tools	%	Traditional KS Channels	%
Blogs	4	Document management	36	In class training	46
Wikis	6	Content management-multimedia	6	Mentoring	38
Social Network Sites	6	Intranet-extranet	67	Individual meetings	44
Instant messaging	19	Search engines	47	Informal exchanges	50
Forums	7	Knowledge maps	4	Social activities	24
Email	76	Online training	39	Telephone meetings	19
		Shared repositories	46	Team meetings	62
				Conferences	18
				Colleague feedback	52
				Written documents	39

in the public sector and 2 years of tenure at their current job. The respondents were asked to indicate the availability of a variety of KS channels in their organizational settings during their integration phase (first 6 months on the job). As expected, email followed by instant messaging were the two most widely present communication tools available (76% and 19% respectively). There was a high prevalence of digital KS channels, with more than 35% of respondents indicating that they were able to access and share knowledge using software-based knowledge management systems, such as intranets, extranets, shared repositories, document management systems, search engines, and e-learning platforms. Traditional knowledge sharing channels were the most present among all the KS channels, with colleague feedback, informal exchanges, and team meetings being mentioned by more than 50% of respondents.

3.3.2 Data Analysis

To assess the Figure 1 research model, partial least squares (PLS) structural equation modeling (SEM) was performed using SmartPLS version 3.2.4 (Ringle et al., 2015). We chose PLS-SEM to do the analysis for two reasons: 1- the complexity of the research model. Indeed, the model contains 5 first-order constructs, 1 second-order construct, and 4 control variables (Ringle et al., 2012), making the model quite complex. 2- the use of formative constructs. More specifically, the availability of KS channels is operationalized in this study as a formative construct with four indicators. This unique type of construct is known to be difficult to assess using covariance-based SEM because these techniques tend to face model-identification problems when dealing with formative constructs (Chin, 1998; Hair et al., 2017). However, this is not an issue with PLS-SEM.

3.3.3 Measurement Model Validation

As recommended by Fornell and Larcker (1981), the convergent validity of the reflective constructs was assessed using three criteria: 1) indicator loadings, 2) construct reliabilities, and 3) average variance extracted. All the items had loading values higher than the suggested benchmark. As it can be seen in Table 2, all the Cronbach's alpha values were superior to the recommended 0.7 minimum,

Table 2. Construct reliability and convergent validity

Construct	Items/Dimensions	Loadings	Cronbach's Alpha	CR	AVE
KS Culture	cult1	0.822	0.843	0.889	0.617
	cult2	0.843			
	cult3	0.801			
	cult4	0.773			
	cult5	0.678			
Professional Competency	Pro_Cpt1	0.850	0.8	0.882	0.714
	Pro_Cpt2	0.829			
	Pro_Cpt3	0.856			
Personal Competency	Perso_Cpt7	0.848	0.76	0.862	0.676
	Perso_Cpt8	0.792			
	Perso_Cpt9	0.825			
Competency Development	Professional Competency	0.920	0.855	0.892	0.58
	Personal Competency	0.908			
Satisfaction with KS	Satis1	0.927	0.838	0.903	0.759
	Satis2	0.918			
	Satis3	0.758			

suggesting that all the constructs were reliably measured (Churchill et al., 2001). Moreover, for all the reflective constructs, the composite reliability values were no lower than the 0.86 level and the AVE values were no lower than the 0.58 level. These figures exceed the variance of the measurement error and show that the measures satisfy the convergent validity criterion.

To further assess construct validity, a cross-loadings table was also generated. As shown in Table 3, each item loading is much higher for its assigned construct than for the other constructs, indicating adequate convergent and discriminant validity.

Discriminant validity was also assessed using the square root of the AVE of each construct and the correlation between the constructs (Chin, 1998). As shown in Table 4, all the AVE values were greater than the off-diagonal elements, which further demonstrates discriminant validity.

A multicollinearity test was also conducted. It yielded variance inflation factor (VIF) scores all lower than the conservative threshold of 3.3 (Diamantopoulos & Siguaw, 2006), thus significantly lower than the generally used threshold of 10 (Hair et al., 1998), suggesting that multicollinearity was not an issue.

