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KNOWLEDGE WITHHOLDING WITHIN AN ORGANIZATION: THE PSYCHOLOGICAL RESISTANCE TO KNOWLEDGE SHARING LINKING WITH TERRITORIALITY

Retenção do Conhecimento em uma Organização: A Resistência Psicológica ao Conhecimento Compartilhado Partilhando Ligação à Territorialidade

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Abstract: The world of knowledge management consists of different terms that are flying around. Some words are more significant and frequently used than others. Knowledge sharing and knowledge transfer are sometimes measured to have overlapping content and used synonymously. The transfer of knowledge between organizational members has drawn consideration from both academia and business because company competitiveness is linked directly to the dissemination of innovation through an organization. Regardless of the efforts to increase knowledge sharing in organizations, success has been subtle. It is pretty clear that in many instances, employees are not willing to share knowledge even when organizational practices are followed to facilitate transfer. As the scope of innovation within an organization depends on the efficient transfer of knowledge between members, this paper emphases on the concept of knowledge withholding, which is known to interrupt this transfer and distinguish from related concepts (knowledge barriers, knowledge hiding). The aim of this paper is to make a contribution in finding the proper demarcations between these concepts. Firstly, to prove that knowledge sharing and knowledge withholding are separate concepts, Herzberg's twofactor theory is used which explain the difference between them. Secondly, previous studies on knowledge management are exposed to have unnoticed knowledge withholding in courtesy of knowledge sharing, leading to a lack of information on the earlier. Thirdly, knowledge withholding is defined into two separate manners: the intentional hiding and the unintentional hoarding of knowledge. Finally, characteristics of knowledge withholding are abbreviated based on four territorial behaviors associated to employees in order to advocate areas for further study.

Key words: Knowledge Management, Knowledge Sharing; Knowledge Withholding; Innovation; Two-Factor Theory of motivation

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Resumo: O mundo da gestão do conhecimento consiste em termos diferentes que circulam ao redor. Algumas palavras são mais significativas e frequentemente usadas do que outras. Compartilhamento de conhecimento e transferência de conhecimento às vezes são medidos para ter conteúdo sobreposto e usado como sinônimo. A transferência de conhecimento entre os membros de uma organização atraiu a atenção tanto da academia quanto das empresas, porque a competitividade da empresa está diretamente ligada à disseminação da inovação por meio da organização. Independentemente dos esforços para aumentar o compartilhamento de conhecimento nas organizações, o sucesso tem sido sutil. É bastante claro que, em muitos casos, os funcionários não estão dispostos a compartilhar conhecimento, mesmo quando as práticas organizacionais são seguidas para facilitar a transferência. Como o escopo de inovação dentro de uma organização depende da transferência eficiente de conhecimento entre os membros, este artigo enfatiza o conceito de retenção de conhecimento, que é conhecido por interromper essa transferência e distinguir conceitos relacionados (barreiras de conhecimento, ocultação de conhecimento). O objetivo deste artigo é contribuir para encontrar as demarcações adequadas entre esses conceitos. Em primeiro lugar, para provar que o compartilhamento de conhecimento e a retenção de conhecimento são conceitos separados, a teoria de dois fatores de Herzberg é usada para explicar a diferença entre eles. Em segundo lugar, estudos anteriores sobre gestão do conhecimento são expostos a ter a retenção de conhecimento despercebida em cortesia do compartilhamento de conhecimento, levando a uma falta de informação sobre o anterior. Em terceiro lugar, a retenção de conhecimento é definida em duas maneiras distintas: a ocultação intencional e a acumulação não intencional de conhecimento. Por fim, as características de retenção de conhecimento são abreviadas com base em quatro comportamentos territoriais associados aos funcionários, a fim de promover áreas para estudos posteriores.

Palavras-chave: Gestão de Conhecimento, Conhecimento Compartilhado; Retenção de Conhecimento; Inovação; Teoria de Dois fatores de Motivação.

