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The importance of Organizational Commitment to Knowledge Management

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> Abstract. In recent years, Knowledge Management (KM) has assumed great importance in the literature on business and management. However, we still have so little understanding of the human issues in KM processes. Thus, this research aims to contribute to analysing the importance of Organizational Commitment (OC) to KM. First, we used the Cardoso (2003) Knowledge Management Questionnaire (QGC) that embraces all organizational activities around knowledge processes and distinguishes four dimensions of KM. Secondly we applied the Quijano, Masip, Navarro and Aubert (1997) questionnaire (ASH-ICI) that distinguishes two types of commitment (personal and instrumental) into four dimensions. These two questionnaires were applied with 300 employees in the Portuguese industrial ceramics sector. Through multiple regression analysis we found that levels of organizational commitment are statistically important to KM dimensions. Furthermore, our analysis indicates that personal commitment is more important than need commitment. These results are discussed and Organizational Behaviour specialists and Work and Organizational psychologists are challenged to assume more responsibility and an active role in KM studies and practices and to explore human issues in this field. *Key words*: Knowledge Management, Organizational Commitment.

1. Introduction

Although Knowledge Management (KM) is a relatively new field, it has generated a great amount of literature and experienced great, complex and constant development (Wiig, 2002). The "boom" of KM literature (Takeuchi & Nonaka, 2001) was a result of the increasing recognition of the importance

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of knowledge to organizations (Bhatt, 2002; Cardoso, 2003; Carter & Scarborough, 2001; Chauvel & Despres, 2002; Chowdhury, 2005; Hoof & Ridder, 2004; Milton, 2005; Myers, 1996; Nonaka, 1991, 1994) and to their competitiveness (Anantatmula & Kanungo, 2006; Cardoso, 2003; Carneiro, 2000; Carter & Scarbrough, 2001; Davenport & Prusak, 2001; Darroch, 2005; Marques & Simon, 2006; Ofek & Sarvary, 2001). Effective management of knowledge becomes crucial for corporate success (Myers, 1996).

Knowledge Management initiatives are gaining popularity in organizational and entrepreneurial worlds (Hislop, 2003). The expansion of this field includes all types of organizations, geographical areas and professionals (Chase, 2006). There are several approaches, practices, models and definitions in KM literature. However, there is a gap between KM theory and practices (Reinhardt, 2001), overemphasis on technological issues (Moffett, McAdam & Parkinson, 2003), little overall consensus (Oliver & Kandadi, 2006), confusion (Nonaka & Teece, 2001) and few empirical studies (Cardoso, 2003) in this field.

There is little understanding about the links between KM and human-related issues in the literature. Assuming this lack of understanding to be a weakness for organizations, contributing to creating links between these two organizational spheres became the major objective of this research.

Some authors have acknowledged the importance of studying the relationship between KM and OC (Bontis & Fitz-enz, 2002; Dyer & McDonough, 2001; Hoof & Ridder, 2004; Nahapiet & Ghoshal, 1998; Storey & Quintas, 2001; Thompson & Heron, 2005). However, "whether commitment levels affect attitudes towards, or participation in, KM initiatives is an open question, as no research has been done in this area" (Hislop, 2003, p. 183).

Recognising the potential importance of this relationship and the present limitations, in this research we chose to analyse empirically the importance of OC to KM. To accomplish the objective of assessing the relative importance of OC dimensions to KM dimensions, we used standard multiple regressions to analyse data gathered among 300 employees in the Portuguese industrial ceramics sector.

2. Theoretical background

2.1. Knowledge Management Context

The development of KM as a discipline started in the early nineties in the entrepreneurial world (Chase, 2006; Chauvel & Despres, 2002; Hislop, 2003). McElroy (1999) asserted that the first generation (1990-1995) of KM represented the management of information. Its development was based on existent organizational knowledge which should be captured, described and distributed through technological interfaces. According to McElroy (2000), the objective of this generation is to enhance the performance of each employee identifying and supplying the necessary knowledge to accomplish his job.

The second generation (since 1996) is focused on potential knowledge. The learning process and the incentive to innovation could help the organization to develop its full potential from current or

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existing knowledge. Technology is considered a catalyser or facilitator of knowledge management and knowledge processes such as knowledge creation, sharing and diffusion especially (McElroy, 2000).

Authors like Metaoxiotis, Ergazakis and Psarras (2005) state that the third generation is emerging now. This generation has been integrating with the philosophy, strategy, goals, practices, systems and procedures of the organization and how it becomes part of each employee's daily working life and motivation (Wiig, 2002).

The distinction between generations is helpful; however, the great amount of fragmented literature generates considerable confusion (Nonaka *et al.*, 2001). The complexity of KM and its transversal characteristic have been used to support several definitions, paradigms, frameworks, concepts, propositions, perspectives, models and measurements.

Despres and Chauvel (1999) mapping the KM literature distinguished three types of literature: the corporate domain, implementation and development of Knowledge Management Initiatives, Best Practices, Knowledge Bases and other strategies by Companies; the consulting domain, consultant firms that have implemented systems for managing their own stock of knowledge; and the academic domain.

Takeuchi (2001) distinguished three geographical approaches: North American, Japanese and European perspectives. The North American one consists of organizing and maintaining knowledge databases through Information Technology (IT) – emphasizing the importance of explicit knowledge. The European one is focused on the development of measurement systems and spread of intangible resources – emphasizing intellectual capital. The Japanese one, the knowledge creation company, is focused on continuous generation of new knowledge and interaction with the broader environment – emphasizing tacit knowledge.

Organizations are recognizing the need to integrate both types of knowledge (tacit and explicit) to perform their jobs effectively and to develop methodologies to convert tacit knowledge into explicit knowledge (Gupta, Iyer & Aronson, 2000). As a result, in recent years, the Nonaka SECI spiral model to convert knowledge has gained prominence in the literature.

Gloet and Berrel (2003) proposed a dual nature of KM: Information Technologies (IT) and Organizational Learning. This is an approach based on action and highlights the importance of interpretative elements in practice. Its emphasis is on people and processes.

Intellectual Capital is another important and influential point of view of the KM construct. According to Bontis and Fitz-enz (2002), the goal of KM is "leverage of the intellectual capital that is currently resident in the organization and convert that knowledge into sustainable competitive advantage through increased business performance" (p. 227).

On the whole, we can identify two general theoretical guidelines or points of view: Humanoriented KM, centred on people and processes; and Technology-oriented KM, with emphasis on knowledge acquisition, manipulation and storage supported by information systems (Mayer & Remus, 2003, Sveiby, 1997), that is, centred on systems and tools (Hislop, 2003). We recognize the vital importance of technologies as catalysers of KM processes, but for this study our position is more human-oriented.

2.2. Organizational Knowledge

Alvesson and Karreman (2001) argue that knowledge is an ambiguous, unspecific and dynamic phenomenon, intrinsically related to meaning and the understanding process, and therefore difficult to manage. Knowledge itself is a complex, dynamic, polemic and abstract construct.

