KNOWLEDGE MANAGEMENT IN SOCIAL WORK: MANAGEMENT SUPPORT, INCENTIVES, KNOWLEDGE IMPLEMENTATION, AND EMPLOYEE EMPOWERMENT*

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ABSTRACT: In this article, we build on the current research about knowledge management in social work settings to demonstrate that knowledge management has the potential to enable social work organizations to influence public policies and improve the quality of their services. By increasing awareness and information about knowledge management in the field of social work, our goal is to examine a direct positive relationship between management support and incentives and knowledge implementation. In addition, as we wanted to explore the moderating effect of employee empowerment on knowledge implementation, we define and test several hypotheses in order to discover how management support, incentives and employee empowerment impact knowledge implementation in social work settings. We use moderation regression to test our hypotheses with a sample of 98 managers and employees of social work organizations in Slovenia who completed a questionnaire specifically prepared for the study. The study results support the existence of a significant and positive relationship between management support and incentives with knowledge implementation. Employee empowerment also acts as a moderator in the relationship between incentives and knowledge implementation, however, the interaction term is negative. In any case, the highest levels of knowledge implementation occur when employee empowerment is high as well. In the conclusion of the paper, we discuss the theoretical and practical implications derived from the research study.

Key words: knowledge management, social work, management support, incentives, knowledge implementation, employee empowerment

JEL classification: M10

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1 INTRODUCTION

"Knowledge and the way it is managed has been with humankind since the beginning of time" (Jashapara, 2011). In today’s knowledge economy, an organization's ability to manage knowledge effectively is becoming increasingly crucial (Dalkir, 2005). Nowadays, many public organizations orient themselves towards becoming truly knowledge-based organizations (Willem & Buelens, 2007). In this effort, the adaptation and implementation of knowledge management practices is considered beneficial (Špaček, 2016) in any type of an organization, whether private or public (Arora, 2011), and has the potential to play an important role in improving their operations (Wiig, 2002). Previous research has established four basic knowledge management process stages: (1) creating knowledge, (2) storing and retrieving knowledge, (3) transferring knowledge, and (4) implementing knowledge (Alavi & Leidner, 2001). More than simply increasing profit and competitive advantages, the benefits of knowledge management in social work organizations include adding value to services, as well as increasing wellbeing, societal effectiveness, and general welfare (Myers, 2014; Örtenblad & Koris, 2014). Management support (Yew Wong, 2005), incentives (Ajmal, Helo & Kekale, 2010), and employee empowerment (Akbari & Ghaffari, 2017) have been explored in the existing literature and have come to be recognized as the organizational factors that influence the success of knowledge implementation. The implementation phase is perhaps the most important part of the knowledge management process as it contributes the most to value creation (Haamann & Basten, 2019), and yet paradoxically it has received relatively little research attention (Alavi & Tiwana, 2002).

Therefore, we believe it is of crucial importance to develop a better understanding of knowledge management in general and knowledge implementation in the particular context of the public sector, including individual social work organizations. Effective knowledge management enables organizations to influence public policies through the more systematic and effective capture, dissemination, transfer, and implementation of knowledge (Riege & Lindsay, 2006), and consequently has the potential to improve the quality of social work services and programs (Ukil, 2016). Unfortunately, the most frequent discussions about knowledge management do not specifically address the social work sector (Leung, 2007). Moreover, there exists a certain scepticism in the social work sector regarding more “quantocentric” cultures and approaches (McCoyd et al., 2009), as well as a growing discontent among social work professionals that has occurred with the increased formalization of social work practices (Broadhurst et al., 2010). A further difficulty of implementing knowledge management in social work settings arises from the fact that social work organizations have a tendency to rely on the existing knowledge and practices, and are reluctant to embrace new solutions for managing and collecting data (Barrett, 1999). Consequently, what is needed for a successful implementation of knowledge management in the public sector is the development of a research area that has been largely unexplored (Špaček, 2016). Information and understanding about knowledge management in social work remains scarce (Austin et al., 2008; Leung, 2014). Not surprisingly, there is also a lack of substantive discussion about knowledge management in the existing social work literature (Edge, 2005).
Previous research has established the positive effects of management support (Yeh, Lai & Ho, 2006) and incentives (Yew Wong, 2005) on knowledge implementation. However, the combination of those constructs represents an innovation in the context of knowledge management practices in social work settings and therefore requires additional empirical research. It has also been established that employee empowerment has a positive effect on knowledge management practices (Hasan, 2012; Muhammad, 2006), nevertheless, the impact of employee empowerment as a moderator variable has not yet been studied in the context of knowledge implementation in the social work sector. Therefore, we focus our research on the examination of a direct positive relationship between management support and incentives and knowledge implementation. Moreover, we explore the moderation effect of employee empowerment on the relationship between management support and incentives and knowledge implementation. We test our hypotheses in the social work centers of Slovenia, conducting a quantitative analysis of the data collected from 98 social work managers and employees in the Slovenian social work centers. Since all of our data for these variables come from single respondents in a one-time survey, we recognize that the common method bias may influence certain relationships within our model and may therefore pose a methodological problem.