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INTRODUCTION

In the age of knowledge-based economy and globally dynamic competition, innovation has become a dominant object to have a sustainable future for an organization outrunning their counterparts. The banquet of innovation between organizational members has drawn consideration from both academia and organizations (Szulanski 1996; Jasimuddin, 2007) because corporate competitiveness is connected directly to the circulation of innovation within an organization (Argote & Ingram, 2000). Innovation initiatives incline to depend mostly on employees' knowledge, skill and experience in the value creation process (Wang & Wang, 2012). Knowledge sharing among employees are sometimes viewed as the most important raw-materials for innovation. Either combining existing knowledge in a new way or combining existing knowledge with newly discovered knowledge (Schumpeter, 1939) innovation can be created and progressed. Though, it is significantly apparent that a firm's ability to transform and exploit knowledge may determine the level of innovation such as new technique of problem-solving, new development of products for reacting to market demand (Goh, 2002; Marina, 2007; Tidd et al., 1997), but the spread of innovation within an organization rest on the efficient transfer of knowledge between members.

Although knowledge sharing and innovation are primarily studied within the firm (Brockman & Morgan, 2006; Kamasak & Bulutlar, 2010; Leiponen, 2006; Liebowitz, 2002; Sáenz, Aramburu, & Blanco, 2012; Wang & Noe, 2010; Wang & Wang, 2012; Zohoori, et al, 2013), many scholars have researched methods of expediting knowledge sharing among organizational members (Voelpel et al, 2005; Horwitz & Santillan, 2012). In spite of the numerous efforts by companies and managers, effective knowledge sharing has proven difficult to attain in many organizations (Szulanski, 2000; Smith et al, 2010). Companies have introduced knowledge management systems and technologies to promote knowledge transfer between employees, but these have been unsuccessful in most cases (Connelly & Kelloway, 2003). This reluctance to transfer knowledge persists even when employees are encouraged and rewarded for doing so (Bock, Zmud, Kim, & Lee, 2005). The objective of the study is to classify the reasons for these disappointing results.

Organizations do not 'own' the 'intellectual assets' of employees, and as such cannot coerce or force workers to transfer their knowledge to other organizational members (Kelloway & Barling, 2000). Knowledge in an operational sense relates to information, ideas, and expertise related to the tasks carried out by the members of an organization (Bartol & Srivastava, 2002). According to Nonaka & Takeuchi (1995), new knowledge is generated by individuals and, if proven valuable, this knowledge is transmitted to the entire organization. Knowledge can be classified broadly into implicit knowledge, which deals with how tasks are implemented within the organization, and explicit knowledge, such as organized job manuals (Polanyi, 1962; Tsoukas, 1996). In particular, implicit knowledge is shared within the organization through a process of exchange between members that request knowledge and those responding to such requests (Szulanski, 1996). Knowledge-related research can be divided into studies investigating knowledge creation and those concerned with knowledge delivery; knowledge withholding belongs to the latter category.

There is growing heading that employees must be motivated to share their knowledge with others, although this is difficult (e.g., Husted & Michailova, 2002). The deficiency of knowledge sharing within an organization may be the result of problems with organizational systems, programs, culture, or other aspects of the work environment; on the other hand, issues surrounding those organizational members who are instrumental in the transmission of knowledge may also be a factor (Pfeffer & Sutton, 1999). The current study focuses on the psychological reasons for individuals within an organization to withhold knowledge; the intentional hiding of knowledge by organizational members is one of the major factors disrupting successful knowledge delivery (Hansen, 1999). No matter how simple the organizational structure, if members intend to withhold knowledge, the information will not be transferred to other members, blocking the spread of innovation. Research on knowledge withholding has had a long history (e.g., Simmel, 1906), but has only established itself as a major research topic relatively recently (Riege, 2005; Webster et al, 2008; Connelly et al, 2012; Peng, 2013).