There is a wide variety of literature about what "knowledge" and knowing means in epistemology, social sciences, and psychology, but the business perspective of knowledge is much more pragmatic (Gupta *et al.*, 2000). Therefore, the KM literature tends to describe knowledge through its characteristics instead of understanding what it means to know something. Furthermore, Despres and Chauvel (1999, p. 114) assert that "the majority of popular and even serious works on knowledge management ignore a theory of management... that is, they fail to define the thing they deal with".

Regarding the complexity of defining knowledge, Davenport and Prusak (1998) stressed the close connection between knowledge and action, its dynamic character and the difficulty of capturing knowledge in words or understanding it completely in logical terms. Tsoukas (2001), regarding the Davenport and Prusak definition, stated it is not clear how knowledge is connected to action and in what sense knowledge is different from information. This author asserts that for better development of KM, it is necessary to construct a deep and well-founded foundation for knowledge in the organizational context.

Knowledge has been recognised as an exclusively human process (Davenport & Prusak, 1998; Milton, 2005; Nonaka, 1994; Polanyi, 1958). Polanyi (1958) stressed its personal character as the key issue of knowledge constitution. This personal character of knowledge does not define what knowledge is exactly, however, its inseparability from people becomes evident. Furthermore, knowledge demands human involvement (Bell, 1999) and interpretation (Tsoukas, 2001).

Nonaka (1991) stressed that people do not just passively receive new knowledge, but they actively interpret and fit it in to their own situation and perspective. Furthermore, Metaoxiotis et al. (2005) claim that all knowledge is inherently social and cultural, and organizational knowledge can only be formed through change in organizational activity and practice.

We assume that knowledge is a complex combination of meaning being given to a fact or experience, a set structured element that is information, and it is action oriented. To attribute meaning assumes the existence of signification or an interpretation process, which is based on personal background – theories and preconceptions – and prior experiences that are socially constructed. It is a dynamic and multi-dimensional construct and is characterized as an essentially human process. That is, it has essential personal character and demands human participation.

Commonly, two basic types of knowledge have been recognised: tacit and explicit (Davenport & Prusak, 2000; Milton, 2005; Nonaka, 1994; Takeuchi & Nonaka, 2001). Explicit knowledge is the type of knowledge that can be readily transferred to individuals formally and systematically; it can be expressed in words and numbers (Takeuchi, 2001). Tacit knowledge is highly personal, hard to formalize and difficult to communicate to others (Nonaka, 1991). Tacit knowledge is difficult to verbalize – "We can know more than we can tell" (Polanyi, 1966 p. 4). It consists of informal skills – "knowhow" – and mental models – beliefs and perspectives (Milton, 2005). Tacit knowledge is usually in

the domain of subjective, cognitive and experiential learning, whereas explicit knowledge deals with more objective, rational and technical knowledge – data, policies, procedures, software, documents, etc. (Gupta *et al.*, 2000).

According to Laszlo and Laszlo (2002), knowledge is a resource that can be embodied in an individual or a collective, or embedded in a routine or a process. It can be incorporated in languages, stories, rules and tools. Bhatt (2002) states that organizational knowledge is the knowledge internalized (or embodied) by the organization and is interdependent on individual knowledge. According to Nonaka (1991), making personal knowledge available to organizational members – transforming personal knowledge into organizational knowledge – is the way to create organizational knowledge. This author stresses that organizational knowledge embodies the company's vision, top managers' aspirations and strategic goals. It has the potential to build the company's organizational knowledge network. Nevertheless, it is still not evident in what sense it becomes organizational (Tsoukas, 2001).

2.3. Knowledge Management

There is still no one definition or consensus about what KM means (Gupta *et al.*, 2000). There is no single perspective that describes KM completely (Reinhardt, 2001). Among several definitions there is some consensus that KM consists of management activities which develop and utilize organizational knowledge resources efficiently and improve a firm's creative ability (Tiago, Couto, Tiago & Vieira, 2007). According to Davenport and Prusak (1998), KM is concerned with the exploitation and development of knowledge assets aiming to achieve organizational objectives.

Cardoso (2003) defends that KM underlies all organizational processes and actions involved with all knowledge processes in such a way that it becomes accessible to all participants. She stressed the importance of six knowledge processes: creation/acquisition, sense making; share and spread, organizational memory, measuring and recovery.

This author constructed and validated an instrument to measure the level of activities around KM processes that are perceived as being to a greater or lesser extent operated by organizational members. Based on empirical evidence she distinguished four dimensions: Knowledge Management Practices; Knowledge Oriented Culture; Social and Discursive Management of Knowledge; and Strategic Knowledge Management.

The first dimension, Knowledge Management Practices, is more related to the actions and attitudes involved in knowledge creation, acquisition, preservation, sharing and use. These sets of actions were translated into formally instituted processes (e.g., routines, rules and regulations). This dimension puts a greater focus on the management of explicit knowledge (Cardoso, Gomes & Rebelo, 2005). For instance, it includes attitudes like asking for help, making use of available information, making information available for other employees, trying to acquire new knowledge or competences (using external and internal sources) and cooperation (internal and external).

Knowledge Oriented Culture is a common referential that serves as a guide for the instituted practices, rules and regulations, as a memory that orients and gives sense to everyday practices (Cardoso, 2003). It is an informal, culturally instituted guide that provides the organizational orientation for

behaviour when facing situations or problems that are not regulated. This dimension is less explicit, because it includes more socially and culturally related attitudes, like action related to responsibility, submission, identity and personal expectation.

Social and Discursive Management of Knowledge is connected to the informal interactions that take place in the organization and facilitates the social construction of knowledge. It intends to construct collective comprehension about relevant organizational events, from a collective language. These circumstances favour the creation and use of tacit knowledge (Cardoso *et al.*, 2005). For example, informal conversations about the job, work problems, organizational issues and individual difficulties at work.

Strategic Knowledge Management is more related to managing organizational knowledge with respect to the macro environment. What is known about the competitors, what kind of knowledge do they have or how much do they know of what we know, and what do we want them to know about us or what we have (Cardoso, 2003)? Use of official and informal communication means knowing about the competitors, customers and market; being conscious of the real competition, organizational secrets and advantages; and protecting specific organizational knowledge from competitors.

These dimensions point out the amplitude and the transversal characteristic of KM. This construct is affected by the different levels of an organization. The organizational mission, strategies, policies, culture, structure, managers, employees, stakeholders, competitors and the macro-environment should be recognised as important parts of any KM initiative or project.

Enterprises need to ensure that their knowledge strategy and knowledge programme is consistent with corporate ambitions, and that the techniques, technologies, resources, roles, skills and culture are aligned with and support the business objectives (Snyman & Krugger, 2004).