To evaluate the formative KS Channels construct, the multicollinearity of the four dimensions and the significance level of each of them were assessed (Cenfetelli & Bassellier, 2009). As indicated in Table 5, all the VIF scores were below the recommended upper limit, and all the weight values

Table 3. Item cross-loading

	Professional C.	Personal C.	Satisfaction	KS Culture
Pro_Cpt1	0.85	0.542	0.269	0.23
Pro_Cpt2	0.829	0.551	0.208	0.18
Pro_Cpt3	0.856	0.606	0.231	0.159
Perso_Cpt7	0.566	0.848	0.163	0.135
Perso_Cpt8	0.48	0.792	0.202	0.199
Perso_Cpt9	0.602	0.825	0.235	0.173
Satis1	0.274	0.231	0.927	0.578
Satis2	0.266	0.234	0.918	0.531
Satis3	0.18	0.165	0.758	0.448
cult1	0.155	0.125	0.452	0.822
cult2	0.164	0.159	0.48	0.843
cult3	0.217	0.196	0.527	0.801
cult4	0.148	0.151	0.434	0.773
cult5	0.185	0.163	0.445	0.678

Table 4. Construct correlations

	Culture	Personal C.	Professional C.	Satisfaction
KS Culture	0.785			
Personal Competency	0.204	0.822		
Professional Competency	0.224	0.671	0.845	
Satisfaction	0.599	0.243	0.279	0.871

Table 5. The second order KS channels construct

Dimensions	Weights	VIF	p-Value
IS	0.29	1.898	<0.001
ESM	0.08	1.522	<0.001
Non-Digital	0.17	1.740	<0.001
Pred. KS	0.85	1.007	<0.001

were significant, suggesting that the four dimensions contribute significantly to the formation of the construct.

Structural Analysis and Results

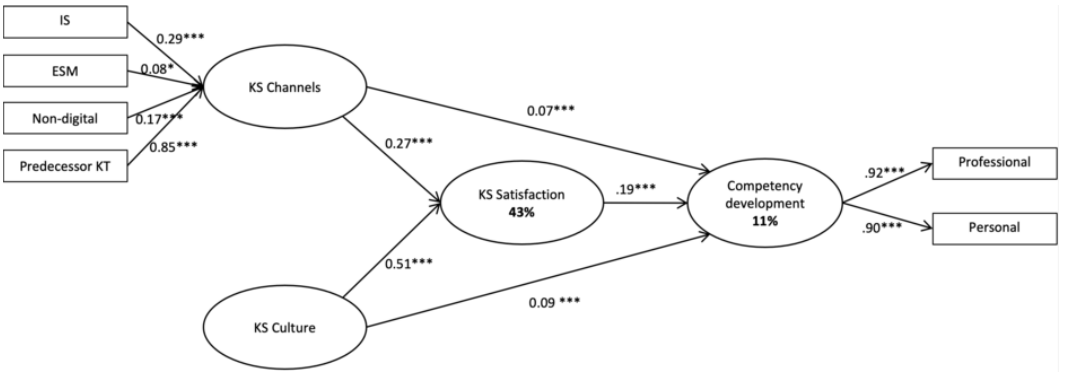
Table 6 and Figure 2 show the results of the structural model analysis, including the regression weights and the significance levels of the hypothesized relationships. All our study hypotheses were supported, and the model explained 11% of the variance in employee perception of competency, and

Table 6. Structural model results

Paths	Hypotheses	Path Coefficients
KS Channels -> Perceived Competency	H1	0.07***
KS Culture -> Perceived Competency	H2	0.09***
KS Channels -> Satisfaction with KS	H3	0.27***
KS Culture -> Satisfaction with KS	H4	0.51***
Satisfaction with KS -> Perceived Competency	H5	0.19***
Control Variables		
Experience with Government-> Perceived Competency		0.132***
Gender -> Perceived Competency		0.03*
Current Job Experience -> Perceived Competency		0.003ns
Age -> Perceived Competency		-0.001ns

* p < 0.05; ** p < 0.01; *** p < 0.001; and ns p > 0.05

Figure 2. Structural model results



44% of the variance in the satisfaction in KS practices. As hypothesised, the presence of KS channels had a direct, significant, and positive effect on employees' perception of competency (β=.07, $p < .001$). Similarly, KS culture had a direct, significant, and positive effect on this dependent variable (β=.09, $p < .001$). The presence of KS channels and KS culture both exhibited significant positive effects on employees' satisfaction with knowledge sharing (β=.27, $p < .001$ and β=.51, $p < .001$ respectively). In turn, satisfaction with knowledge sharing exhibited a direct positive effect on competency development (β=.19, $p < .001$).