This paper is organized as follows. First, the two-factor theory (Herzberg et al, 1959), a motivational theory in business, is used to demonstrate that knowledge sharing and knowledge withholding are distinct perceptions that exert influence in different ways. The overemphasis by previous research

on knowledge sharing and the relative neglect of knowledge withholding is then discussed. Next, an attempt is made to categorize knowledge withholding into two concepts: intentional knowledge hiding and unintentional knowledge hoarding. Four territorial behaviors related to a member's intention to withhold knowledge are then described. Finally, we conclude with a discussion of the theoretical and practical implications along with limitation of the study and directions for future research.

KNOWLEDGE SHARING AND KNOWLEDGE WITHHOLDING: TWO-FACTOR THEORY'S PERSPECTIVE

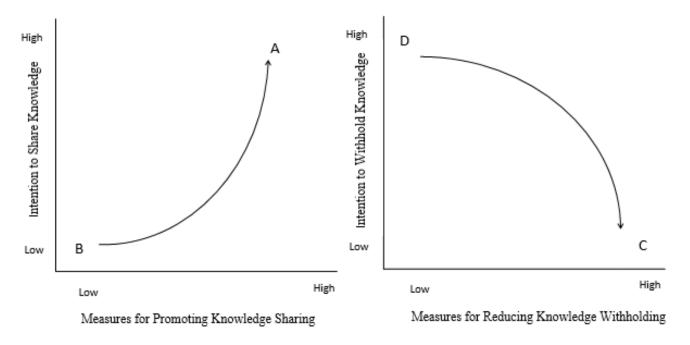
The Two-Factor Theory

Psychologist Frederick Herzberg established the two-factor theory, which was also called the motivation-hygiene theory and dual-factor theory (Herzberg et al, 1959). Published in his famous article, "One More Time: How do You Motivate Employees," the conclusions he drew were extraordinarily influential, and still form the bedrock of good motivational practice nearly half a century later. Herzberg interviewed hundreds of engineers and accounting professionals from nine companies located in Pittsburgh, and based on the research, he proposed that satisfaction and dissatisfaction were conceptually different continuums. In other words, the opposite of satisfaction was not dissatisfaction. The inverse of satisfaction is 'no satisfaction', and the inverse of dissatisfaction is 'no dissatisfaction'. According to his study, Herzberg concluded that job satisfiers (those things that lead to job satisfaction) were related to work content such as achievement and recognition, and job dissatisfiers were associated to work context such as company policy and supervision. He called the satisfiers motivators, and he named the dissatisfiers hygiene factors. The motivators that lead to job satisfaction are distinctly separate from hygiene factors that lead to job dissatisfaction. Fulfilling hygiene factors around the job does not necessarily make the job satisfying. Hygiene factors prevent dissatisfaction, but they do not lead to satisfaction. The factors that lead to satisfaction are motivators. Herzberg's two-factor theory provided one major implication for management: managers should care about both motivators and hygiene factors for their employees simultaneously in the work- place. If managers neglect or overlook any of those two factors, they might have trouble in achieving the optimal output. In summary, Herzberg's two-factor theory posits that job satisfaction and job dissatisfaction should be viewed as concepts distinct from one another (Herzberg et al, 1959). In general, motivational factors such as achievement, recognition, job autonomy affects job satisfaction, whereas hygiene factors such as job environment, company policies, status affect job dissatisfaction. Remedying the causes of dissatisfaction will not create satisfaction. Nor will adding the factors of job satisfaction eliminate job dissatisfaction. For instance, if a company provides additional motivational factors, the satisfaction among members of the organization may increase, but this does not mean that their dissatisfaction automatically decreases.

Application of the Two-Factor Theory's Perspective

Herzberg's two-factor theory suggests that a company should provide sufficient hygiene factors if the company wants to decrease employee dissatisfaction. When applied to the present study, this theory recommends that successful measures to encourage knowledge sharing may be ineffective at reducing knowledge withholding, and vice versa. Figure 1 isolates the two-factor theory with the concepts of knowledge sharing and knowledge withholding and Figure 2 integrates the two concepts knowledge sharing and knowledge withholding in two-factor theory's perspective.

