

Employee Satisfaction and Knowledge Management

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Abstract: This paper examines knowledge management, which is a way to nurture job satisfaction and examine how knowledge management can increase individual employees' job satisfaction. We propose a theoretical model concerning the connections between five facets of knowledge management and job satisfaction. Existence of knowledge management processes in one's working environment is significantly linked with high job satisfaction. Practical implications of knowledge management has strong impact on employee satisfaction, and therefore, managers should implement knowledge management activities in their organizations, not only for the sake of improving workers' performance but also for improving their well-being at work.

Keywords: Knowledge management; Job satisfaction; Organization.

1 Introduction

The most important means of production are intangible. The knowledge-based view puts a great emphasis on human capital – skills, knowledge, competences, attitudes and motivation of people working for an organisation and the way that they use these skills for the benefit of the organisation (Schultz, 1961; Crook et al., 2011). However, as human intelligence is tacit, embedded and at least partially individual, it cannot be simply “captured and codified”, which makes its management problematic. It is necessary to suggest that the management of knowledge is usually connected to creating, providing, energising and supporting suitable knowledge environments within an organisation. Knowledge management is about how to motivate and enable knowledgeable individuals to use and share their knowledge and create new knowledge. The authors examine if and how knowledge management can be used to promote employee job-satisfaction. They also suggest that knowledge management can nurture job satisfaction and, in so doing, foster high organisational performance. Several studies have demonstrated that job satisfaction, which is the extent to which an employee feels positively or negatively towards his/her job (Locke, 1976; Odom et al., 1990; Spector, 1997), influences employee motivation, organisational commitment, and, ultimately, the quantity and quality of performance (Petty et al., 1984; Bolon, 1997; Spector, 1997; Judge et al., 2001). Factors that support job satisfaction have been studied extensively, and the validated antecedents include, for example, job design, skill variety and role ambiguity. However, knowledge management issues have not yet been included among the many examined influencing factors. Although job satisfaction is the most researched topic in the field of organisational behaviour (Spector, 1997; Appelbaum et al., 2000), it has only rarely been approached from a knowledge-based perspective. We have organised the paper into 6 parts. In first part, we presented a model of the

connections between knowledge management and job satisfaction. We devoted the second part to five discussed facets of knowledge management: knowledge acquisition, knowledge sharing, knowledge creation, knowledge codification and knowledge retention. We formulated some hypotheses that concern the impact of knowledge management on job satisfaction. After that, we tested them empirically by analysing a survey data set of 411 observations, collected from the employees of a Slovak municipal organisation. We analysed the data by structural equation modelling, using the partial least squares package to examine connections between the study variables. Finally, we presented the results with reflection to theoretical and practical implications discussed.

2 Theoretical background

In the second chapter, we brought ideas and discussed the nature of job satisfaction and knowledge management practices. Then we created a framework of the research model and formulated hypotheses concerning the impact of knowledge management practices on job satisfaction.