The primary goal of our study is to contribute to the underdeveloped literature about knowledge management in the public sector (Špaček, 2016) and especially in social work settings (Austin et al., 2008; Leung, 2014). The intent of our research is to partially fill this gap by providing a theoretical analysis followed by an empirical examination that links management support and incentives to knowledge implementation, and finally, an analysis of this relationship by considering the moderating mechanism of employee empowerment. In this way, we respond to certain shortfalls in the existing research and contribute to the theoretical advancement of the field (Al Ahbabi et al., 2019). In line with the knowledge-based organizational view (Grant, 1996; Hislop, Bosua & Helms, 2018; Kogut & Zander, 2003) that recognizes the important role of knowledge in organizations, our study assumes knowledge to be the primary source underlying the functioning of social work centers. This paradigm shift has already been recommended by several social work researchers (Edge, 2005; Fitch, 2006). The second goal of our research is to continue in the tradition of Kahn (1993) who began to explore how professional caregivers can organize in more effective ways, in particular, how they can share (or transfer) and implement knowledge in order to deliver higher-quality services. This new focus on knowledge management in social work settings is extremely promising as an area of exploration in the context of the broader public sector (Henttonen, Kianto & Ritala, 2016). Moreover, by focusing on social work organizations, our research goes beyond previous studies on knowledge management in the public sector which were typically conducted within the education and research sectors (Massaro, Dumay & Garlatti, 2015). The third goal of our research is to use a quantitative approach as a way to provide a new methodological framework. Most previous studies researching management topics in the social work sector tend to use exclusively qualitative approaches (Downes, 2014), mainly case studies. Our quantitative approach builds on Soydan's suggestion (2008) that since the scope of social work research is broad and multidisciplinary, it should include methodological diversity.
2 THEORY

2.1 Enhancing the implementation of knowledge management in the public sector

Knowledge management is a managerial activity that develops, transfers, stores, and implements knowledge. Moreover, it aims to equip employees with real time information so that they can react appropriately and make decisions that will allow them to successfully fulfill organizational goals (Hicks, Dattero & Galup, 2006). In recent years, knowledge and knowledge management have become increasingly important in the operation of public organizations (Willem & Buelens, 2007). Key factors that enable the implementation of knowledge management are organizational culture, leadership, management support, information-communication technologies, incentives, and performance measurement (Lee, Kim & Kim, 2012). In the context of the public sector and social work organizations, modifying organizational culture is considered especially important because it is the main driver for successful implementation of knowledge management in general (Riege & Lindsay, 2006). However, barriers that prevent successful implementation differ in the public and private sectors. The reduced ability to plan strategically (Ragsdell, 2013) resulting from regular political changes, the lack of operational maturity, and the constant battle between altruistic and organizational objectives (Hume & Hume, 2008) have been identified as barriers specific to the public sector and social work organizations.

As mentioned above, the four basic knowledge management process stages (knowledge creation, knowledge storage and retrieval, knowledge transfer, and knowledge implementation) have been clearly established in previous research (Alavi & Leidner, 2001; Hicks et al., 2006). Knowledge implementation is defined as the final stage of a knowledge seeker’s quest to solve a problem (Bock, Kankanhalli & Sharma, 2006). More importantly, knowledge implementation is the stage that creates real value for the organization by making knowledge active and relevant (Downes, 2014). In other words, problems are only really solved if and when knowledge is applied in practice (Bierly, Damanpour & Santoro, 2009). The additional value of knowledge implementation also involves providing feedback information to organizations, feedback that can subsequently be used as a source for continual learning (Grah et al., 2016). It must be recognized that the mere existence of knowledge will not impact an organization’s activities. Further, it is of paramount importance to actually use newly gained knowledge in daily practices and routines (Alavi & Leidner, 2001). Ranjbarfard et al. (2014) identify both the lack of management support and the lack of incentives as significant barriers impeding knowledge implementation. Because of this, we include in our research these two crucial organizational factors as predictors of knowledge implementation.

2.2 Management support and knowledge implementation

The first organizational factor identified above is management support that focuses on openly supporting and encouraging knowledge management (Downes, 2014). Management support can be perceived as the degree to which management understands the importance
of knowledge management and the extent to which it participates in its implementation and activities (Lin, 2011). In previous research, management support has been defined as both a facilitator (Lee et al., 2012) and a generic critical factor of success (Yew Wong, 2005) in knowledge management. The support and active involvement of managers can have a significant impact on the positive outcomes of knowledge management in organizations (Azmee, Kassim & Abdullah, 2017). Such support from top management should be ongoing and delivered in a practical manner (Storey & Barnett, 2000). The lack of management support for knowledge management in general can negatively impact the overall success of specific knowledge management initiatives (Akbari & Ghaffari, 2017).

It follows therefore that management support is one of the most important organizational components of knowledge management infrastructure and it is an essential factor for all knowledge management processes (Kulkarni, Ravindran & Freeze, 2007). As such, the knowledge management infrastructure, including management support, has the potential to improve knowledge implementation (Hoffman, Hoelscher & Sherif, 2005). In their study, Lee et al. (2012) predict and empirically support that management support positively affects knowledge process capabilities. One of the knowledge process capabilities they examine is the implementation of knowledge that also enables the realization of its practical values. In a similar vein, Kamhawi (2012) establishes and supports a positive relationship between management support and knowledge management activities. Yeh et al. (2006) also identify management support as an important factor that promotes knowledge implementation. Akbari and Ghaffari (2017) posit that the supportive behavior of management is of paramount importance in creating a workplace environment where employees are motivated to actually apply and implement their knowledge in their work. Although research on the relationship between management support and knowledge management does exist, these factors have not been pursued in combination in research studies on knowledge management in the social work setting. In light of the above, the following is our first hypothesis:

Hypothesis 1: Management support is positively related to knowledge implementation in social work.

2.3 Incentives and knowledge implementation

In addition to openly encouraging and supporting knowledge management, managers should also be aware of the need to recognize and reward contributions made by their employees (Downes, 2014). Because of this, our research also focuses on incentives and the impact they have on knowledge implementation. We especially focus on how incentives influence the amount of knowledge implemented in the practices of an organization. In general, incentives are regarded as a reflection of the worth an organization gives to their knowledge workers (Cabrera & Bonache, 1999). Both management support and incentives have already been established as organizational factors that have a positive impact on knowledge management (Svetlik, Stavrout-Costea & Lin, 2007). Ajmal et al. (2010) suggest
that incentives for knowledge efforts in general have the potential to positively influence the success of specific knowledge management initiatives.