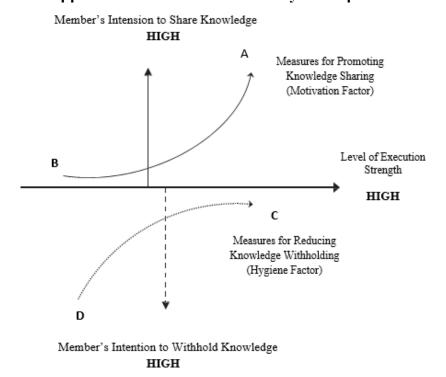
Figure 1: Knowledge Sharing and Knowledge Withholding: Two-Factor Theory's Perspective (Isolated view)



The figures present four situations: A-D, A-C, B-D, and B-C. These situations elaborate based on two-factor theory as:

Situation A-D: If a company strongly pursues the promotion of knowledge sharing without attempting to reduce the intention to withhold knowledge, the company will be faced with an A-D situation. 'A' represents an increase in the intention to share knowledge while 'D' represents the strong intention to withhold knowledge. The two factors work in opposition to each other, preventing the realization of the expected results.

Figure 2: Knowledge Sharing and Knowledge Withholding Integration:
Application of Two-Factor Theory's Perspective



Situation A-C: This case is the most ideal for a company, works as follows. With measures increasing the intention to share knowledge, (A) and another set of measures lowering the intention to withhold knowledge (C), active knowledge sharing can be achieved.

Situation B-D: Meanwhile, it is the most negative outcome. Here, the intention to share knowledge is low (B) while their intention to withhold knowledge is high (D). Thus, knowledge transfer between members is extremely rare. Finally,

Situation B-C: Finally, a measure to reduce knowledge withholding (C) is implemented without any corresponding effort to promote knowledge sharing (B). Given that the measure only lowers the intention to withhold knowledge and does not influence the intention to share knowledge, optimal results cannot be achieved.

We elaborated in the analysis that knowledge withholding is not simply the absence of knowledge sharing; instead, it is the intentional or unintentional psychological behavior of employees regarding hiding, hoarding or sharing of knowledge that has been requested by other individual within the organization. Knowledge sharing is not always directly related to knowledge withholding; they are independent concepts (Webster et al, 2008) and these variables are not the opposite of each other but rather these are two conceptually distinct constructs (Connelly et al, 2012). In other words, less knowledge sharing does not necessarily mean more knowledge withholding. For example, when organizational members are unable to transfer requested knowledge because they lack the relevant information, this can be interpreted as a failure of knowledge sharing, but not an example of knowledge withholding (Webster et al, 2008).

In this regard, the introduction of programs designed to promote knowledge sharing in the workplace will not necessarily lower the intention to withhold knowledge; indeed, if employees have a strong desire to prevent the transmission of knowledge, the introduction of knowledge-sharing measures may not in fact weaken knowledge withholding behavior, and as a result the expected outcomes will not be achieved. Psychologically, it seems reasonable that these two constructs might appear quite alike but the motivations behind knowledge withholding and a lack of knowledge sharing are significantly different which is revealed with the two-factor theory perspective.

KNOWLEDGE WITHHOLDING

Separation of Knowledge Sharing and Knowledge Withholding

Although efforts intended to assure and speedy the knowledge transfer within organization, success has been still intangible (Hislop, 2002). Despite the numerous studies conducted on knowledge sharing, it looks that an optimal knowledge sharing has not yet been successfully achieved in a business setting (Ford & Staples, 2006). What are the causes for this disappointment? One possibility is that past efforts, both academic and practical, have not considered that the knowledge sharing and the knowledge withholding were separate concepts. Some previous researches of knowledge sharing have merged the knowledge sharing and the knowledge with- holding / knowledge hiding in one concept and called it knowledge sharing. In numerous instances, researchers may have deemed knowledge withholding behaviors as negative ones for knowledge sharing behaviors, and as a result the separation of these two concepts in previous studies were not considered.