2.1 Job satisfaction

Spector (1994) defined job satisfaction as the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs. The meaning of job satisfaction varies from the feelings a worker has about his/her job (Smith et al., 1969) to “an effective reaction to a job, which results from the incumbent’s comparison of actual outcomes with those that are desired” (Cranny et al., 1992). Locke (1969) stressed that the job satisfaction has also been defined as “a function of the perceived relationship between what one wants from one’s job and what one perceives it as offering” and as the extent to which an employee feels positively or negatively towards his/her job (Odom et al., 1990; Locke, 1976). The term job satisfaction is close to the concept of employee well-being. According to Grant et al. (2007, p. 52), employee well-being is the overall quality of an employee’s experience and functioning at work. The definition includes three dimensions of well-being: psychological, physical and social. Well-being is a critical factor in both individual and organisational performance. The impact of poor well-being is reflected in under-performance, absenteeism, presentism, sick leave and turnover. Job satisfaction also relates to the discussion of motivation (Vroom, 1964; Herzberg et al., 1959; Maslow, 1954), where the source of job satisfaction can be connected especially to social belonging, self-esteem and self-actualisation, at the top of Maslow’s hierarchy of needs (Maslow, 1954). Vroom’s (1964) expectancy theory hypothesises the situation with personality variables that in combination enhance job satisfaction. Expectancies are based on the worker’s belief that effort will lead to strong performance, which will, in turn, lead to reward. Another concept closely related to job satisfaction is organisational commitment, which can be defined as attachment to the organisation, characterised by intention to remain in it, identification with the values and goals of the organisation and willingness to exert extra effort on its behalf (Porter et al., 1974). Commitment binds an individual to an organisation and thereby reduces the likelihood of turnover (Meyer et al., 2004). It has been demonstrated that job satisfaction strongly impacts organisational commitment (Bolon, 1997). Job (dis)satisfaction is usually defined as a negative or positive judgement regarding one’s job situation (Weiss & Cropanzano, 1996). According to Blum and Naylor (1968; Gustainiené & Endriulaitiené, 2009), job satisfaction is general attitude among workers, which incorporates their feelings about wages and working conditions, control mechanisms, promotion related to the job, social relations at

work, recognition of talent and other similar variables, personal characteristics and group relations outside work. Employee's performance is determined by their competency, motivation and organizational support. This has an impact on the factors that contribute to job satisfaction rate. Employee's job satisfaction determines the number of objective and subjective factors (Kozelová, 2016). Job satisfaction is an accumulation of sentiments related to the job being performed. If people believe that their value is appreciated within the job, they develop a positive attitude towards it and experience satisfaction (McCormick & Tiffin, 1974). It is possible to increase job satisfaction by ensuring fair and satisfactory performance appraisals, reward systems and benefits. According to Herzberg (1968), the opposite of job satisfaction is not dissatisfaction, but rather a simple lack of satisfaction. Many studies have argued that an individual will stay when a job is satisfying, but will leave a dissatisfying job (Judge et al., 2005; Locke & Latham, 2002). Irvine & Evans (1995) note that the characteristics of work content—such as routinisation, autonomy and role conflict – and the work environment – such as leadership, supervisory relations and participation – all relate to job satisfaction. Job satisfaction has been widely studied in connection with various organisational and individual characteristics including organisational commitment (Currivan, 1999), performance, organisational culture (Lund, 2003) and age/gender. However, very few existing studies have related knowledge management to job satisfaction (Lee & Chang, 2007; Koseoglu et al., 2010; Almahamid et al., 2010; Singh & Sharma, 2011). This kind of approach seems to be quite new.

2.2 Knowledge management practices

Knowledge management refers to identifying and leveraging the collective knowledge in an organisation to help the organisation compete (von Krogh, 1998). Generally speaking, knowledge management consists of knowledge processes (such as knowledge creation, sharing, acquisition, transfer and application) together with infrastructures, capabilities and management activities that support and enhance the knowledge processes (Lee & Choi, 2003).

The literature on knowledge management includes several categorisations, practices and activities. For example, Nonaka & Takeuchi (1995) divide knowledge management practices into knowledge creation, incorporation and dissemination. Demarest (1997) proposes four knowledge management processes: knowledge construction, embodiment, dissemination and use. Alavi & Leidner (2001) discuss knowledge creation, knowledge storage/retrieval, knowledge transfer and knowledge application. In sum, the literature typically identifies four to six interrelated knowledge processes that are cyclical (Nonaka & Takeuchi, 1995; Demarest, 1997; Alavi & Leidner, 2001). Similarly to these views, knowledge management processes can be divided into five main types: knowledge acquisition, knowledge sharing, knowledge creation, knowledge codification and knowledge retention.

Knowledge acquisition stands for organisational practices aimed at collecting information from extra-organisational sources (Cohen & Levinthal, 1990; Zahra & George, 2002; Darroch, 2005). External networks and collaborative arrangements are important sources of knowledge for all types of organisation. Customers form an especially important group from whom knowledge should be acquired if the organisation is to succeed. For example, customer feedback systems, data mining, business intelligence and collaboration with partners and research institutions are typical of highly developed knowledge acquisition practices.