4. DISCUSSION

Although a long-standing issue, existing research still lacks a comprehensive framework that depicts how organizations can establish efficient onboarding processes, particularly from a Knowledge Management standpoint (Brødsjø et al., 2023). To this end, this study uncovers the advantageous conditions that facilitate competency development of employees during the onboarding phase. More specifically, the study examines the competency development of newly hired employees using a knowledge management lens and uncovers important factors that can shape how employees assess their own level of competency after the completion of a six-month onboarding period. To do so, the study develops and empirically validates a theoretical model suggesting that employee competency is determined by the availability of knowledge sharing channels (both digital and traditional), by the KS culture sensed during the onboarding period, as well as by the level of satisfaction with existing KS practices. The study results shed much needed light on the critical aspects of onboarding processes that should be considered to support newcomer's needs and organizational objectives (Becker & Bish, 2021; Ellis et al., 2017; Meyer & Bartels, 2017). The study's research model is empirically validated using governmental agencies (provincial), which are unique, knowledge-based organizations that are known to be bureaucratic, and whereby, competency development is of vital importance (Titi Amayah, 2013; Pepple et al., 2022). Indeed, numerous public sector organizations are trying to implement various technological tools to facilitate knowledge sharing among their employees with the objective of increasing job satisfaction and retention (Fischer & Döring, 2022).

Accordingly, the study findings present important implications for practitioners interested in designing adequate onboarding settings for their newly hired employees. More specifically, the results suggest that to maximize the potential value of knowledge sharing, organizations need to invest in the development of their KS capabilities by integrating a variety of KS channels to their work practices. These can be in the form of non-digital KS channels, traditional KS information systems, or enterprise social media. This helps ensure that employees have access to a comprehensive range of KS resources to cater to their diverse needs. Furthermore, our results clearly suggested that developing and nurturing an organizational culture that encourages KS are important building blocks to implement in an organizational setting, particularly because of their impact on new hires. Indeed, with a positive knowledge sharing culture, employees are more likely to be satisfied with the knowledge sharing environment they operate in, which in turn helps them develop their competency and allow them to be more efficient at work. By following these guidelines, organizations can create dynamic environments that facilitate seamless access to knowledge and that promote effective communication and collaboration among employees.

However, to leverage the benefits of KS technologies, organizations should remember that it is crucial to increase employee awareness about, and to highlight the capabilities of, available digital knowledge sharing tools. This can be done by providing adequate training, conducting pilot projects, and sharing best practices. Following these processes helps ensure that employees are well-informed about the value of these tools, and that they are aware of their functionalities and affordances (Cheikh-Ammar, 2018). An effective onboarding program will seamlessly integrate new employees into the organization's existing knowledge management systems and facilitate their appropriation of relevant KS platforms. This integration enables new hires to conveniently access and share information with

their colleagues, facilitating smooth knowledge exchange within the organization. Additionally, it is advisable for organizations to closely monitor the satisfaction of employees with the knowledge sharing channels provided during the onboarding process. This is especially important in the case of virtual onboarding, whereby employees exhibit higher risks of feeling socially disconnected. Regular assessment of employee satisfaction can help identify possible gaps in knowledge or areas to improve in the KS channels, which allows management to intervene to ensure a more engaging and connected experience (Jeske &Olson, 2021; Sani et al., 2023).

Finally, fostering a culture of knowledge sharing within the organization can be an integral part of onboarding programs (Becker & Bish, 2021; Meyer & Bartels, 2017). This entails explicitly conveying the value and importance of sharing information and expertise. Engaging in KS activities, such as KS trainings, sharing best practices, and hands-on collaborations are effective ways to encourage knowledge sharing. These initiatives create avenues for sharing and learning, fostering a collaborative environment that promotes continuous knowledge transfer and development within the organization.

4.1 Limitations and Future Research

Although this study offers new insights on the role of KS capabilities on the effectiveness of onboarding new employees, its limitations should also be taken into consideration. First, the research model only explains about 11% of the variance in the dependent variable, which indicates that measuring KS channels and culture, along with evaluating employee competencies, are complex issues that depend on numerous other contingencies. Future research should aim to incorporate more qualitative studies to explore the use of various knowledge sharing strategies, both through technology-mediated means and face-to-face communication. These studies should examine the potential impact of these strategies on the productivity and job satisfaction of recently hired employees, with a particular focus on Generation Y. Considering that Generation Y may have distinct preferences in acquiring knowledge compared to previous generations of workers, investigating their specific needs and preferences can provide valuable insights for designing effective KS approaches tailored to their requirements.