Another motive may be researchers mixed knowledge withholding among potentially related but distinct set of behaviors, like counterproductive workplace behaviors (CWB), workplace aggression, social undermining in the workplace, deception, workplace incivility and other behaviors (Connelly et al, 2012). Knowledge withholding might be inspired by a number of different causes (e.g., prosocial, instrumental, laziness, etc.). On the other hand, absence of knowledge sharing can be driven by an absence of the knowledge itself. For instance, an employee may receive a request for knowledge and wish to share it however he is not in the possession of sharing the knowledge. In this case, s/he is not intentionally attempting to withhold knowledge but s/he is not able to engage in sharing the behavior. Therefore, knowledge withholding does not belong to cases where an employee unable to share knowledge by accident, or ignorance. In contrast, if s/he receives a request for knowledge to share and intentionally or unintentionally engages in a behavior to hide or conceal or hoard knowledge (e.g., deliver that s/he does not have this knowledge though accessible), an example of knowledge withholding. As requests for knowledge came from individuals not from group or organizations, so

this study knowledge withholding in dyads, because dyadic interaction is the supreme way in which knowledge is transferred within organizations (Hislop, 2002; Lane & Wegner, 1995). Despite there may be overlap between knowledge withholding and other workplace behaviors, we claim that knowledge withholding is a unique and independent psychological shadowy hindrance of knowledge transfer among employees within organization that create barrier in spreading innovation.

A significant number of publications dealing with knowledge management-related issues have been published in journal ranging from Post-Communist Economies, Conservation Biology to more business-oriented journals such as Research Policy, Journal of Knowledge Management, Harvard Business Review and KM World. We conducted a simple search to determine whether past studies on knowledge management did not treat knowledge withholding as different concept. Words related to knowledge sharing and withholding were entered into SCOPUS, an abstract/citation database of more than 22,000 academic journals worldwide, to identify the number of related papers (knowledge sharing: knowledge share/sharing, knowledge transfer/transferring, knowledge receive/receiving; knowledge withholding: knowledge withhold/withholding, knowledge hide/hiding, knowledge hoard/hoarding). In total, the search found 89,356 papers (almost 97% of the total) related to knowledge sharing and 2754 papers (3%) related to knowledge withholding (2016.9.24). Though these results may not necessarily reflect the actual qualitative and quantitative importance of knowledge sharing and withholding to researchers, they show that, from a quantitative point of view, the two forms of knowledge-related research have not been studied to the same degree.

Classification of Knowledge Withholding

Knowledge withholding classified as a repertoire of possible behaviors characterized by both knowledge hiding and hoarding (Connelly et al, 2012). According to Webster et al (2008), knowledge withholding by organizational members can be classified into unintentional knowledge hoarding and intentional knowledge hiding. Knowledge hoarding and hiding represent two different types of knowledge withholding, where hoarding captures the accumulation of knowledge and hiding represents concealing knowledge requested by another1 . Knowledge hoarding is merely the act of retaining or accumulating knowledge, which may or may not be shared in the future (Hislop, 2003) often without realizing it may be of value to others. Employees who are hoarding knowledge may be well-intended, striving to do their best, and struggling to honor their social commitments (e.g., to the organization, to co-workers, to clients) as best they can (Sitkin & Brodt, 2006) not necessarily assume employees have malevolent intentions or even incompatible interests with their organizations. In contrast, knowledge hiding refers to the act of intentionally withhold or conceal (Connelly et al, 2006) or keeping secret specifically requested knowledge from another person, i.e.; captures dyadic situation where knowledge is requested by one person and hidden by the responsible person which is relevant with knowledge transfer definition by Szulanski (1996, p.28) as "dyadic exchange of organizational knowledge between a source and a recipient unit in which the identity of the recipient matters"2.