Tacit knowledge is embedded in human experiences and shared in social interaction. Although some tacit knowledge may be codified, much will remain tacit. The only way to share it is in face-to-face interaction (Nonaka & Takeuchi, 1995); knowledge sharing is the key for

managing tacit knowledge. Therefore, organisations should also encourage frequent face-to-face communication and creation of shared learning experiences, as well as build a knowledge-sharing culture (Nonaka & Takeuchi, 1995; Ståhle & Grönroos, 2000; Carpenter & Rudge, 2003; Dalkir, 2005). Knowledge-sharing activities include informal communication, brainstorming sessions, mentoring and coaching (Filius et al., 2000).

Knowledge creation refers to the organisation's ability to develop new and useful ideas and solutions regarding various aspects of organisational activities, from products and technological processes to managerial practices. Knowledge creation is a key factor in enabling sustained performance in turbulent environments (Teece et al., 1997; Eisenhardt & Martin, 2000). Knowledge is created when an organisation and its members learn and innovate. Knowledge-creating organisations arrange for the development of potential and self-transcending knowledge to cultivate radically new insights (Scharmer, 2001) and promote innovation and idea development at all levels of the organisation.

To allow for the re-use and integration of knowledge, its codification and storage is also important. Knowledge codification consists of activities needed to codify tacit knowledge into an explicit form, to store documented knowledge and to provide up-to-date documented knowledge to others in the organisation (Filius et al., 2000). It is based on availability of appropriate communication and information technology tools, platforms and systems, together with the related employee skills and motivation to use them to make employee knowledge explicit and to codify and store it for use in company systems and documents. Ideally, employees should be equipped with information technology tools and platforms that facilitate the effective codification and storing of explicit knowledge in databases and manuals, as well as the search and transfer of this knowledge.

Finally, knowledge retention refers to activities related to managing personnel turnover and the associated loss of expert knowledge – a key strategic resource. Expert knowledge can be lost when employees leave the organisation for one reason or another. As baby boomers retire, attracting and maintaining the best employees will become an even more pressing challenge with regards to knowledge retention.

2.3 Knowledge management as a means of improving job research model

Job satisfaction is one of the most researched topics in organisational behaviour literature and has been actively studied since the 1930s. The prerequisites for high job satisfaction have been widely studied, and the validated antecedents include, for example, job design, skill variety and role ambiguity (Glisson & Durick, 1988). Nevertheless, knowledge management issues have not yet been included among the many job satisfaction factors to be examined. In general, it seems that knowledge management literature has only rarely addressed the impact that knowledge management can have on “soft” performance issues, such as job satisfaction.

In the literature review, the authors found only four previous papers that had explored the relationship between knowledge management and employee job satisfaction (Koseoglu et al., 2010; Almahamid et al., 2010; Lee & Chang, 2007; Singh & Sharma, 2010). Lee & Chang (2007) examined the relationship between employee job satisfaction and knowledge management in an electric wire and cable group in Taiwan. The results of their study demonstrate a mutually positive correlation between job satisfaction and knowledge management. Singh & Sharma's (2011) research into Indian telecommunication industries also showed a positive association between knowledge management and employee job satisfaction. Almahamid et al. (2010) focused more closely on the impact of knowledge sharing on job

satisfaction in a sample of 160 employees in Jordan. Their study demonstrated that knowledge-sharing practices significantly impact employees' job satisfaction. However, Koseoglu et al. (2010), who examined the relationship between knowledge management (knowledge sharing and knowledge transfer) and job satisfaction among 154 luxury hotel employees in Turkey, failed to find a connection between knowledge management and job satisfaction. In sum, it can be stated that existing research evidence on the relationship of knowledge management and job satisfaction is rather scant and inconclusive.