In the opinion of Yew Wong (2005), establishing the right levels of recognition, incentives, and rewards is one of the most important factors that shifts employees in the direction of knowledge implementation. Employees must be motivated (Cho & Korte, 2014) and their participation rewarded (Paroutis & Al-Saleh, 2009) in order to encourage behaviors that are related to knowledge management. Organizations should provide additional support for employees to improve their ability in this area (Černe, Jaklič & Škerlavaj, 2013) and enable them to respond to challenges (Škerlavaj et al., 2007). Incentives are viewed as the most effective mechanism encouraging employee participation in such activities and clearly demonstrating that they are valued. Incentives also show employees that their actions are seen and recognized by the organization and its management (Razmerita, Kirchner & Nielsen, 2016). Ho (2009) similarly claims that incentives positively influence levels of knowledge implementation in organizations. As is clear from this discussion, previous research has examined the benefits derived from the relationship between incentives and knowledge implementation. However, this combination of constructs has not been explored in the context of knowledge management in social work settings. In light of the above, the following is our second hypothesis:

**Hypothesis 2:** Incentives are positively related to knowledge implementation in social work.

### 2.4 Moderating role of employee empowerment

Employee empowerment is an integral part of the successful functioning of organizations (Hunjra et al., 2011). It is considered an effective motivational tool that will influence the behavior and outcomes of individuals by facilitating their participation and involvement in decision-making processes (Meyerson & Dewenttinck, 2012). Bowen and Lawler (1992) developed one of the most globally recognized conceptualizations of employee empowerment. The latter defines employee empowerment as a multifaceted approach to service delivery in which managers share with their employees the following key organizational components: (1) information about the organization’s performance, (2) rewards based on the organization’s performance, (3) knowledge that allows employees to understand and contribute to organizational performance, and (4) the power to make decisions that influence organizational direction and performance. Their conceptualization follows that organizations with the goal of implementing knowledge-based management should invest in employee empowerment strategies (Akbari & Ghaffari, 2017).

Today employee empowerment is considered an important research topic and has gained significant attention in the context of studies on knowledge management (Akbari & Ghaffari, 2017). Employee empowerment occurs and can be analyzed on many different levels and affects employees differently in different contexts (Amichai-Hamburger, 2008). The study of moderator effects has a long and important history in many different research
areas (Aiken & West, 1991), including management studies. Contemporary researchers have become increasingly interested in examining the complex relationships between variables, including moderating effects (Fassot, Henseler & Coelho, 2016). Dawson (2014) defines a number of statistical models that include moderation effects as one of the most important factors in management and organizational literature.

Previous research supports the proposal that empowerment plays a significant part in influencing knowledge management practices (Hasan, 2012; Muhammad, 2006). It is also important to recognize that employees take into account their expectations and evaluate their experiences in relation to their empowerment. For this reason, it is important to develop clear empowerment-related expectations. In the case of under-fulfilled and/or unclear empowerment-related expectations, employees might become confused about their role in decision making. This can lead to poor judgement in their work activities (Wong & Kuvaas, 2018) and can also hinder their perception of competence mobilization (Wong, Škerlavaj & Černe, 2017). To sum up, how employees evaluate the utilization of their competence is less dependent on the actual level of autonomy and more dependent on their expectations (Wong et al., 2017).

Management can enhance employee empowerment by modifying organizational structures that support empowerment (Leitch et al., 1995). Any significant increase in employee empowerment requires management support (Yukl & Becker, 2006). Akbari and Ghaffari (2017) propose a significant and positive relationship between management support and employee empowerment. They conducted one of the few applied studies that aimed to fill the gap between knowledge management and employee empowerment, and established the relationship between knowledge management initiatives and employee empowerment. Using a theoretical approach, Ahmed, Rafiq, and Saad (2003) discovered that employee empowerment had a strong connection to management and that management support is integral to its successful implementation. To the contrary, the failure of organizations to implement successful empowerment practices is often caused by the lack of management support (Cunningham & Hyman, 1999).

Similarly, the idea that employee empowerment endorses knowledge implementation has emerged in many different research fields (Wall, Cordery & Clegg, 2002). Moreover, employee empowerment represents the potential structure within which knowledge can actually be implemented in practice (Blumberg & Pringle, 1982). Ahmadi et al. (2012) suggest and empirically support that there is a direct relationship between employee empowerment and knowledge implementation. Significant relationships between dimensions of knowledge management, including knowledge implementation, are also reported in the research of Hasani and Sheikhesmaeili (2016). Empowered employees perceive that they have the power to deal with complex situations, events, and various users by drawing on the knowledge and skills they possess (Conger & Kanungo, 1988). In conclusion, when employees feel empowered, they tend to be more committed to using their knowledge for the general good of the entire organization (Chong & Choi, 2005).
Nevertheless, research thus far has failed to provide a comprehensive understanding of how employee empowerment influences the relationship between management support and knowledge implementation in the context of knowledge management in social work settings. Previous research focusing on knowledge management has neglected the interaction effect of employee empowerment and management support. It should be noted, however, that while employee empowerment, management support, and knowledge implementation have been considered extensively in the existing literature, these concepts and the relationships and interaction effects require further conceptual development. In light of the above, the following is our third hypothesis:

**H3:** Employee empowerment moderates the positive relationship between management support and knowledge implementation: specifically, the positive relationship becomes stronger when levels of employee empowerment are high.

Previous research indicates that to implement employee empowerment within an organization, management must provide appropriate incentives that are linked to the desired employee behavior. In other words, it is necessary for management to link employee behavior to incentives, possibly in the form of financial benefits or promotion opportunities that will encourage further empowerment within the organization. Empirical research also supports the finding that incentives are positively related to the extent of employee empowerment in an organization (Baird & Wang, 2010). In addition, the provision of incentives is crucial in the context of empowerment, as employee empowerment increases risk and responsibility for individual employees and raises the demands for them to perform (Goldsmith et al., 1997). Recognition and financial incentives are positively correlated to enhancing employee empowerment (Gkorezis & Petridou, 2008). According to Spreitzer (1995), incentives are an essential factor in the work context determining employees’ feelings of empowerment.