Moreover, Gloet and Berrel (2003) stressed the importance of congruence between HRM policies, KM initiatives and organizational strategies. These authors state, firstly, the influence of the KM approach on HRM operation, and secondly, the significant role of KM strategies in HRM efficiency. The relationship between them is complex and the coherence and congruency of their strategies can contribute to increased organizational quality and performance. However, the role of human issues in KM initiatives has still to be fully developed, because the KM literature has made only partial and limited use of HRM concepts and frameworks (Hislop, 2003).

Knowledge creation should be put at the centre of a company's Human Resource strategy (Nonaka, 1991). However, while the recognition of KM depends on people, "it is precisely the people (or HR) aspect that has been the most neglected in studies in this field" (Storey & Quintas, 2001, p. 344).

Therefore, KM can be understood as a set of dynamic and intentional efforts to optimize and develop internal organizational conditions to catalyse the knowledge-related processes or sub processes (Cardoso, 2003). KM embraces the management of actions and activities related to knowledge creation, capture, synthesis, sharing and use. All processes should be supported by one learning culture – oriented to the promotion and facilitation of workers' learning and dissemination of what was learnt (Rebelo, 2006). The appearance of knowledge is not spontaneous, but needs to be promoted in a conscious and intentional way and be identified and systematically managed.

2.4. Organizational Commitment

Since the seventies, OC has become a very popular topic of investigation (Brown, 1996). Mowday, Porter and Steers (1979) suggested that the processes related to OC have important implications for employees, organizations, and society as a whole. The importance of this construct has increased together with recognition of its influence on employee attitudes and behaviours.

A great many empirical studies linked OC to other work-related variables. Mathieu and Zajac (1990), in their meta-analysis, pointed out the most common OC links: as an antecedent (personal characteristics, role states, job characteristics, organizational characteristics and group/leader relations); as correlated (motivation, job involvement, job satisfaction, stress and occupational commitment); as a consequence (job performance, intention to leave, lateness and turnover).

More recent studies highlight the positive correlation between OC and Organizational Citizenship Behaviour (Meyer, Stanley, Herscovitch & Topolnytsky, 2002), willingness to share knowledge and engagement in extra-role behaviour (Storey & Quintas, 2001; McKenzie, Truch & Winkelen, 2001).

According to Mathieu and Zajac (1990), there was a proliferation of foci, types, definitions and measures. Among different OC definitions, these authors identified the idea of a bond or link between the individual and the organization. O'Reilly and Chatman (1986) defined OC as a psychological attachment felt by the person to his organization that reflects the level in which organizational values and objectives are internalized.

Gradually OC became a multifaceted construct (Lease, 1998). Several integrative models emerged, which consider one type of commitment with distinguishable dimensions (multi-dimensional nature) or components (Quijano, Navarro & Cornejo, 2000).

O'Reilly and Chatman (1986) proposed three independent foundations (which may represent separate dimensions) for OC: compliance, attitudes to gain specific rewards; identification, acceptance of influences to establish or maintain the relationship (there is a need for affiliation); and internalization; congruence between employees' and organizational values.

Allen and Meyer (1990) identified three distinct components. The affective commitment is the employee's emotional attachment to, identification with, involvement in, and enjoyment of membership of, the organization. The continuance commitment is based on the cost associated with leaving and benefit associated with continued participation, while normative commitment is related to the employee's feelings of obligation to remain with organization. Employees can experience these three components concurrently and to distinct degrees (Allen & Meyer, 1991).

Quijano *et al.* (2000) defend the existence of only one attitudinal nature of commitment with four progressive levels of bonding with the organization: need, exchange, affective and value-based commitment. They integrated these levels into two general categories or types of commitment: instrumental (or calculative) and personal (or affective). Instrumental commitment is related to individual dependence on organizational rewards. This type has two kinds of bonds: exchange commitment, relationship based on extrinsic rewards; and need commitment, the need to keep the job. Personal commitment includes, to some degree, the personal internalization of organizational values and objectives. It can have two levels of intensity: affective commitment, the affective bond that the

employee establishes with the organization that transcends the contractual relationship – there is a need for affiliation; and value-related commitment, acceptance of organizational values and objectives that are similar to or congruent with their own. We assume that these four levels of bond are dimensions of OC and we opted to use this terminology.

Table 1 compares the approaches or models' mentioned in the present study and their dimensionality.

Three Components Model (Allen & Meyer, 1990)	Three Dimensional Model (O'Reilly & Chatman, 1986)	Four Dimensional Model (Quijano <i>et al.</i> , 2000)
<i>Affective</i> (emotional attachment, identification, enjoy membership)	<i>Internalization</i> (congruence of values and objectives)	<i>Value-Related</i> (congruence of values and objectives)
	Identification	Affective
	(desire for affiliation)	(need for affiliation)
Continuance	Compliance	Exchange
(leaving costs and benefit)	(gain specific rewards)	(extrinsic rewards)
		Need
		(keeping job)
<i>Normative</i> (<i>feeling</i> of obligation)		

 Table 1

 Comparison between OC Models/Approaches

Font: Own Resource.

Different authors agree that affective commitment has the strongest relationship with outcomes of interest (Brown, 1996; Lease, 1998; Meyer & Herscovitch, 2001).

2.5. Relationship between OC and KM

Organizational Commitment and KM have been studied as independent and unrelated fields. The OC literature is focused on effects and relationships established with other work-related variables. The KM literature emphasizes the technological aspects or specific processes of KM, like sharing and diffusion. The linkages between them are weak and to build well-founded links is a difficult and challenging task. Table 2 summarizes the most interesting contributions we found in the literature about the relationship between KM and OC and other variables of interest for this study² (e.g., potential antecedents, mediators and moderators).

¹ All these theoretical models were empirically tested. The Three-Component and Three-Dimensional Models have several empirical studies, including different countries and cultures.

² This table and our bibliography do not represent all the existent literature about the theme because this paper does not aim to make a Bibliography Review of the field. We searched the international scientific literature using different key-words and data-bases according to our available time and access.