According to psychological expectancy-based job design theory (Hackman & Lawler, 1971; Hackman & Oldham, 1975), particular task attributes lead to an individual sense of meaningfulness, responsibility and knowledge of results, which, in turn, promote job satisfaction, as well as work motivation, performance and effectiveness (Hackman, 1977). In the current knowledge era, knowledge management processes constitute such contextual features of the work environment, which can enrich the job and increase job satisfaction (Mohrman, 2003; Morgeson & Humphrey, 2006). Knowledge management processes in organisations help workers in knowledge-intensive environments to establish shared understanding and derive value from knowledge (Mohrman et al., 2002). More specifically, knowledge acquisition improves job satisfaction because it involves access to new knowledge that improves efficiency in carrying out one's tasks. Knowledge codification also helps people find the information and informants they need to carry out their tasks in a timely and effective manner. Knowledge-creation processes, on the other hand, enable individuals to participate in planning and designing of activities and to utilise their creativity. Knowledge sharing also relates to social needs of individuals. Knowledge retention increases the sense of recognition and appreciation of the employee, as it is based on recognising the value of the individual's expert knowledge. In sum, the authors suggest that employees will be more satisfied with their jobs to the extent that they experience knowledge management processes in their working environment. This argument can be divided into five more specific hypotheses:

- H1. Knowledge acquisition will be positively associated with job satisfaction.
- H2. Knowledge sharing will be positively associated with job satisfaction.
- H3. Knowledge creation will be positively associated with job satisfaction.
- H4. Knowledge codification will be positively associated with job satisfaction.
- H5. Knowledge retention will be positively associated with job satisfaction.

The research model is depicted in Figure 1. The paper argues that the five facets of knowledge management – knowledge acquisition, knowledge creation, knowledge sharing, knowledge codification and knowledge retention – improve the likelihood of employee job satisfaction. Job satisfaction, in turn, is related to high performance at both the individual and organisational levels. The rest of this paper concentrates on the relationship between knowledge management and satisfaction. Following the wide range of previous research on the consequences of job satisfaction (Cranny et al., 1992; Judge et al., 2001; Springer, 2001; Shaikh et al., 2012), this paper assumes that there is a connection between satisfaction and performance, although this assumption is not tested empirically.

3 Methods

3.1 Sample and data collection

The research data were collected from employees in a municipal organisation located in south-eastern Slovakia using a Web-based questionnaire. In this public governmental organisation, responses were acquired from 411 respondents, representing the five functional sectors of the organisation: administration; social and health services; education and culture; work, entrepreneurship and business services; and technical and environmental services. The respondents were categorised as follows:

253 (61 per cent) were general employees;

78 (19 per cent) were experts;

47 (12 per cent) were supervisors;

26 (6 per cent) were unit directors; and

7 (2 per cent) belonged to the top management group of the organisation.

With regards to gender, 314 (76.5 per cent) were female and 97 (23.5 per cent) were male.

We present the research model in Fig. 1.