Following this argument, we identify another potential research opportunity. Namely, there is a shortage in the existing literature of models that combine various streams of research including knowledge management and social work as well as different methods and tools that include moderator variables. Combining these streams could lead to a more in-depth understanding of relationships between the constructs of employee empowerment, incentives, and knowledge implementation. Although employee empowerment, incentives, and the knowledge implementation have been extensively covered individually in the literature, the combination of these concepts has not been fully explored. Understanding the interaction effect between empowerment and incentives, as well as the relationships between these constructs requires additional research. In light of the above, we propose the following hypothesis:

**H4:** Employee empowerment moderates the positive relationship between incentives and knowledge implementation in such a way that the positive relationship is stronger with high levels of employee empowerment.
Our conceptual model with hypotheses is presented in Figure 1.

Figure 1: Conceptual model of the relationships between management support, incentives, knowledge implementation and employee empowerment

3 METHODOLOGY

3.1 Sample and data collection procedure

We used an adapted online and in-person questionnaire to collect primary data from respondents in the period from May 2018 to January 2019. The questionnaires were filled out by 98 managers and employees in Slovenian social work centers that employ approximately 1,250 people (Ministry of Labor, Family, Social Affairs and Equal Opportunities, 2018). The Slovenian government maintains a network of social work centers, giving them the central role for coordinating social protection and the delivery of welfare services (Kuzmanič Korva et al., 2004). Social work centers are the institutions on the national level that introduce measures and deliver services for basic social security and protection. For our sample, the Social Chamber of Slovenia provided us with the e-mail contacts of employees and we later established personal contacts with individual respondents. The Social Chamber of Slovenia invited all of the employees for whom they had e-mail contacts to participate in our research and we later contacted additional individuals through personal contacts.

The largest share of respondents work in organizations with 26 to 50 employees (33.3%) or in organizations with 50 or more employees (33.3%). The next largest share of respondents work in organizations with 11 to 25 employees (29.2%). The largest share of respondents (more than 40.0% of the total age structure) belongs to the age cohort from 40 to 49 years old. Two-thirds of respondents (71.3%) are aged from 30 to 49 years. Of the 98 respondents, 80.2% are women, 11.5% are men, and 8.3% of respondents did not provide their gender. The high proportion of female respondents is consistent with McPhail’s observation (2004) that social work is predominantly a female profession. In accordance
with the decree on the introduction and use of the classification system of education and training in Slovenia, more than half of our respondents (64.5%) had successfully acquired level 7 in the Slovenian education system. 15.7% of respondents had acquired level 6/2 in the education system and 10.5% level 8/1. Almost four-fifths of respondents (78.7%) have been employed in their organizations for at least six years, over half of the respondents (58.5%) have been employed in their organizations for at least 11 years, and 24.5% of the respondents have been employed in their organizations for at least 21 years.

To avoid non-response bias, we developed personal relationships with many of the individuals employed in social work centers and sent them several reminders to respond to our questionnaire. Because the data for all our model variables came from individual respondents in a one-time survey, the common method bias might have influenced certain relationships in our model. To test for the potential existence of common method bias, we first applied Harman’s single factor test (1976). The first factor accounted for 82.3% of the overall variance, which is above the 50.0% threshold recommended by Podsakoff et al. (2006) and suggests that the common method bias is indeed an issue in this study. However, as Harman’s single factor test has a number of limitations (Kemery & Dunlap, 1986), we also adopted the common latent factor (Liang et al., 2007) and marker variable approach (Lindell & Whitney, 2001). Both approaches can be used to indicate the presence of common method bias in a study (Podsakoff et al., 2003). The entire questionnaire was filled out by 98 respondents. Our response rate was 7.9%. We edited the data in the SPSS 24.0 program.

3.2 Measures

For individual constructs, we selected the measurement instruments that are used in the scientific environment. (1) We used well-established measurement instruments that have been developed and/or used by key authors of the studied topics. (2) We used frequently-used measurement instruments that are often cited in scientific papers. (3) We used up-to-date and relevant measurement instruments that have been used in the latest research. We used the five-point Likert scale ranging from 1 (I completely disagree) to 5 (I completely agree) to assess the respondents’ level of agreement with the statements about what level of management support, incentives, employee empowerment, and knowledge implementation are present in their organizations.

3 For the marker variable, we chose a construct that is theoretically dissimilar to the principle constructs used in our study: namely, our marker variable is organizational infrastructure. The marker variables correlations with our principle constructs are as follows: marker and management support -.469; marker and incentives -.830; marker and knowledge implementation -.857, and; marker and employee empowerment -.177. High correlations among items of the study’s principle constructs and the marker variable are an indication of the common method bias issue.
Management support. We used the three item scale (α = .79) that Downes (2014) adapted from the already existing literature to measure management support. The questionnaire includes statements such as: “My organization has a designated manager for administering knowledge management processes.”

Incentives. We used the five item scale (α = .90) that Marsick and Watkins (2003) developed to measure how much incentives were used in the respondents’ organizations. The questionnaire includes statements such as: “My organization rewards employees for new ideas.”

Knowledge implementation. We used the five-item scale (α = .90) that Downes (2014) adapted from the already existing literature to measure knowledge implementation in respondents’ organizations. The questionnaire includes statements such as: “My organization has mechanisms for converting knowledge into action plans,” and “My organization uses lessons learned or best practices from projects or tasks to improve subsequent projects or tasks.”

Employee empowerment. We used the six-item scale (α = .87) derived from one of the best-known conceptualizations of employee empowerment developed by Bowen and Lawler (1992) to measure employee empowerment in respondents’ organizations. We used this instrument to focus on the extent to which managers share information about the organization’s performance. This is the information that enables employees to understand and contribute to organizational performance, and endows them with the power to make decisions that influence organizational direction and performance and to give rewards based on the organization’s performance. The questionnaire includes statements such as: “My organization has information in a form that is readily accessible to employees,” and “In my organization managers regularly involve staff in decision-making.”