Employees in the organization may hide knowledge requested by others colleagues in different ways. In response to request for information, members in the organization may be engaged in knowledge hiding in three different ways (Connelly et al. 2008; Webster et al, 2008). The first way of hiding is to engage in 'evasive hiding', which refers to the mean of providing impractical knowledge to the information requestor or purposely deferring knowledge delivery until the relevant information is useless and then promising to help at later time. Another recognized method is 'playing dumb'. In this case, members reported engaging to pretend that they know nothing about the requested knowledge or unfairly stating no knowledge of the relevant field. 'Rationalized hiding' is the third identified method of knowledge hiding where people claims that stating the requested knowledge is confidential and never be shared. As for example, demanding to lack the authorization to deliver the requested knowledge, or that the pertinent information is secret and thus cannot be shared.

¹ Knowledge encompasses the information, ideas, and expertise relevant for tasks performed by organizational members (e.g., Bartol & Srivastava, 2002)

² This study does not focus on situation where employees keep silent or keep secrets (as no knowledge has been requested), nor concentrate on other level of analysis like group, organizational or inter-organizational.

Entirely, the research suggest that the motive of knowledge hiding can yield on three main forms. These different sorts of methods were found to be predicted by a dissimilar set of antecedents and to have diverse relationships with outcomes such as job performance. Meanwhile, it may be frequented in some cases, for knowledge hiding behavior to reflect malicious intentions on the part of the hider, or at least expected to be so by the requestor, it may at times twig from more benevolent motivation. Like, the sender may be struggling to defend organizational secrets or encourage the good of society. Therefore, the motive of hiding knowledge cannot be umpired by a solitary moral standard (Robinson & Bennett, 1995). Generally, on the other, knowledge hoarding is improbable to reflect any malicious intentions. Employees who hoard knowledge may simply be endeavoring to fulfil their social responsibilities and doing their best to assist colleagues and clients (Hislop, 2003).

CHARACTERISTICS OF KNOWLEDGE WITHHOLDING

In organizational life, impeding knowledge transfer is a common phenomenon. The problem arises is about what knowledge to reveal to whom and conceal from whom that happen with frequency (Sitkin, 1986), and the psychological choices people make are consequential, sometimes effect organizational relationships (Simmel, 1950; Steele, 1970), organizational effectiveness (Lawler, 1971) and employee satisfaction (Stevenson, 1980). Why employees sometimes try to withhold their knowledge, organizations need to rectify these shadowy hindrances by finding the psychological reasons behind to sharp the transfer of knowledge and spread the innovation.

Territorial Behavior

The most significant and somewhat interesting behavioral perspective emerge is 'territoriality', which senses the employee to felt ownership over knowledge (Brown et al., 2005) and becomes a psychological resistance to knowledge sharing within an organization. 'Territorial Behavior' is a thoughtful crucial part of territoriality, which has weighty role in knowledge sharing and intended as a social behavioral construct in relation to other people that mark and defend the knowledge (Webster et al, 2008). As Brown and colleagues (2005) argue, territorial behaviors are centrally concerned with establishing, communicating, and maintaining one's relationship with that object relative to others in the social environment (e.g., this is mine and not yours!) rather not simple about expressing ownership over an object. Perceptions, or fear of infringement lead to these behaviors projected to maintain and restore the claim to the territory.