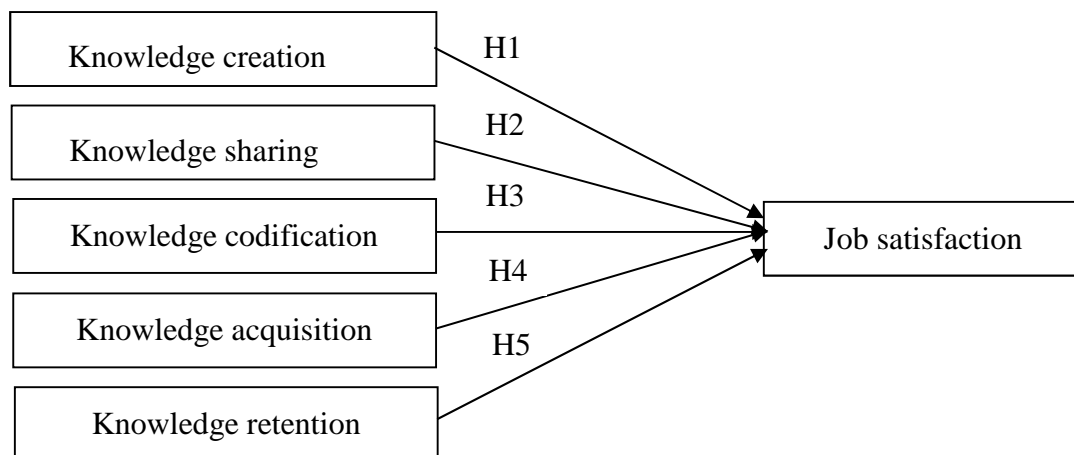


Fig. 1 *The research model*

3.2 Measurement

3.2.1 Knowledge management practices

Knowledge management practices were measured by asking the respondents to answer a set of questions on a scale from 1 to 7 (1 totally disagree, 7 totally agree). The questions were drawn from the Organisational Renewal Capability Inventory survey (Kianto, 2008). The scale for knowledge acquisition examined the importance and fluency of knowledge acquired from extra-organisational sources, whereas the scale for knowledge sharing addressed horizontal knowledge flows inside the organisation. Questions on knowledge creation looked at the frequency and basis of new idea development in different groups of activities. Questions on knowledge codification identified the amount of storage and documentation and the scope of

knowledge repositories. Knowledge retention addressed the continuity and preservation of knowledge within the organisation.

3.2.2 Job satisfaction

To measure job satisfaction, the authors used a three-item composite. Typically, job satisfaction measures focus either on overall satisfaction or on specific facets of satisfaction, e.g. pay, supervision or co-workers (Scarpello & Campbell, 2006). The authors wanted to explore general attitudes towards jobs and, therefore, focused on overall satisfaction. Job satisfaction was measured directly and indirectly, making use of items adopted from Hackman & Oldham (1975).

3.2.3 Control variables

Three variables (respondent's tenure, age and unit) were used as control variables to eliminate the effects they might have had on job satisfaction.

3.3 Assessment of bias

The data relied on self-reported measures and, accordingly, common method variance might have biased the findings. Common method bias is of particular concern when survey respondents are asked to complete items covering both independent and dependent variables. This study used Harman's one-factor test (Podsakoff et al., 2003) to assess the risk of such bias, and the authors conducted a principal component analysis that incorporated all the items from all of the constructs. The study investigated the solution to determine the number of factors required to account for variance in all the items. The largest factor accounted for 36.5 per cent, which suggests that the common method bias was not a concern in this study.

4 Results

We used Partial Least Square (Smart PLS) for the analyses (version 2.0M3 of SmartPLS). The first step was to assess the reliability and validity of the measurement model. The structural model was then used to test the hypotheses.

4.1 Correlation analysis

First, the connections between job satisfaction and knowledge management processes were examined using correlation analysis. Tab. I presents the mean and standard deviations and provides a correlation matrix. The results demonstrate that all knowledge management process variables had significant relation with job satisfaction and with each other. This indicates and supports the study's expectations of interconnectedness between knowledge management processes and job satisfaction.

Tab. 1 Correlation matrix

Variable	Mean	SD	1	2	3	4	5
1. Knowledge sharing	4.89	1.09					
2. Knowledge retention	4.19	1.38	0.596**				
3. Knowledge acquisition	4.54	1.36	0.302**	0.276**			
4. Knowledge codification	4.74	1.21	0.432**	0.529**	0.391**		

5. Knowledge creation	3.56	1.15	0.540**	0.672**	0.392**	0.458**	
6. Job satisfaction	4.88	1.30	0.599**	0.487**	0.193**	0.381**	0.391**

Note: **Correlation is significant at the 0.01 level

4.2 Measurement model

To test the measurement model, internal consistency and discriminant validity were assessed.

4.2.1 Control Internal consistency

4.2.1 Construct reliability (CR) and convergent validity measures represent internal consistency. According to the CR test, all the constructs showed a value above the threshold (0.7, as adopted by Bagozzi & Yi, 1988). To test for convergent validity, CR, factor loading and average variance extracted (AVE) were analysed. Loadings of all items were high and statistically significant (Appendix). This means that they were all related to their specific constructs, verifying the suggested relationships between the indicators and constructs. Second, the AVE measure exceeded the cut-off (0.50; Fornell & Larcker, 1981) for all the test constructs.