Relationship	Studies	Nature of Study
OC & Knowledge Sharing	Hislop, 2003; Lin, 2006; Mckenzie <i>et al.</i> , 2001; Nonaka <i>et al.</i> , 2001; Peltokorpi, 2006; Scarbrough & Carter, 2000; Storey & Quintas, 2001; Takeuchi, 2001.	Theoretical
	Cabrera et al., 2006; Hoof & Ridder, 2004;	Empirical
OC & Knowledge Creation	Alvesson, 2005; Nonaka, 1991; Takeuchi, 2001; Thompson & Heron, 2005.	Theoretical
OC & Knowledge Dissemination	Van Der Bij et al., 2003.	Empirical
OC & KM Implementation	Dyer & McDonough, 2001; Malhotra & Galletta, 2003.	Theoretical
OC & Human Capital	Bontis & Fitz-enz, 2002.	Empirical
Organizational Culture & KM	Davenport & Prusak, 1998; Gupta <i>et al.</i> , 2000; Janz & Prasarnphanic, 2003; Metaoxiotis <i>et al.</i> , 2005; Nonaka & Takeuchi, 2001; Oliver & Kandadi, 2006.	Theoretical
	Moffet et al., 2003.	Empirical
Performance & KM	Anantatmula & Kanungo, 2006; Carneiro, 2000; Davenport & Prusak, 2000; Nonaka et al., 2001; Ofek & Sarvary, 2001.	Theoretical
	Cardoso, 2003; Darroch, 2005; Marqués & Simón, 2006.	Empirical
Trust & Knowledge Sharing	Chowdhury, 2005; Montano & Wang, 2003.	Empirical
Job Satisfaction, Job Involvement & KM	Reinhardt, 2001.	Theoretical
	Janz & Prasarnphanic, 2003.	Empirical
HRM & Knowledge Sharing	Hislop, 2003.	Theoretical
HRM & KM	Despres & Hiltrop, 1995; Gloet & Berrel, 2003; Hislop, 2003; McElroy, 2000; Storey & Quintas, 2001; Yahya & Goh, 2002.	Theoretical

Table 2Relationship between variables of interest in the literature

Note: The Nature of Study column concerns the nature of the relationship proposed. Every study (empirical or theoretical) that does not provide empirical evidence of the suggested relationship is considered, in this table, as a theoretical study. *Font*: Own Resource.

According to Thompson and Heron (2005, p. 385), "the importance of commitment to knowledge creation has been recognized by practitioners". However, theoretical and empirical bases for this relationship are not yet developed. Lack of clarity is predominant and suggestions predominate in the literature.

First of all, organizations need to gain their employees' commitment and retain them. High turnover of knowledge workers means loss of both tangible and intangible knowledge and potential competitive advantage (Kinnear & Sutherland, 2000). According to these authors, this kind of employee is more critical to the long-term success of the organization than the short-term efficiencies of the organization.

Hislop (2003) suggested that there may be an interesting relationship between the levels of commitment employees feel towards their organization and their attitude and behaviour towards

KM initiatives. That is, commitment levels interfere with employees' willingness or reluctance to share their knowledge. The author highlights that knowledge, being mostly tacit, will be transmitted only if those who have to share and communicate have a certain attitude towards their organization.

Storey and Quintas (2001) suggest that developing the trust, motivation and commitment of employees represents one of the key issues in relation to the management of knowledge workers. Employees with high levels of OC are less likely to leave and are more likely to be highly motivated as well as being more willing to provide extra discretionary effort and thus generally more willing to share their knowledge within the organization. In the same direction, Thompson and Heron (2005) assert that high levels of knowledge worker commitment are critical to knowledge creation, because the importance of these workers has been shown for the creation and sharing of knowledge.

McKenzie *et al.* (2001) and Scarbrough and Carter (2000) defend that organizational commitment may greatly influence the willingness of workers to share their knowledge. Moreover, Lin (2006) asserts that OC is important to tacit knowledge sharing and Peltokorpi (2006) also defends that OC can motivate employees to share their knowledge. Furthermore, Alvesson (2005) suggests that the success of companies in generating and appropriating knowledge is related to high levels of employees' commitment to the organization.

Dyer and McDonough (2001) affirmed that success or failure of Knowledge Management Systems is often affected by employee motivation and commitment. Malhotra and Galletta (2003), claim that motivation and commitment perform an important role in successfully implementing Knowledge Management Systems (as antecedents). For them, the development of organizational knowledge culture should be characterized by high levels of commitment and motivation. These authors defend that Knowledge Management Systems are dependent upon active participation and involvement of knowledge workers to transform the above inputs into organizational performance.

Nonaka (1991) asserts that the personal commitment of employees and their identification with the company and its mission is crucial for knowledge creation. According to Nonaka *et al.* (2001), commitment should be cultivated among organization members to motivate the sharing and creation of knowledge.

According to Bontis and Fitz-enz (2002) the inter-relationship between employee satisfaction, commitment and motivation are important antecedents of human capital development. Business performance is positively influenced by the commitment of its organizational members and their ability to generate new knowledge.

Table 3 summarizes the previous studies that suggest³ the existence of interesting links between OC and KM. We can observe that these authors proposed a relationship only between OC and knowledge sharing and/or creation.

Besides these studies, we found only four studies that empirically support, to some degree, the importance of organizational commitment to knowledge sharing and dissemination.

Hoof and Ridder (2004) studied empirically the relationship between organizational commitment and knowledge sharing. In this research the authors concluded that organizational commitment and

³ The suggestions included in this table are exclusively theoretical; the proposed links are not based on empirical data.

Authors	Commitment	Link	KM
Hislop (2003)	Levels of commitment	Interfere	Employee's willingness or reluctance to share
Storey & Quintas (2001)	Employee with high level of commitment	Are more likely to	Provide extra discretionary efforts and to share their knowledge
Thomson & Heron (2005)	Levels of knowledge worker commitment	Is critical to	Knowledge creation
McKenzie <i>et al.</i> (2001); Scarbrough & Carter (2000)	Organizational commitment	May importantly influence	The willingness of workers to share their knowledge
Lin (2006)	Organizational commitment	Is important to	Tacit knowledge sharing
Peltokorpi (2006)	Organizational commitment	Can motivate employees to	Share their knowledge
Alvesson (2005)	Employees commitment	Is related to	Success of generating and appropriating knowledge
Nonaka (1991); Nonaka <i>et al.</i> (2001)	Commitment and identification with the company	Is crucial to	The sharing and creation of knowledge
Dyer & McDonough (2001); Malhotra & Galletta (2003)	Employee motivation and commitment	Affect/Antecedent	The success or failure of KM Systems
Bontis & Fitz-enz (2002)	Employee satisfaction, commitment and motivation	Are antecedents of	Human capital development

Table 3	
Summary of possible links between OC and KM	ſ

Font: Own Resource.

communication climate are factors that promote or impede the sharing of knowledge within groups and organizations. In a study of consultancy firms, Robertson and Hammersely (2000) found that employees with high levels of commitment to the company were more likely to share their knowledge.

Van Der Bij, Song and Weggeman (2003) defend that individual commitment to firms is very important to facilitate knowledge dissemination. They found a significant impact of individual commitment on levels of knowledge dissemination.

Cabrera, Collins and Salgado (2006) found that individuals who show greater levels of internalization commitment (O'Reilly and Chatman model) to their organization will be more likely to engage in knowledge sharing.

The results of these empirical studies converge on the same assumption: the existence of a positive relationship between levels of organizational commitment and the desirable attitudes to KM processes like knowledge sharing and dissemination.

In the literature we find various indications of the importance of OC for the processes and practices of KM. However, there is still a great shortage of empirical studies, models and theoretical basis for this relationship. This research is innovative because it proposes empirical investigation of a topic

that has not been explored in the scientific literature. Consequently, it is liable to limitations due to the lack of a more complete background to the topic.