Types of Territorial Behavior

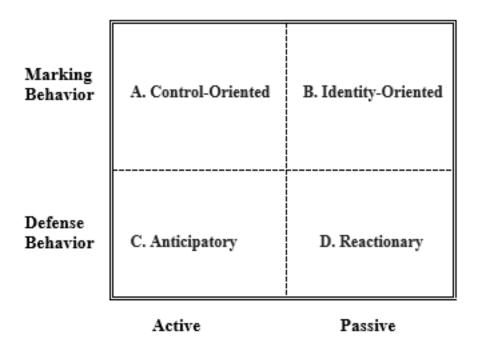
When organizational members try to defend the knowledge in their possession, knowledge-related territorial behavior occurs viewing it as their personal property (Webster et al, 2008). By marking it as their own and notifying others of their proprietorship organizational members establish their territorial privileges over an object (Brown et al, 2005). Territorial behavior can be classified as 'marking'; the act of notifying others of one's ownership of a certain type of knowledge, or 'defending'; protecting one's knowledge from others. As described in figure 3, past research categorized these behaviors into four types including control-oriented marking, identity- oriented marking, anticipatory defense, and reactionary defense (Altman, 1975; Brown, 1987; Brown et al., 2005), which can influence and have implications for knowledge withholding. Where knowledge is a critical source of competitiveness, territorial knowledge withholding behavior frequently arises there.

Marking Behavior: Control-Oriented vs Identity-Oriented

The marking behavior of organizational members can be classified as control-oriented or identity-oriented (Webster et al, 2008). Control-oriented marking, an aggressive form of marking behavior, refers to the act of notifying others regarding the scope and ownership of personal territory, or to the act of making territorial symbols (Smith, 1983). Examples include an employee publicly announcing to others that he or she has thought of a certain idea, or a scientist presenting a new theory at a conference. These cases can be viewed as control-oriented marking given that the individuals share their knowledge while actively publicizing their ownership of the information. As another example, the patent right system is a special form of sharing knowledge with society but also a socially institutionalized form

of withholding knowledge, which is control-oriented marking behavior. In passive identity-oriented marking behavior, individuals build their identity through territorial rights and make their ownership known to themselves and others. The key is for the shared knowledge to reflect the identity of the owner (Sundstrom & Sundstrom, 1986). For example, people who find personal meaning in knowledge are hesitant to share certain information with others but eager to

Figure 3: Territorial Behaviour of Knowledge Withholding



deliver knowledge that reflects positively on them as individuals. The information they wish not to share with others is either hidden, or the level of sharing is adjusted to craft a positive perception of their identity (Webster et al, 2008). Even though the purpose of marking behaviors was not to decrease knowledge withholding, but rather to increase it, the marking behaviors may release some limited amount of knowledge to protect the core of knowledge while the defense behaviors do not disseminate any knowledge.

Defense Behavior: Anticipatory vs Reactionary

The defense behavior of organizational members can be classified as anticipatory or reactionary (Webster et al, 2008). First, anticipatory defense, an aggressive form of defense, is the act of preventing personal territorial knowledge rights from being violated. Individuals may at times fail to protect their territorial rights due to the marked rights being incomprehensible or misinterpreted by new employees or outsiders (Edney, 1975). Thus, organizational members engage in anticipatory defense to prevent such violations. An example of this is using a computer password to prohibit others from accessing personal knowledge (Webster et al, 2008). Actively announcing ownership of a certain idea or hiding an idea from others can both be viewed as anticipatory defense strategies. For example, a researcher may choose not to disclose incomplete research data or a paper manuscript for fear that others may misuse the information. In addition, an individual may exhibit anticipatory defense behavior by failing to provide requested knowledge, even if the relevant information is already widely known.

Reactionary defense, a passive form of defense, refers to the act of taking reactionary measures after personal knowledge is used or stolen by another person (Brown et al, 2005). This may involve, for example, re-establishing territorial ownership in response to the infringement and expressing disapproval of the territorial invasion, through either a face-to-face confrontation with the invader or taking the case to a superior. While reactionary defense protects individual ownership, it can also increase know- ledge withholding. If an organizational member is worried about invading another person's territory, or fears the strong reactionary defense with which an opponent may respond to an

infringement, he or she may intentionally hide knowledge and sacrifice the opportunity to help develop the other person's idea.