4.2.2 Discriminant validity

This indicates the extent to which any one construct differs from the others. The AVE should be greater than the variance shared between that construct and the other constructs in the model (i.e. the squared correlation between two constructs) (Fornell & Larcker, 1981). The constructs in this study fulfill this condition: in the model (Tab. 2), the diagonal elements (AVEs) are greater than the off-diagonal elements in the corresponding rows and columns. In sum, the model assessments gave reliable evidence of validity and reliability for the operationalisation of the concepts.

4.3 Testing the research model

As Tab. 3 shows, the research model was able to explain 42 per cent of the variance in job satisfaction. The path model was estimated to reflect the proposed relationships between knowledge management processes and job satisfaction to test the hypotheses. The path estimates from the knowledge management processes to job satisfaction supported most of the hypotheses. The paths from knowledge sharing (H2), knowledge codification (H4) and knowledge retention (H5) to job satisfaction were as hypothesised. Knowledge sharing ($B = 0.439$, $p < 0.005$), knowledge codification ($B = 0.125$, $p < 0.005$) and knowledge retention ($B = 0.193$, $p < 0.005$) each had a significant positive impact on job satisfaction. The research model also predicted direct paths from knowledge acquisition (H₁) and knowledge creation (H₃) to job satisfaction. However, these hypotheses were not supported.

Tab. 2 Discriminant validity of the research model

Variable	1	2	3	4	5	6
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1. Knowledge sharing	0.58					
2. Knowledge retention	0.36	0.69				
3. Knowledge acquisition	0.09	0.08	0.82			
4. Knowledge codification	0.19	0.28	0.15	0.60		
5. Knowledge creation	0.29	0.45	0.15	0.21	0.52	
6. Job satisfaction	0.36	0.24	0.04	0.15	0.15	0.64

Tab. 3 Testing the research model

Path	Path coefficient	t-value
Tenure → Job satisfaction	- 0.057*	1.966
Age → Job satisfaction	0.142***	4.470
Unit → Job satisfaction	- 0.003 n.s.	0.167
Dependent variable		
Knowledge acquisition → Job satisfaction	- 0.040 n.s.	1.508
Knowledge sharing → Job satisfaction	0.439***	10.401
Knowledge creation → Job satisfaction	0.014 n.s.	0.501
Knowledge codification → Job satisfaction	0.125***	3.501
Knowledge retention → Job satisfaction	0.193***	3.939
R2		0.420

4.4 Testing models for employee groups

In addition to testing the research model, the authors wanted to explore the relationship between knowledge management processes and job satisfaction in more detail. Thus, additional models were tested for different groups of employees: general employees (N 253), experts (N 78), middle managers (N = 47), unit directors (N = 26) and top management (N = 7). Within the different groups of employees, several highly diversified occupational groups were presented:

- general employees (e.g. cleaners, practice nurses, office secretaries, physiotherapists, caretakers, dental nurses and kitchen helps);
- experts (e.g. development managers, teachers, dentists, vets, nurses and engineers);
- middle managers (e.g. master builders, principals, leading social workers and library directors); and
- top management (e.g. personnel directors, directors of culture and chief administration officers).

As Tab. 4 shows, the models for different employee groups account for between 34 and 58 per cent of job satisfaction. Specifically, knowledge management processes explained the

largest amount of the variance of job satisfaction for middle managers and the smallest amount for top management. Knowledge management processes accounted for nearly 42 per cent of variance for general employees and nearly half of the variance in the expert group. Path estimates from knowledge management processes to job satisfaction show a significant positive relationship between knowledge sharing ($B = 0.424$, $p < 0.005$), knowledge codification ($B = 0.207$, $p < 0.005$), knowledge retention ($B = 0.160$, $p < 0.01$) and job satisfaction in the general employee group. For both experts and middle managers, knowledge sharing (experts: $B = 0.537$, $p < 0.005$; middle managers: $B = 0.504$, $p < 0.005$) and knowledge retention (experts: $B = 0.205$, $p < 0.05$; middle managers: $B = 0.248$, $p < 0.01$) are related to job satisfaction. For top management, only knowledge retention is related to job satisfaction ($B = 0.450$, $p < 0.01$).