2. Objectives and Hypotheses

This research aims to contribute by providing a theoretical framework and empirical findings about the importance of human-related issues in Knowledge Management. Therefore, our first objective is to empirically assess the importance of OC to KM, which we consider be a potential first link between these two organizational spheres.

The second objective is to verify the importance of all OC dimensions to each KM dimension. That means, what type or dimension of OC has greater importance in this relation. The last objective is, using our findings, to challenge professionals and researchers to give more attention and investment to the "human side of organizations" in KM initiatives, projects and studies.

Based on previous literature and empirical findings relating commitment to KM processes and in accordance with our objectives we proposed the following hypotheses:

H1: The level of Organizational Commitment is important for each Knowledge Management dimension.

H2: The stronger dimensions of Organizational Commitment (value-based and affective commitment) have greater importance than the weakest dimensions (exchange and need commitment) in the relationship with KM dimensions.

4. Method

4.1. Sample

Our sample was composed of 300 workers from 13 companies in the Portuguese industrial ceramic sector. These participants belong (as widely as possible) to different hierarchic levels and functional profiles. Descriptive analysis showed that almost half the participants are male and more than 50% have tenure longer than 10 years.

4.2. Measures

QGC meant to evaluate the organizational processes related to knowledge and its management (Cardoso, Gomes & Rebelo, 2005). This instrument asks for employees' perception about the actions and processes related to knowledge in their organization. In other words, to what extent these actions and processes occur daily.

Regarding the previous results (Cardoso, 2003; Monteiro, 2007) we assume the suitability of this instrument and dimensions for the Portuguese industrial sector, including the industrial ceramic

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sector (Table 4). Even so, we used reliability analysis of these four dimensions to verify their consistency for this sample. The item-total correlation of all items are higher than 0.55 and Cronbach's alpha greater than 0.82 (Table 5). Thus, we assume that all four scales, or KM dimensions, are important elements of KM construct, based on their high correlation and good internal consistency.

Table 4Comparison of Cronbach Alpha of KM Dimensions in different research developed in Portugueseindustrial sector

	Cardoso (2003)	Monteiro (2007)	Present Research
KMP	.88	.84	.89
КСО	.86	.86	.90
KSDM	.79	.73	.84
SKM	.76	.73	.83

Table 5

Reliability Analysis of KM Questionnaire (QGC): Item-Total Correlation, Cronbach's Alpha if item deleted and Cronbach's Alpha of each Scale/Dimension

Item Item-Total Correlation		Cronbach's Alpha if item deleted	Cronbach's Alpha Scale	Dimension		
GC04	.62	.88	.89	Knowledge Management Practices		
GC06	.70	.88				
GC07	.67	.88				
GC11	.68	.88				
GC13	.54	.89				
GC16	.57	.89				
GC17	.62	.88				
GC19	.64	.88				
GC22	.69	.88				
GC27	.62	.88				
GC2	.61	.89	.90	Knowledge Oriented Culture		
GC3	.63	.89		č		
GC9	.60	.89				
GC10	.66	.89				
GC14	.66	.89				
GC20	.56	.89				
GC25	.63	.89				
GC26	.64	.89				
GC28	.70	.89				
GC29	.68	.89				
GC30	.63	.89				
GC12	.57	.82	.84	Social and Discursive Knowledge Management		
GC18	.55	.83		5 5		
GC21	.67	.80				
GC24	.61	.82				
GC31	.64	.81				
GC32	.67	.81				
GC1	.57	.82	.83	Strategic Knowledge Management		
GC5	.65	.79				
GC8	.66	.79				
GC15	.63	.80				
GC23	.65	.79				

Note: Itens description in Annexes (p. 42).

The ASH-ICI intends to measure the levels and dimensions of organizational commitment and identification with the organization. In this research, we opted to use only the twelve items referring to Organizational Commitment.

Quijano, Navarro and Cornejo (2000) evaluated the psychometric properties of ASH-ICI on a sample of 247 Spanish workers. According to this study, need commitment and exchange commitment are distinguishable subscales of instrumental commitment. However, contrary to their expectations, affective commitment and value-related commitment saturated on only one factor, affective commitment of values (personal commitment subscale).

We applied the Principal Component Analysis to extract the dimensions of Organizational Commitment for this sample and evaluated their internal consistence. In our analysis the three items of Exchange Commitment were excluded because of their double saturation or low levels of communality or saturation. Therefore, we extracted a new rotated matrix with nine items and two factors (Table 6). In this model all items of Affective Commitment (C10, C11 and C12) and Value-Based Commitment (C1, C4 and C6) have saturation in the first factor and the items of Need Commitment (C2, C5 e C8) made up the second factor. The first factor we called Personal Commitment (including affective and value-based commitment) and the second factor, Need Commitment.

Table 6

Principal Component Analysis of ASH-ICI (Two Factor Solution); Communalities, Item-Total Correlation, Cronbach's Alpha if item deleted, Alpha's Scale

	Factor	Loadings					
	1 2		Communality	Item-Total Correlation	Cronbach's Alpha if item deleted	Alpha's Scale	
C11	.86	18	.78	.80	.82	.87	
C12	.84	15	.73	.76	.83		
C6	.78	15	.63	.69	.84		
C4	.73	07	.53	.61	.86		
C10	.72	06	.53	.60	.86		
C1	.65	16	.45	.55	.86		
C5	11	.87	.77	.71	.71	.82	
C8	14	.85	.74	.68	.74		
C2	16	.81	.69	.79	.79		

Note: Itens C3, C7 and C9 excluded.

The Reliability Analysis confirmed the internal consistency of these two dimensions. *The Crombach's alpha of both Personal (* α =0.87) and *Need Commitment (* α =0.82) scales are excellent and the item-total correlation of almost all items from these two dimensions are above .50.

All in all, we conclude that these two dimensions are good representatives of OC construct and explained 65 percent of the variance, which is a good explanation for Social Science (Hair *et al.*, 1998).

5. Results

Applying multiple regression analysis with Personal and Need Commitment as predictive variable and each KM dimension as criterion variable, we asked for four standard regressions – estimation models (Table 7). The four models have the percentage of the variance explained by the set of predictive variables greater than 20%. Personal commitment increases the explanation significantly in all models and the Beta coefficient is between .45 and .60. Nevertheless, the need commitment increase was significant just in the explanation of the Social and Discursive Management of Knowledge dimension.

		R	R ²	F	ß	t	p-value
KMP	Personal Commitment Need Commitment	.50	.25	45.59	.45 .10	8.30 -1.90	.00* .07
КОС	Personal Commitment Need Commitment	.61	.37	80.88	.60 02	11.85 56	.00* .57
SDMK	Personal Commitment Need Commitment	.49	.24	44.81	.52 .15	9.40 2.67	.00* .00*
SKM	Personal Commitment Need Commitment	.50	.25	47.19	.52 .09	9.59 1.65	.00* .09

Table 7Standard Multiple Regression Models (N=276)

* p<.05

Note: KMP = Knowledge Management Practices; KCO = Knowledge Oriented Culture; SDKM = Social and Discursive Management of Knowledge; SKM = Strategic Knowledge Management.