DISCUSSION

The knowledge sharing process involves a knowledge requestor, a knowledge provider, and a knowledge receiver. These three agents do not have fixed roles, but rather take turns depending on the time or the situation because, as knowledge becomes ever more specialized, it is impossible for a single person to know everything (Kang, 2016). In this sense, today's knowledge requestor may become a knowledge provider tomorrow. Thus, researchers must investigate the perspectives of all three groups to fully understand know- ledge sharing within an organization.

Due to the role switching of knowledge delivery agents within an organization, past interactions may lead to retribution according to the reciprocity norm (Gouldner, 1960). Individuals who requested knowledge but were rejected in the past may take revenge in the future on the person who refused them by failing to provide requested knowledge or by giving them unrelated information.

On the other hand, knowledge receivers may discriminate against individuals that are less professional, are of a lower rank, or differ in their employment status when accepting knowledge. For example, knowledge delivered by a new or non-regular worker may be neglected or ignored by senior regular workers.

Knowledge requestors are generally also knowledge receivers, but this is not always the case. For example, if a team manager orders an employee to deliver information to another worker, the requestor and the receiver of the knowledge are two separate individuals. To lessen the dependence of the organization on individuals, a company might encourage employees to enter their knowledge into a corporate knowledge management system. Employees, however, may want to avoid such input and instead withhold their knowledge, perceiving the corporate knowledge management system as an institutional device that shifts the balance of knowledge power towards the company or its representative (e.g., a manager) and diminishes employee uniqueness and technical superiority (Gray, 2001).

THEORETICAL CONTRIBUTIONS AND PRACTICAL IMPLICATIONS

This study reviewed the intentions and behavior of organizational members when withholding knowledge, an act that disrupts the diffusion of innovation within an organization. It has two theoretical contributions. First, this study contributes to knowledge-related theories by utilizing the two-factor theory, a motivational theory in business that distinguishes satisfaction from dissatisfaction, to explain the difference between knowledge sharing and knowledge withholding. Second, this study had shown that the primary focus of past research has been on knowledge sharing, a bias that has led to knowledge withholding being relatively unexplored as a research topic. In a sense, this study has also summarized the territorial behaviors associated with knowledge withholding in order to suggest areas for future research in this issue.

The major practical implication of this study is that it explains why knowledge sharing between organizational members has fallen short of expectations despite a great deal of effort by a number of companies. As long as organizational members, the agents of knowledge possession and delivery, intend to withhold information, measures to promote knowledge sharing will be unsuccessful. Thus, measures to reduce the intention to withhold knowledge must be implemented in conjunction with measures to boost knowledge sharing.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although knowledge can be shared or withheld on both an individual (i.e., between colleagues) and an organizational (i.e., between companies) level, this study considered only knowledge withholding between organizational members. Thus, follow-up studies should adopt a broader scope, investigating knowledge withholding between organizations, in addition to between individuals and organizations. Future studies need to expand the research scope from individual level to group or organization levels such as knowledge sharing climate (e.g. Radaelli et al, 2011).

Second, although the knowledge delivery process involves three different agents – requestor,

provider, and receiver – this study focused only on the knowledge provider, considered to be the most important role in knowledge delivery. Researchers will be able to obtain a more comprehensive and balanced understanding of knowledge withholding, as well as offer more practical implications, if they investigate the perspectives of these three agents.

Third, the complexity of knowledge itself and the intention of organizational members to withhold knowledge can be offered as an explanation for unsuccessful knowledge delivery (Hansen, 1999). If certain knowledge is complex, organizational members may find it difficult to deliver the information even if they are inclined to do so. On the other hand, even if the knowledge is simple in nature, it will not be delivered to other organizational members if the provider has the intention to withhold it. These situations may occur independently or affect one another. As this study did not consider the effect of knowledge complexity on knowledge withholding, it is important for future studies to investigate this issue.

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