Tab. 4 Testing the research model for employee groups

Path	Employees	Experts	Middle managers	Top management
Control variables				
Tenure → Job satisfaction	- 0.051 n.s.	- 0.071 n.s.	- 0.028 n.s.	- 0.061 n.s.
Age → Job satisfaction	0.149***	0.041 n.s.	0.220***	0.192 n.s.
Unit → Job satisfaction	0.010 n.s.	0.008 n.s.	- 0.011 n.s.	0.039 n.s.
Dependent variable				
Knowledge acquisition → Job satisfaction	- 0.068* n.s.	- 0.075 n.s.	- 0.070	0.096 n.s.
Knowledge sharing → Job satisfaction	0.424***	0.537***	0.504***	0.251 n.s.
Knowledge creation → Job satisfaction	- 0.009 n.s.	0.054 n.s.	0.140 n.s.	- 0.156 n.s.
Knowledge codification → Job satisfaction	0.207***	- 0.011 n.s.	0.049 n.s.	0.096 n.s.
Knowledge retention → Job satisfaction	0.160**	0.205*	0.248**	0.450**
R2	0.419	0.497	0.581	0.340

Notes: ***Significance < 0.005 ; **significance < 0.01 ; *significance < 0.05

5 Discussion

Of the five knowledge management processes examined in this study, only two had no connection to job satisfaction. Based on this study, therefore, it seems that knowledge acquisition and knowledge creation are not factors that affect job satisfaction. This might be because of the context of the study. It is possible that the nature of the work carried out in this municipal organisation requires neither knowledge acquisition (especially from sources or partners outside the organisation) nor creation of new knowledge. Such activities are not encouraged by either support or reward in the organisation. Consequently, they have no effect

on job satisfaction. However, the remaining three knowledge management processes (knowledge sharing, codification and retention) had connections with job satisfaction. Specifically, the results indicate that intra-organisational knowledge sharing is the key knowledge management process, promoting job satisfaction for most employee groups. Knowledge-sharing mechanisms are probably the most intensively studied facet of knowledge management, which seems to be well justified also from the perspective of well-being at work. Collegial support and encouragement, and a positive work climate, seem to be strong enablers of job satisfaction – as well as high job performance. The results also demonstrate that the significant knowledge-based promoters of job satisfaction differ as a function of job characteristic. Specifically, knowledge management processes account for 58 per cent of the variance of job satisfaction for middle managers, the largest percentage in the study. For this group, knowledge sharing was the key issue, followed by knowledge retention. Judging by the large amount of variance in job satisfaction accounted for by knowledge management issues, it appears that knowledge management is especially important in ensuring positive attitudes towards work for middle managers. This is understandable because their work mostly relates to coordinating activities between different resources within the organisation (Nonaka and Takeuchi, 1995). The second largest variance explained was for the experts. For this group, knowledge management processes accounted for almost half of the variance in job satisfaction. In addition, internal knowledge sharing and knowledge retention were the key processes that improved job satisfaction. As problem solving is a central characteristic of experts' work, it could be argued that experts find satisfaction in being able to share the solutions they have produced with others and in seeing how they impact organisational functioning. Although knowledge acquisition, creation and codification also play an important part in experts' work, they do not increase their job satisfaction, according to the results of this study. Job satisfaction for the general employee group was also significantly influenced by knowledge management processes, specifically, knowledge sharing, knowledge codification and knowledge retention. This means that the widest range of knowledge management processes affects job satisfaction for general employees. This is to be expected as tasks for this group are the most divergent. Interestingly, this group does not appear to view external knowledge flows in a favourable light: knowledge acquisition had a small negative impact on job satisfaction. In the strictly guided and routine tasks of the general municipality employee, knowledge acquisition may be seen as a hindrance, which could distract the employee from task performance. Knowledge management processes seem to have the least impact on job satisfaction for the top management of the municipal organisation. This is a somewhat surprising finding as the work of high-level managers is all about knowledge work, handling complex issues and problem solving. It could, therefore, be assumed that they would particularly benefit from efficient knowledge flows. Knowledge retention was the key knowledge management process for this group, meaning that knowledge continuity and preservation are important for ensuring their work satisfaction. This is to be expected as the strategic steering of an organisation requires an extensive and deep understanding of its history to construct path-dependent strategies. It is also important for this group to understand external forces and the institutional and legislative environment in which the organisation operates. Interestingly, intra-organisational knowledge sharing, which is the key factor for other occupational groups, does not seem to be an important knowledge management process for top management job satisfaction. Perhaps the reference group of top management is located outside the organisation; as a result, the collaborative climate of intra-organisational knowledge sharing may not be particularly relevant for this group.