Based on this empirical evidence we can conclude that the set of OC dimensions (personal and need commitment) has great importance for all KM dimensions in this sample. According to Hair *et al.* (1998), the Beta coefficients should also be used as a guide to the relative importance of the independent variables included in the equation). Therefore, we can also assert that the relative importance of personal commitment is greater than need commitment in all KM dimensions.

6. Discussion

Previous studies analysed the relationship between employees' commitment and share or dissemination of knowledge (Hoof & Rider, 2004; Robertson & Hammersely, 2000; Cabrera *et al.*, 2006; Van der Bij *et al.*, 2003). This investigation, in turn, analysed the importance of OC for KM in different dimensions, not only in a specific process.

The results of this investigation sustain empirically the two hypotheses we formulated: level of employee commitment to their organizations has significant importance in all dimensions of KM; and the importance of personal commitment is greater than the importance of instrumental commitment for the KM dimensions.

Based on these results we can state that levels of collaborator OC in this sample, to some extent are positively related to KM practices in the various dimensions studied. That is to say, the bond established between collaborator and organization interferes with perception of KM practices and probably with its very occurrence. For the time being, we cannot state specifically how this relationship is established or if there are mediators or moderators.

However, from reflection based on the literature presented, we can suggest the role of OC in this relationship is connected to its influence on the behaviour and attitudes of collaborators in organizational practices, including practices directed towards management of organizational knowledge. This is because KM is understood by us to be a set of organizational practices (actions, procedures, activities and processes) that aim to manage organizational knowledge in favour of organizational objectives.

Activities related to knowledge and its management are not easily distinguishable from other organizational activities, as they are inserted in the organization's daily life, set in its practices, culture and internal and external relationships. Despite the wide recognition of the influence of OC on employee attitudes and behaviour, there is still no clarity about the dimension and diversity of this influence.

As we explained before, KM processes are not spontaneous. For effective employee involvement in KM practices, support, incentives and development of a favourable culture are necessary. As pointed out by previous studies, motivation, job involvement, job satisfaction, trust and willingness to share (Chowdhury, 2005; Dyer & McDonough, 2001; Janz & Prasamphanic, 2003; Malhotra & Galletta, 2003; Montano & Wang, 2003) are important factors to encourage those processes. And at the same time, these same variables are influenced by levels of employee OC (Storey & Quintas, 2001; Mathieu & Zajac, 1990; McKenzie *et al.*, 2001; Meyer *et al.*, 2002).

Therefore, we suggest that whether through attitudes and behaviour or its influence on important work-related variables, OC must influence employee involvement and participation in KM practices. That means the relationship established between employee and organization can facilitate or impede the emergence of employees' willingness, involvement and positive attitudes to KM processes (voluntary sharing, discretionary efforts, trust, organizational citizenship behaviours, etc.). Moreover, a weak bond between worker and organization can catalyze the emergence of barriers such as high turnover and low trust. Therefore, we can assert that levels of OC can play the part of inhibiting or facilitating KM processes. Or that a strong link between employees and companies will favour KM practices.

Also according to our results, personal commitment was seen to have greater importance than need commitment. The relevance of personal commitment was significant and high in the four dimensions of KM, whereas the relevance of need commitment was only significant in Discursive and Social Management of Knowledge and with a very low value. Therefore, we can state that KM processes are more closely related to employee identification with the organization and the feeling of belonging than to establishing a link based on the need to keep the job.

The importance of Organizational Commitment to Knowledge Management

The personal bond between employees and the organization results in the formation of a relationship that goes beyond the contractual and professional relationships. The feeling of belonging or congruence of values means employees do not restrict their relationship with the company only according to benefits received, but motivates the investment in extra efforts in favour of the organization and preserving this relationship. Therefore, the employee with a strong bond with his organization tends to be more involved and have more active participation in KM practices, a great many of which are not established contractually as they are part of the organizational routine and set in its processes.

In addition, we identified a certain type of contrasting poles between the two types or categories of commitment. Personal commitment is characterized by a bond that transcends the contractual relationship; it is based on values and need for filiations – centred on internal motives to establish or keep the bond. On the other hand, instrumental commitment is based on the employees' dependence on organizational rewards – centred on the consequences of breaking the bond or some benefits (external motives). This distinction also lets us state, based on our data, that KM initiatives should prioritize strategies based on internal motivators over external motivators in encouraging its practices and active employee participation.

7. Implications, Directions for Future Research and Limitations

Recognizing the great (direct or indirect) importance of OC for KM has strong implications for the field. This is because the importance of the human factor for knowledge management becomes evident, and consequently, the great relevance of investing in aspects related to the human side of the organization, for example the link between organization and collaborators. This being so, HRM itself plays a crucial part in KM, as it influences employee attitudes and behaviour which are directly and indirectly related to KM processes.

When highlighting the importance of the human factor for KM processes, at the same time we claim there must be constant investment in the people involved in this process, aiming to prepare and support them so that they can participate more actively in KM initiatives, understand their goals and act according to this new "paradigm". For this, close collaboration between top management and Human Resource Management is indispensable. While the former must provide the necessary conditions regarding structure, policy and strategy, HRM must identify strategies and interventions that facilitate this process.

What is more, organizations are advised not to neglect the human factor in KM projects and/or initiatives from the planning stage to implementation. Decisions taken based only on financial planning and immediate results neglect their effect on employees and can jeopardize human capital in the medium and long term. Incorrect use of organizations' intellectual capital must be considered as an important loss, threatening organizational survival. For example, when implementing KM initiatives or projects, the impact of this change on employees (commitment, satisfaction, turnover, productivity, etc.) must also be measured and analysed together with the financial investment, profit and loss.

Based on this, we claim that HRM should take an active role in promoting initiatives related to the link between collaborators and their organizations, so as to facilitate fulfilment of those that

are related to KM processes. In this context, we also emphasize the need to harmonize organizational strategies, organizational structure, HRM policies and KM initiatives so as to meet individual and organizational goals.

Concerning future research, we suggest first exploring the possible mediators or moderators of this relationship, such as satisfaction, involvement, confidence, willingness and motivation at work. Secondly, investment in extensive studies about the relationship between KM and OC, and simultaneously with other human-related variables. Thirdly, analysis of the relationship between OC and KM in other sectors and cultures, based on a trans-cultural non-sectorized perspective. Finally, we suggest investment in meta-analysis and reviews of the literature to integrate and organize contributions already in existence.