Control variables. We controlled for the following five variables: size of organization, age of respondent, gender of respondent, highest level of education, and average tenure in the respondents’ organizations. We used these control variables because their inclusion or exclusion can have important consequences on the substance of research conclusions (Bernerth & Aguinis, 2016). Organization size as a control variable may affect the ability of an organization to implement knowledge (Aragon-Correa, Garcia-Morales & Cordon-Pozzo, 2007). The age (Radaelli et al., 2011), gender (Feingold, 1994) and highest level of education (Srivastava, Bartol & Locke, 2006) of respondents are included as control variables because they may have a significant influence on the overall level of knowledge implementation in an organization. The average tenure of respondents in their organizations was used as a control variable in research related to knowledge management conducted by Jain and Moreno (2015).

3.3 Methods

We analyzed our data and the interaction effects using hierarchical linear regression in the SPSS 24.0 program. We also applied the confirmatory factor analysis (CFA), using the lavaan version 0.6-3 (Rosseel, 2012) of the programming environment R – version 3.5.2 (R Core Team, 2018) with the R studio interface. The purpose of applying CFA was to make the designed model sufficiently fit the data. We checked convergent validity by examining the factor loadings of all items in the questionnaire, and verifying that they were statistically significant and above the 0.50 threshold (Hair et al., 1998). The CFA analysis indicated that the factor loadings of all four constructs were statistically significant and above the 0.50 threshold. This further supported the convergent validity of our constructs. The standardized loadings for management support were within the range of .63 to .76. The standardized loadings for incentives were within the range of .73 to .79. The standardized loadings for knowledge implementation were within the range of .75 to .91. The standardized loadings for employee empowerment were within the range of .60 to .87. As a result, no items in the questionnaire (measurement variables) were excluded from further analysis in the iterative process of purifying the scale. In our model, the 19 items in the questionnaire were used to measure the four constructs.

We also calculated the composite reliability index (CRI) and the average variance extracted (AVE) to test for composite (construct) reliability (Fornell & Larcker, 1981). There is no universally accepted standard for appropriate values of CRI, but we decided to follow the suggestion of Diamantopoulos and Siguaw (2000) that researchers should be satisfied with results above the 0.60 threshold.6 We similarly followed the suggestion of Diamantopoulos and Siguaw (2000) regarding a cut-off value for AVE of 0.40.7 All of our constructs fell within the suggested CRI and AVE cut-off values found in the literature. A number of fit indices exist for the purposes of evaluating model fit (Škerlavaj, Song & Lee, 2010). The results of CFA (expected four factor solution) achieved the following results: CFI = 0.90; chi-square = 294.013; RMSEA = 0.12; df = 125.8 The CFI indicator displayed a good fit with the data while the RMSEA indicator was below acceptable values.

6 CRI for our constructs is as follows: Management support 0.75, Incentives 0.88, Knowledge implementation 0.91 and Employee empowerment 0.90.

7 AVE four constructs is as follows: Management support 0.50, Incentives 0.60, Knowledge Implementation 0.68, Employee Empowerment 0.61.

8 Within construct items (i.e. items corresponding to the knowledge implementation scale with other items pertaining to the same scale), residuals were allowed to correlate. Without those modification indices, the results of the model fit are: CFI = 0.82; chi-square = 442.181; RMSEA = 0.15; df = 146.
4 RESULTS

4.1 Descriptive statistics

Table 1 presents descriptive statistics for all variables analyzed in the research study. We can see from the results in Table 1 that the respondents on average give the best evaluation to employee empowerment (2.98), closely followed by their evaluation of knowledge implementation and incentives (2.84 and 2.83). The lowest mean value is assigned to management support (2.63). Correlation coefficients between the measured variables are mostly moderately or strongly positive with ranges between 0.2 and 0.6. There is a significant positive correlation between incentives and management support (.71; p < 0.01) and between incentives and highest level of education (.24; p < 0.05) that additionally explains the correlations. Knowledge implementation showed a significant positive correlation with management support (.80; p < 0.01) and incentives (.84; p < 0.01). Employee empowerment showed a significant positive correlation with management support (.66; p < 0.01), incentives (.84; p < 0.01), knowledge implementation (.80; p < 0.01), and the highest level of education of respondents (.21; p < 0.05). Employee empowerment showed a significant negative correlation with organization size (-.25; p < 0.05). Among the control variables, average tenure is significantly and positively correlated to age (.45; p < 0.01).

Table 1: Mean Values, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organization size</td>
<td>3.96</td>
<td>0.89</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2. Age</td>
<td>3.98</td>
<td>0.91</td>
<td>-.15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Gender</td>
<td>1.97</td>
<td>0.45</td>
<td>-.11</td>
<td>-.08</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Highest level of education</td>
<td>3.80</td>
<td>0.78</td>
<td>.05</td>
<td>-.01</td>
<td>-.02</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Average tenure</td>
<td>3.98</td>
<td>1.78</td>
<td>-.02</td>
<td>.45**</td>
<td>-.04</td>
<td>-.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Management support</td>
<td>2.63</td>
<td>1.07</td>
<td>-.14</td>
<td>.03</td>
<td>-.15</td>
<td>.11</td>
<td>-.07</td>
<td>(.79)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Incentives</td>
<td>2.83</td>
<td>1.02</td>
<td>-.14</td>
<td>-.03</td>
<td>-.13</td>
<td>.24*</td>
<td>-.14</td>
<td>.71**</td>
<td>(.90)</td>
<td>-</td>
</tr>
<tr>
<td>8. Knowledge implementation</td>
<td>2.84</td>
<td>0.97</td>
<td>.19</td>
<td>.00</td>
<td>-.12</td>
<td>.16</td>
<td>-.12</td>
<td>.80**</td>
<td>.84**</td>
<td>(.90)</td>
</tr>
<tr>
<td>9. Employee empowerment</td>
<td>2.98</td>
<td>0.91</td>
<td>-.25*</td>
<td>.11</td>
<td>-.12</td>
<td>.21*</td>
<td>-.06</td>
<td>.66**</td>
<td>.84**</td>
<td>.80**</td>
</tr>
</tbody>
</table>