The study is also limited by the way that KS capabilities were assessed. A list of KS channels was provided to respondents who were then asked to select those that were available in their work environment. The list included both traditional channels, KS information systems, and more modern ESM tools. An exhaustive list was developed for the purpose of the study and could be very useful to researchers who want to obtain a general picture of the state of available KS capabilities in various organizational settings. However, this assessment did not consider the usage frequency of each channel, the appropriateness of this use, nor the usefulness of the channels. Since these factors can also have a significant impact on knowledge acquisition, future research should strive to provide a more comprehensive assessment of how these tools can effectively be integrated into the work of new employees. By doing so, a better understanding of their role in facilitating knowledge acquisition can be gained.

Lastly, there are numerous research opportunities that future studies should look to explore, particularly when considering the impact of the COVID-19 pandemic on work practices. Future research can delve into understanding the effects of remote work, digital collaboration tools, virtual onboarding, and other related issues that have recently emerged. Investigating these areas can provide valuable insights into the evolving dynamics of knowledge sharing, competency development, and organizational practices in the post-pandemic era. Indeed, in recent years millions of new hires have found themselves separated from their colleagues with whom they can now only communicate remotely. In the processes, numerous new knowledge risks have emerged that must be properly examined, and their impact assessed (Jennex & Durcikova, 2020; Jennex et al., 2022). Indeed, it has been well-documented that remote work and the rapid adoption of collaboration tools that we have recently witnessed can intensify cybersecurity threats, hinder knowledge flow, and potentially impede decision-making. At a time when jobs are being radically altered by telework, researchers should attempt to understand the organizational risks and mechanisms that shape how the newly available

IT tools, such as Microsoft Teams, Zoom, and other modern organizational information systems can be properly leveraged for KS purposes and onboarding effectiveness.

As the workplace continues to rapidly evolve, new technological advancements (i.e., artificial intelligence and augmented reality) are now available and can boost employee experiences and develop their soft skills, even during onboarding (Fowler, 2019; Faragher, 2020). Hence, future research can focus on examining the similarities and differences among IT artifacts employed in digital onboarding and explore the potential role of these technologies in enhancing competency development. By investigating these aspects, valuable insights can be gained regarding the effectiveness and impact of various digital tools utilized during the onboarding process, ultimately contributing to the improvement of competency development practices.

ACKNOWLEDGMENT

The data for this study was collected using a survey designed for a larger study of knowledge-sharing practices among young professionals working at public sector organizations in the Canadian province of Quebec. We would like to thank the public sector youth forum of Quebec for its help in distributing the survey to its members.

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APPENDIX

Table 7. Questionnaire Items

Construct		Measures
KS Culture	**Cult1**	Employees understand the importance of knowledge sharing.
	Cult2	High levels of participation in capturing and transferring knowledge are expected.
	Cult3	On the job training and learning are valued.
	Cult4	Senior management attributes a great deal of our success as a team or as an organization to the knowledge we possess.
Perceived Competency		*After the first six months in my job:*
Professional	**ProCpt1**	I was able to define the objectives and issues related to my job functions
	ProCpt2	I had the ability to solve technical problems
	ProCpt3	I had the ability to plan, organize and execute my tasks
Personal	**PerCpt1**	I had the ability to handle stressful situations
	PerCpt2	I had the ability to learn and develop as per changing organizational demands
	PerCpt3	I had self-confidence
Satisfaction with KS Practices	**Satis1**	Overall, I am satisfied with the different channels for knowledge sharing available in my workplace.
	Satis2	The available channels to access knowledge meet my needs within my area of responsibility
	Satis3	Access to knowledge significantly contributes to the development of my skills at work.
Availability of KS channels	***IS***	Sum of traditional IS knowledge management applications available
	ESM	Sum of all SM tools available for knowledge management purposes
	Non-digital Tools	Sum of traditional IS knowledge management practices available
	Predecessor KT	When I took office, the knowledge of my predecessor was passed on to me. (Scale of 1 to 5)

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