This study has some limitations beyond the scarcity of theoretical and methodological bases already explained. In the first place, we point out the extent of the sample which, although suitable for the statistical analysis carried out, is not representative of the population under study, nor likely to lead to results that can be generalized. Secondly, in the KM questionnaire (QGC), applicability of organizational processes related to knowledge is measured by individuals' perceptions. That is, individuals are asked to identify activities related to knowledge that daily occur in their organization. However, there may be activities contained in the organization's daily life which are not explicitly perceived by its members. Lastly, in our opinion, the theoretical and methodological perspective adopted, due to its great amplitude and extent, could give rise to less capacity to discriminate the activities/processes related to knowledge compared to others that are not so.

These limitations restrict the ambitions of this study. However, they are acceptable and to be expected in a subject involving a relationship that has been little studied up to now and therefore, we consider our contributions to be significant and relevant for the development of knowledge in this field.

References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Alvesson, M. (2005). Knowledge work: Ambiguity, image and identity. Human Relations, 54, 863-886.
- Alvesson, M., & Karreman, D. (2001). ODD couple: Making sense of the curious concept of knowledge management. *Journal of Management Studies*, 38 (7), 995-1016.
- Anantatmula, V., & Kanungo, S. (2006). Structuring the underlying relations among the knowledge management outcomes. *Journal of Knowledge Management*, 10 (4), 25-42.
- Bell, D. (1999). The axial age of technology foreword: 1999. In *The coming of the Post-Industrial Society*. New York: Basic Books.
- Bhatt, G. D. (2002). Management strategies for individual knowledge and organizational knowledge. *Journal of Knowledge Management*, 6 (1), 31-39.
- Bontis, N., & Fitz-enz, J. (2002). Intellectual capital ROI: A causal map of human capital antecedents and consequents. *Journal of Intellectual Capital*, *3* (3), 223-247.

- Brown, R. (1996). Organizational commitment: Clarifying the concept and simplifying the existing construct typology. *Journal of Vocational Behavior*, *49*, 230-251.
- Cabrera, A., Collins, W., & Salgado, J. S. (2006). Determinants of individual engagement in knowledge sharing. International Journal of Human Resource Management, 17 (2), 254-264.
- Cardoso, L. M. (2003). *Gerir conhecimento e gerar conhecimento: Estudo empírico sobre a gestão do conhecimento e seu impacto no desempenho organizacional*. Dissertação de Doutoramento em Psicologia. Especialização em Psicologia do Trabalho e das Organizações, apresentada à Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra. Disponível no site da Ariadne Editora (www.ariadne-editora.com).
- Cardoso, L. M., Gomes, A. D., & Rebelo, T. (2005). Construção e avaliação das qualidades psicométricas do Questionário de Gestão do Conhecimento (GC). *Psicologia Educação e Cultura*, 9 (2), 535-556.
- Carneiro, A. (2000). How does knowledge management influence innovation and competitiveness? *Journal of Knowledge Management*, 4 (2), 87-98.
- Carter, C., & Scarbrough, H. (2001). Towards a second generation of KM? The people management challenge. *Education & Training, 43* (4/5), 215-224.
- Chase, R. L. (2006). A decade of knowledge management. Journal of Knowledge Management, 10 (1), 3-5.
- Chauvel, D., & Despres, C. (2002). A review of survey research in knowledge management: 1997-2001. *Journal* of Knowledge Management, 6 (3), 207-223.
- Chowdhury, S. (2005). The role of affect and cognition-based trust in complex knowledge sharing. *Journal of Managerial Issues*, 7 (3), 310-326.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9 (3), 101-115.
- Davenport, T., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*. London: Harvard Business School Press.
- Despres, C., & Chauvel, D. (1999). Knowledge management(s). *Journal of Knowledge Management*, 3 (2), 110-120.
- Despres, C., & Hiltrop, J. M. (1995). Human resource management in the knowledge age: Current practice and perspectives on the future. *Employee Relations*, 17 (1), 9-23.
- Dyer, G., McDonough, B. (2001). "The State of KM", Communicator eNewsletter http://www.destinationcrm.com/km/dcrm_km_article.asp?id=822&ed=5%2F1%2F01#?id=822&ed=5%2F1%2F01
- Gloet, M., & Berrel, M. (2003). The dual paradigm nature of knowledge management: Implications for achieving quality outcomes in human resource management. *Journal of Knowledge Management*, 7 (1), 78-89.
- Gupta, B., Iyer, S. L., & Aronson, J. E. (2000). Knowledge Management: practices and challenges. *Industrial Management & Data Systems*, 100 (1), 17-21.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis* (5th ed.). New Jersey: Pearson Prentice Hall.
- Hislop, D. (2003). Linking human resource management and knowledge management via commitment: A review and research agenda. *Employee Relations*, 25 (1/2), 182-202.
- Hoof, B. V., & Ridder, J. A. (2004). Knowledge sharing in context: The influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, 8 (6), 117-130.

- Janz, B. D., & Prasarnphanic, P. (2003). Understanding the antecedents of effective knowledge management: The importance of a knowledge-centred culture. *Decision Science*, *34* (2), 351-373.
- Kinnear, L., & Sutherland, M. (2000). Determinants of organizational commitment amongst knowledge workers. South African Journal of Business Management, 31 (3), 106-112.
- Laszlo, K. C., & Laszlo, A. (2002). Evolving knowledge development: The role of knowledge management in a changing world. *Journal of Knowledge Management, 6* (4), 400-412.
- Lease, S. (1998). Annual review, 1993-1997: Work attitudes and outcomes. *Journal of Vocational Behavior*, 53, 154-183.
- Lin, C. (2006). To share or not to share: Modelling tacit knowledge sharing, its mediators and antecedents. *Journal of Business Ethics*, 70, 411-428.
- Malhotra, Y., & Galletta, D. (2003). Role of commitment and motivations in knowledge management systems implementation: Theory, conceptualization, and measurement of antecedents of success. In *Proceedings* of the 36th Hawaii International Conference on System Sciences.
- Marqués, D. P., & Simón, F. J. (2006). The effect of knowledge management practices on firm performance. *Journal of Knowledge Management, 10* (3), 143-156.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108 (2), 171-194.
- Mayer, R., & Remus, U. (2003). Implementing process-oriented knowledge management strategies. Journal of Knowledge Management, 7 (4), 62-75.
- McElroy, M. (1999). Second generation knowledge management. *IBM Knowledge Management Consulting Group*, June, 1-9.
- McElroy, M. (2000). Integrating complexity theory, knowledge management and organizational learning. *Journal* of Knowledge Management, 4 (3), 195-203.
- McKenzie, J., Truch, A., & Winkelen, C. (2001). Winning commitment for knowledge management initiatives. *Journal of Change Management*, 2 (2), 115-127.
- Metaoxiotis, K., Ergazakis, K., & Psarras, J. (2005). Exploring the world of knowledge management: agreements and disagreements in the academic/practitioner community. *Journal of Knowledge Management*, 9 (2), 6-18.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1* (1), 61-89.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace toward a general model. *Human Resource Management Review*, 11, 299-326.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behaviour*, 61, 20-52.
- Milton, N. (2005). Knowledge management for teams and projects. Great Britain: Publishing.
- Moffett, S., McAdam, R., & Parkinson, S. (2003). An empirical analysis of knowledge management applications. *Journal of Knowledge Management*, 7 (3), 6-26.
- Monteiro, S. J. S. (2007). GC: contributos para a conceitualização e operacionalização. Um projecto de investigação-acção. Tese de Mestrado não publicada. FPCE, Universidade do Porto.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.