6 Conclusion

While the impact of knowledge management has typically been studied in terms of the benefit it brings to organisational-level performance, very few previous studies have examined the impact of knowledge management on “soft” human issues from the perspective of individual employees. This study provides knowledge on a type of consequence of knowledge management - job satisfaction - which has been largely unexplored in previous research. The key finding is that existence of knowledge management processes in the working environment is linked to high job satisfaction. Consequently, this study demonstrates a novel benefit of knowledge management for organisations, strengthening the argument that knowledge management is an important driver of value creation, organisational competitiveness and success (Carneiro, 2000; Bhatt, 2001; Zack et al., 2009; Andreeva & Kianto, 2012). Overall, this demonstrates knowledge management as a novel organizational practice, which promotes job satisfaction. Thus, knowledge management can be added to the toolbox of managers, consultants and other organisational developers attempting to improve the conditions for well-being at work.

6.1 Implications for practitioners and researchers

The results of this study illustrate that knowledge management has a strong impact on employee job satisfaction. It should, therefore, encourage managers to implement Implications for practitioners and researchers activities in their organisations, to improve both knowledge worker performance and well-being at work. In addition, the results demonstrate that different employee groups benefit from different kinds of knowledge management activities. The paper, therefore, provides guidelines for a targeted implementation of knowledge management in different intra-organisational working environments. By demonstrating that the benefits of knowledge management differ as a function of employee group, the paper supports moving knowledge management research to the next stage, where the impact of knowledge management practices can be explored not as a “one size fits all” phenomenon but rather as a contingent and contextual issue, taking into account the requirements and characteristics of the various types of tasks conducted in an organisation.

6.2 Limitations and future research

It should be noted that as the study design was cross-sectional, it is only possible to hypothesise the direction of the impact between knowledge management processes and job satisfaction. It could be argued that those employees who feel satisfied with their jobs are more likely to engage in knowledge activities than those who do not feel so positively about their work. Ascertaining the direction of impact would require a longitudinal research setting. Another limitation of the study relates to the lack of an empirical analysis of work performance. Although it does not empirically address this question, this study makes the assumption that job satisfaction ultimately leads to high performance, based on the extensive empirical research available on this topic (Cranny et al., 1992; Judge et al., 2001; Springer, 2001; Shaikh et al., 2012; Quedraogo & Leclerc, 2013). Although this link does not seem to need further justification, it should be noted that, to the authors’ knowledge, no previous study has addressed the impact of job satisfaction on knowledge worker performance. Examining the links between knowledge management processes, job satisfaction and knowledge work performance could be an interesting topic for future research. Finally, this study is among the first to examine the relationship between knowledge management and job satisfaction. As such, it has only provided an initial perspective on the topic, and much more research remains to be done to deepen its

understanding. Potential fruitful avenues for future research include looking at knowledge types as contingency variables. Adding closely related issues to the research model, such as organisational commitment and work engagement, could also prove valuable.

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