Note: n = 98 managers and employees employed in Slovenian social work centers. Reliability indicators (Cronbach’s alphas) are on the diagonal in the parentheses. *p < 0.05 **p < 0.01
4.2 Hypotheses testing

In our research paper, we test the direct relationship between management support and incentives with knowledge implementation in the social work sector, as articulated in hypotheses H1 and H2. We also include the construct of employee empowerment as a moderating mechanism, as articulated in hypotheses H3 and H4. We use a series of hierarchical regression analysis with centered variables to test our hypotheses. In the first regression model (Model 1), we include five control variables with management support as the independent variable. In the second regression model (Model 2), we include the same five control variables with incentives as the independent variable. In the third model (Model 3), we enter a two-way interaction (management support X employee empowerment). Similarly, in the fourth model (Model 4), we enter a two-way interaction (incentives X employee empowerment). The results of all four models are presented in Table 2.
### Table 2: Hierarchical regression analysis predicting knowledge implementation – Models 1-4

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>s.e.</td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Organization size</td>
<td>-0.01</td>
<td>0.06</td>
<td>-0.01</td>
<td>-0.15</td>
</tr>
<tr>
<td>Age</td>
<td>-0.05</td>
<td>0.07</td>
<td>-0.05</td>
<td>-0.74</td>
</tr>
<tr>
<td>Gender</td>
<td>0.01</td>
<td>0.12</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Highest level of education</td>
<td>0.01</td>
<td>0.07</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Average tenure</td>
<td>-0.02</td>
<td>0.03</td>
<td>-0.04</td>
<td>-0.62</td>
</tr>
<tr>
<td>C_Management support</td>
<td>0.43</td>
<td>0.07</td>
<td>0.48</td>
<td>6.55**</td>
</tr>
<tr>
<td>C_Incentives</td>
<td>0.56</td>
<td>0.11</td>
<td>0.59</td>
<td>5.22**</td>
</tr>
<tr>
<td>C_Employee empowerment</td>
<td>0.52</td>
<td>0.08</td>
<td>0.48</td>
<td>6.33**</td>
</tr>
<tr>
<td>C_MSxC_EE</td>
<td>-0.04</td>
<td>0.06</td>
<td>-0.04</td>
<td>-0.72</td>
</tr>
</tbody>
</table>

R²: 0.767 F(df): 37.70(80) ΔR²: 0.767
F(df): 30.39(76) ΔR²: 0.737
F(df): 32.85(79) ΔR²: 0.002
F(df): 33.29(76) ΔR²: 0.017

As gender is not a dichotomous variable, we also rerun a regression analysis without this control variable and achieve the following results:

- Model 1: R²: 0.767 F(df): 44.52(81) ΔR²: 0.767
- Model 2: R²: 0.737 F(df): 35.91(77) ΔR²: 0.737
- Model 3: R²: 0.769 F(df): 38.01(80) ΔR²: 0.002
- Model 4: R²: 0.754 F(df): 33.29(76) ΔR²: 0.017
In Model 1, we find a positive and significant relationship between management support (\(\beta = .48; \text{exact } p = .000\)) and knowledge implementation in the social work sector. Therefore, hypothesis H1 is supported by the data. In Model 2, we use the hierarchical regression analysis and find a positive and significant relationship between incentives and knowledge implementation in the social work sector (\(\beta = .59; \text{exact } p = .000\)). Therefore, hypothesis H2 is also supported by the data. Models 3 and 4, which test employee empowerment as a moderator of management support (Model 3) on incentives (Model 4) and knowledge implementation, show minimal added value in comparison with the direct effect models (\(\Delta R^2\) in comparison with Models 1 and 2).

The results of the hierarchical regression analysis applied in Model 3 do not show a significant relationship between the two-way interaction of management support and employee empowerment on knowledge implementation (\(\beta = -.04; \text{exact } p = .476\)). In other words, on the basis of our sample data, we do not find sufficient evidence to support the interaction between management support and employee empowerment. Therefore, hypothesis H3 is rejected. The results of the hierarchical regression analysis applied in Model 4 show a significant negative relationship between the two-way interaction of incentives and employee empowerment with knowledge implementation (\(\beta = -.13; \text{exact } p = .023\)). The resulting negative interaction coefficient indicates that the effect of the combined action of the two predictors is less than the sum of their individual effects. The graphic interpretation of this model is best represented by a simple slope analysis. The analysis of the simple slope represents high levels of employee empowerment, suggesting it is significant (exact \(p = 0.001\)). The interaction between incentives and employee empowerment as they influence knowledge implementation is shown in Figure 2.

9 The p-value failed to reach the defined threshold. The absence of the interaction effect indicates that there is also no moderation between the observed variables. The size of the interaction found is not far enough from zero to assertively claim an interaction effect (at least not with a type I error of 0.05 and a reasonable type II error = 1 - \(\beta\)). It is more reasonable to conclude from the data that management support and employee empowerment have individual, additive effects on knowledge implementation.

10 The lack of the interaction effect tells us that the simple slopes are not different from each other. In other words, the lines are parallel. To avoid misleading the readers of our paper, we did not include the simple slope analyses because of the statistically non-significant interaction effect.

11 We included the following in the two-way unstandardized simple slope analyses: Unstandardized Regression Coefficients (independent variable, moderator, interaction, and intercept/constant), Means and SDs of Variables (mean and SD of independent variable, mean and SD of moderator) and Simple Slopes Analysis (variance coefficient of independent variable and interaction, covariance of coefficients of independent variable and interaction, value of moderator at which to evaluate slope, sample size, and number of control variables).
Figure 2: Interaction between incentives and employee empowerment in influencing knowledge implementation

Figure 2 illustrates that the highest levels of knowledge implementation are achieved when employee empowerment is high. We also find that the level of incentives influences knowledge implementation both when employee empowerment is low and when it is high. In both cases, incentives influence the higher levels of knowledge implementation in practice. Hypothesis H4 predicts that employee empowerment is a moderator of the relationship between incentives and knowledge implementation. It can be concluded from our research that the influence of incentives on knowledge implementation is stronger when the level of employee empowerment is higher. Thus, the results provide support for hypothesis H4 in cases of both low and high levels of process incentives. However, when the levels of incentives are higher, the contribution of employee empowerment to higher levels of knowledge implementation is smaller.