Myers, P. S. (1996). Knowledge management and organizational design. Boston: Butterworth-Heinemann.

- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy* of Management Review, 23 (2), 242-266.
- Nonaka, I. (1991). The knowledge creation company. Harvard Business Review, November-December, 96-104.
- Nonaka, I. (1994). Dynamic theory of organizational knowledge creation. Organizational Science, 5 (1), 14-37.
- Nonaka, I., & Teece, D. J. (2001). Research directions for Knowledge Management. In *Managing Industrial Knowledge: Creation, Transfer and Utilizations*. London: SAGE Publications.
- Nonaka, I., Toyama, R., & Konno, N. (2001). SECI, Ba and leadership: A unified model of dynamic knowledge creation. Long Range Planning, 33, 5-34.
- Ofek, E., & Sarvary, M. (2001). Leveraging the customer base: Creating competitive advantage through knowledge management. *Management Science*, 47 (11), 1441-1456.
- Oliver, S., & Kandadi, K. R. (2006). How to develop knowledge culture in organizations? A multiple case study of large distributed organizations. *Journal of Knowledge Management, 10* (4), 6-24.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification and internalization on prosocial behaviour. *Journal of Applied Psychology*, 71, 492-499.
- Peltokorpi, V. (2004). Transactive memory directories in small work units. Personnel Review, 33 (4), 446-467.
- Polanyi, M. (1958). Personal Knowledge: Towards a post-critical philosophy. London: Routledge and Kegan Paul.
- Polanyi, M. (1966). The tacit dimension. Gloucester, MA: Peter Smith, 1983.
- Quijano, S. D., Masip, R., Navarro, J., & Aubert, I. (1997). Conceptualización y medida de compromiso y la identificación con la organización y la implicación con el trabajo: Análisis de la estructura factorial del cuestionario ASH-ICI. Comunicación presentada al VI Congreso Nacional de Psicología Social, San Sebastián, 29-30 de Septiembre y 1 de Octubre de 1997.
- Quijano, S. D., Navarro, J., & Cornejo, J. M. (2000). Un modelo integrado de Compromiso e Identificación con la Organización: análisis del Cuestionario ASH-ICI. *Revista de Psicología Social Aplicada, 10* (2), 27-57.
- Rebelo, T. (2006). Orientação cultural para a aprendizagem nas organizações: Condicionantes e consequentes. Dissertação de doutoramento não publicada, Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra.
- Reinhardt, R. (2001). Knowledge management: Linking theory with practice. In D. Morey, B. Maybury, & B. Thuraisinghan (Eds.), *Knowledge Management: Classic and Contemporary Works*. Cambridge: MIT Press.
- Robertson, M., & Hammersely, G. O. (2000). Knowledge management practices within a knowledge-intensive firm: The significance of the people management dimension. *Journal of European Industrial Training*, 24 (2-4), 241-253.
- Scarbrough, H., & Carter, C. (2000). *Investigating knowledge management*. London: Chartered Institute of Personnel Development.
- Snyman, M. M., & Kruger, C. J. (2004). The interdependency between strategic management and strategic knowledge management. *Journal of Knowledge Management*, 8 (1), 5-19.
- Storey, J., & Quintas, P. (2001). Knowledge management and HRM. In J. Storey (Ed.), Human Resource Management, a Critical Text. London: Thomsom Learning.

- Takeuchi, H. (2001). Towards a universal management concept of knowledge. In I. Nonaka, & D. Teece (Eds.), Managing Industrial Knowledge: Creation, Transfer and Utilizations. London: SAGE Publications.
- Takeuchi, H., & Nonaka, I. (2001). Classic work: Theory of organizational knowledge creation. In D. Morey, B. Maybury, & B. Thuraisinghan (Eds.), *Knowledge Management: Classic and Contemporary Works*. Cambridge: MIT Press.
- Thompson, M., & Heron, P. (2005). The difference a manager can make: organizational justice and knowledge worker commitment. *International Journal of Human Resource Management*, *16* (3), 383-404.
- Tiago, M. T. B., Couto, J. P. A., Tiago, F. G., & Vieira, J. A. C. (2007). Knowledge management: An overview of European reality. *Management Research News*, 30 (2), 100-114.
- Tsoukas, H. (2001). What is organizational knowledge? Journal of Management Studies, 38 (7), 974-993.
- Van der Bij, X. H., Song, M., & Weggeman, M. (2003). An empirical investigation into the antecedents of knowledge dissemination at the strategic business unit level. *Product Development & Management Association*, 20, 163-179.
- Yahya, S., & Goh, W. (2002). Managing human resource toward achieving knowledge management. *Journal* of Knowledge Management, 6 (5), 457-468.
- Montano, B. R., & Wang, R. (2003). The value of trust in knowledge sharing. In E. Coakes (Ed.), *Knowledge* management: current issues and challenges. Hershey: IGI Publishing.
- Wiig, K. M. (2002). Knowledge Management has many facets. Short Note from Knowledge Research Institute, Inc.

Resumo. Nos últimos anos, a Gestão do Conhecimento (GC) tem assumido uma grande relevância na literatura da gestão e dos negócios. Contudo, persiste a escassa compreensão dos aspectos humanos nos processos de GC. Deste modo, esta investigação procura contribuir para a análise da importância do Comprometimento Organizacional (CO) para a GC. Em primeiro lugar, utilizámos o Questionário de Gestão do Conhecimento (QGC) de Cardoso (2003) que compreende em si todas as actividades organizacionais constituintes dos processos do conhecimento e que distingue quatro dimensões da GC. Em segundo lugar, aplicámos o questionário (ASH-ICI) de Quijano, Masip, Navarro e Aubert (1997) que distingue dois tipos de comprometimento (pessoal e instrumental) em quatro dimensões. Estes dois questionários foram aplicados a 300 colaboradores do sector industrial cerâmico português. Através da análise de regressão múltipla, verificámos que os níveis de comprometimento organizacional são estatisticamente importantes para as dimensões da GC. Para além disso, a nossa análise indica que o comprometimento pessoal é mais importante do que o comprometimento de necessidade. Estes resultados são discutidos e os especialistas do Comportamento Organizacional e psicólogos do Trabalho e das Organizações são desafiados a assumir uma maior responsabilidade e um papel mais activo nos estudos e práticas da GC, bem como a explorar os aspectos humanos neste campo.

Palavras-chave: Gestão do Conhecimento, Comprometimento Organizacional.