5 DISCUSSION

Our study examines the role of employee empowerment and its moderating effect on the direct relationship between management support and incentives with knowledge implementation. Notably, management support has a positive and significant influence on knowledge implementation in social work settings (Hypothesis H1). In addition, incentives also have a positive and significant relationship with knowledge implementation in social work settings (Hypothesis H2). The moderating effect of employee empowerment on the relationship between management support and knowledge implementation is not significant (Hypothesis H3). While the relationship between incentives and knowledge implementation is further moderated by employee empowerment (Hypothesis H4), the
interaction term is negative. Specifically, the highest levels of knowledge implementation occur when employee empowerment is high.

5.1 Theoretical implications

The concept of knowledge management is relatively new and remains largely unexplored in the public sector (Špaček, 2016). Moreover, knowledge management is particularly neglected as a research topic in the field of social work (Austin et al., 2008; Downes, 2014; Leung, 2014). In this paper, we make three important theoretical contributions to this area.

Our first theoretical contribution to the literature of knowledge management research is simply applying and testing components of knowledge management to the public sector. Svetlik et al. (2007) propose that management support and incentives are organizational factors that impact knowledge management practices. In our study, we provide a theoretical explanation and an empirical examination of how management support and incentives directly and positively influence the implementation of knowledge management in the context of the Slovenian social work centers. Previous studies established that knowledge management practices can help organizations to impact public policies through a more systematic and effective capture, dissemination, transfer, and implementation of knowledge (Riege & Lindsay, 2006), and in this way improve the quality of their services and programs (Ukil, 2016). However, these studies did not examine the relationship between the previously defined constructs that we explored in our research. Thus, our study provides a relevant contribution to the literature because we show how management support and incentives have the potential to shape knowledge implementation in social work centers and how this can influence the aforementioned organizational goals.

Moreover, our study emphasizes the significance of employee empowerment as a moderator that is present in the relationship between incentives and knowledge implementation. Knowledge implementation in cases of both low and high levels of employee empowerment proves to be sensitive to changes in the amount of incentives. The significance of the role of incentives is discernible in cases of both high and low levels of employee empowerment. Specifically, incentives tend to lead to higher levels of knowledge implementation in practice. In the case of higher levels of employee empowerment, the role of incentives appears to be less significant. However, because the interaction term is negative, the interaction between employee empowerment and incentives may have the effect of reducing the overall knowledge implementation in practice. Therefore, we recommend that social work centers do not simultaneously focus on employee empowerment and incentives as this might have the unintended effect of reducing knowledge implementation. Based on our results, we also believe that enhancing simultaneously the efforts in employee empowerment and incentives might confuse employees in social work centers. Finally, we note that this first contribution to the theory in the literature was in part a response to the need expressed by several researchers to advance the theoretical foundations in the field of knowledge management specifically in the public sector (Al Ahbabi et al., 2019).
Our second theoretical contribution to the literature involves the knowledge-based view of the organization (Grant, 1996; Hislop et al., 2018; Kogut & Zander, 2003). Our study seeks to draw attention to the importance of knowledge management in social work centers by identifying the primary components that underlie their functioning. This research orientation is in agreement with social work researchers who recommend a shift in emphasis to the knowledge-based view of social work organizations (Edge, 2005; Fitch, 2006). We aimed to conceptualize and empirically validate how knowledge and knowledge management can help social work centers deliver higher quality services. As Massaro et al. (2015) note, previous research on knowledge management in the public sector primarily focused on the education and research settings. By focusing our research on social work centers, we aim to go beyond the typical framework of knowledge management research in the public sector.

Our third theoretical contribution to the literature is to respond to the need for more methodological diversity in the scope of social work research and provide a new methodological foundation (Soydan, 2008). In our study, we add to the previous research by applying quantitative research methods to a sample of the Slovenian social work organizations. Quantitative research methods significantly contribute to both understanding and effectively responding to the existing challenges encountered by social work organizations (Teater et al., 2016). In our research, we identify a sample of managers and employees working in the Slovenian social work centers and measure their individual perceptions of different aspects of knowledge management.

5.2 Practical implications

We use the results of our study to generate a number of important practical recommendations for managers and employees in social work organizations. Although social work centers are not-for-profit enterprises, they can nevertheless benefit from our findings by understanding the positive potential of knowledge management techniques for improving the quality of their services. Social work organizations have the obligation to provide high-quality services to their users and in this way enhance the wellbeing of society at large (Bloice & Burnett, 2016). Managers of social work centers have become increasingly aware that, like other public organizations, they must respond to the growing needs of the users of their services combined with a diminishing amount of resources to meet such demands. As a result, they will have to make internal improvements in order to successfully maximize the existing resources (Dimovski et al., 2017) and continue delivering their mission to their clients (Miller & Whitford, 2007) in the highest quality way possible.

The mean values of the four measured constructs in our research are at best moderate in practice and can at times be considered low. The moderate to low mean values indicate that social work centers are not realizing the many potential benefits of knowledge management practices. Small increments of improvement are therefore possible in all of
the four constructs that were examined in our study to assess the current condition of knowledge management practices in the Slovenian social work centers. The following is a review of the four constructs and suggestions of practices that could be undertaken. First, social work centers should ascertain whether their management supports knowledge management and the implementation of knowledge management practices. This is crucial because management support has been defined as a critical success factor (Azmee et al., 2017; Yew Wong, 2005) for knowledge management (Lee et al., 2012). If organizations neglect the aspect of management support, the probability of successful implementation of knowledge management practices significantly deteriorates (Akbari & Ghaffari, 2017). Second, social work centers should ascertain that appropriate incentives are being provided when employees make positive efforts toward knowledge implementation. Providing appropriate incentives is an integral part of the success of the knowledge management initiative (Ajmal et al., 2010). Moreover, incentives should be made to encourage employees to use their knowledge (Yew Wong, 2005) and positive recognition should be clearly expressed when such efforts are made (Razmerita et al., 2016). Third, social work centers should focus on employee empowerment as this can also be a significant factor in encouraging knowledge implementation and determining its long-term success (Ahmadi et al., 2012; Hasan, 2012). However, as the interaction term in our study is negative, there should also be an awareness that simultaneously endorsing employee empowerment and incentives could have a detrimental effect on the overall levels of knowledge implementation. In other words, employee empowerment and incentives are more effective when used separately. Fourth, social work centers should determine the extent to which knowledge is implemented in practice. Only when knowledge is applied in practice can it help social work organizations to actually solve their problems (Bierly et al., 2009). The sole existence of knowledge per se is not enough (Alavi & Leidner, 2001). Therefore, managers must consider how to improve knowledge implementation, which aspects of knowledge management are most effective in practice, and what role these practices might have on stimulating higher levels of knowledge implementation. Finally, we believe it is important to carry out an ongoing discussion with policy and decision makers at the national level about the potential use of knowledge management practices in the social work sector in order to achieve an overall improvement of services.

5.3 Limitations and future research directions

Despite the new information about knowledge management practices in the Slovenian social work centers generated by our research, our study is not without limitations. The first limitation relates to the size of the study's sample. Due to the implementation of the GDPR Act in May 2018, the number of our potential respondents was small. We were able to collect data from only 98 managers and employees, which represent a small proportion of the whole population of employees working in the social work centers in Slovenia (1,250).

The second limitation is related to common method bias as defined in Harman’s single factor test (1976), the common latent factor (Liang et al, 2007), and the marker variable...
approach (Lindell & Whitney, 2001). Ideally, we would deal with common method bias by obtaining data from our respondents in three phases during which we would measure independent, moderating, and dependent variables at separate points in time at least two weeks apart (Podsakoff et al., 2003). The failure to find an interaction effect of employee empowerment on the relationship between management support and knowledge implementation may also be the result of our common method bias issue (Jakobsen & Jensen, 2015). Another potential factor that could explain the lack of moderation effect is the misfit between empowerment and related expectations. As emphasized in previous research (i.e. Wong & Kuvaas, 2018; Wong et al., 2017), unclear empowerment expectations might result in employees’ confusion related to their decision-making roles, which in turn leads to poor judgement on work-related activities and can negatively impact their perception of competence mobilization.

The third limitation of our study is that we cannot make a general conclusion about the proposed relationships because we included only a proportion of social work centers in our study. Thus, the generalizability of our current findings across all social work centers or the whole social work field is not clear. Consequently, the future direction of research would be to include more social work centers in subsequent studies with the aim of generating more conclusive results. Researchers could potentially also involve other social work organizations to study additional aspects of knowledge implementation. This is an important opportunity as the whole topic of knowledge management is still fairly innovative and unexplored in social work settings and thus offers potential for future exploration for both researchers and practitioners.

The fourth limitation of our study is that we did not control for the geographic location of the respondents in our research. As indicated informally by some respondents, there are significant differences in the Slovenian municipalities that are also apparent in the field of social work. Therefore, we could explore whether there are variances in the level of knowledge management practices in social work centers across (statistical) regions.

In future research, we would like to gain a more in-depth understanding of how individual employees perceive knowledge management in relation to their daily work routines. This would require a combination of quantitative and qualitative research approaches. In particular, follow-up, open-ended, face-to-face interviews would strengthen our quantitative findings. Such additional research would generate greater insights into specific topics related to knowledge management practices and allow the researchers to overcome the limitations caused by our reliance on questionnaires, using only Likert scale ranges. We would also encourage researchers to re-examine our results of the two-way interaction effects. It would be interesting to gain additional insight on why the interaction effect between management support and employee empowerment is statistically not significant. Likewise, it would be beneficial to further explore why the interaction effect between incentives and employee empowerment is negative.
Future research could also encompass new constructs. We suggest linking management support and incentives with knowledge creation, knowledge storage and retrieval, and knowledge transfer. Moreover, the leadership style of managers in social work centers would be an interesting independent or moderating variable. In addition, gaining insight about whether the novel and interesting stream of knowledge hiding (Connelly et al., 2019) is relevant for social work might be another promising avenue of future research. As our present study was based on the perception of individual employees, a promising opportunity for future research on knowledge implementation would be to investigate the same constructs on the team and organizational levels. To conclude, there remain many areas still to be explored in the field of knowledge management in the public sector and specifically in social work settings. We believe that the current research offers useful theoretical and practical contributions and encourages more research into other aspects of knowledge management in social work settings.

6 CONCLUSION

Our research study focuses on understanding how individuals employed in the Slovenian social work centers perceive various aspects of knowledge management in their organizations. In our study, we combine the constructs of management support, incentives, knowledge implementation, and employee empowerment. Using questionnaires filled out by 98 respondents, working as managers or employees in social work centers, we find that management support and incentives positively and directly influence levels of knowledge implementation. We also find that employee empowerment acts as a moderator of the relationship between incentives and knowledge implementation, but that the interaction term is negative. Knowledge implementation tends to be highest when employee empowerment is also high. Based on these results, this paper could be used as an important building block to improve our understanding of how knowledge management works in the social work sector and how it is best implemented in specific social work organizations. In the future, it would be necessary to include national policy and decision makers in the discussion of our findings as social work centers function in the framework of the public sector and outcomes are in many cases determined by state employees. We hope that at the very least our research sparks additional interest and debate in the area of knowledge management in the social work sector and specifically in social work organizations in Slovenia.

REFERENCES


