Knowledge Sharing Attitude: An Empirical Test of Multicomponent model

Bassam Hasan
College of Business and Economics
Qatar University, P.O. Box 2713, Qatar
Phone (+974) 580-1583
bassamsh@qu.edu.qa

ABSTRACT

While knowledge sharing attitude represents a key factor affecting knowledge sharing behavior, the knowledge sharing attitude remains vaguely understood in the literature. Despite that attitude is a multicomponent concept, most past studies of knowledge sharing have focused on knowledge sharing attitude as a single-component construct. Thus, the structure of the knowledge sharing attitude, its underlying components and their effects on knowledge sharing need better understanding. Accordingly, this study aims to model and empirically test knowledge sharing attitude as a multidimensional construct with cognitive, affective, and behavioral elements.

The proposed research model suggests that the three dimensions of knowledge sharing attitude are positively correlated. Moreover, since the research model is to be tested in group project setting, the three dimensions of knowledge sharing attitude are hypothesized to be directly influenced by perceptions of group cohesion and self-efficacy for group work. The empirical results are expected to provide support for the research model and show significant correlations among the three dimensions of knowledge sharing attitude. Group cohesion is expected to demonstrate a positive impact on all attitudinal components. In contrast, social loafing is expected to demonstrate a negative impact on all three attitudinal dimensions of knowledge sharing attitude.

INTRODUCTION

In the present knowledge-driven and globally-connected markets, knowledge is regarded as a key asset for advancing and maintaining organizational competitiveness [2,10]. Knowledge
is related to organizational ability to respond to customer needs, create solutions to emerging
problems, improve decision-making, and increase employee satisfaction [30]. Although
organizations are making substantial investments in knowledge management systems to promote
and support the creation, transfer, and utilization of knowledge [1], such investments in
technology are not achieving substantial improvements in knowledge sharing behavior [22]. The
success of knowledge management systems and achievement of benefits associated with
knowledge have been linked to the extent to which knowledge is shared and disseminated among
individuals in an organization [31,36,51]. As a result, there has been a shift in KS literature from
being techno-centric to being people-oriented and socially-driven [45].

Knowledge sharing (KS) depends on individuals’ motivation and willingness to share
their knowledge with others [8,12,49]. Much research has attempted to examine factors that may
boost or impede KS among individuals [7, 8, 10, 26, 33, 40]. From the host of factors of
determinants of KS behavior, KS attitude has been positively associated with increased KS
behavior [7, 8, 10, 32, 33]. The ability of firms to successfully promote KS culture depends on
changing employees’ attitudes and behaviors to make them more willingly and consistently share
their knowledge [36]. Thus, better understanding of KS attitude is vital for efforts to nurture and
maintain environments that are conducive to KS behavior [52].

Despite the critical role that attitude plays in KS behavior, the pattern of reported findings
has been mixed and inconsistent. For instance, whilst intrinsic (e.g. enjoyment) and extrinsic
(e.g. monetary) rewards are posited to motivate individuals to share their knowledge and enhance
their KS attitudes [5], rewards demonstrated a negative influence on KS attitude in some cases
[7, 8] and positive relationship in others [30]. Likewise, KS attitude was found to be the strongest
predictor of KS behavior [37] whereas other studies reported that KS attitude was the second
strongest factor, after subjective norms, to affect KS behavior [47].

The aforementioned contradictory findings highlight the complex role that attitude plays
in KS environments [32]. Despite that attitude is conceptualized as a multidimensional construct
with affective, cognitive, and behavioral elements, the distinction among these dimensions in KS
attitude was largely overlooked in past studies. On the contrary, despite recommendations that all
underlying dimensions of attitude should be considered simultaneously in order to achieve a
better prediction of behavior [3,20], KS attitude has been predominantly used as a single-dimension or a broad construct without explicit links to its core dimensions. This limited conceptualization of attitude may help explain the inconsistent relationships concerning KS attitude.

This study aims to fill a significant void in the current KS literature and provide better understanding of KS attitude. Based on theoretical and empirical attitude literature, KS attitude is recognized as a tripartite concept with cognitive, affective, and behavioral dimensions and empirically tests the three dimensions of KS attitude in an information systems development group project setting. To further validate the multidimensional KS attitude model, this study empirically examines the impact of group cohesion and self-efficacy for group work on the three KS attitudinal dimensions.

**KNOWLEDGE SHARING**

Although the literature is rife with definitions of the concept of knowledge, knowledge can be better defined by contrasting it with similar concepts such as data and information. Blair [6] defines data as facts and figures such as numbers, words, figures, images, and sounds that are meaningful in a very limited way. In contrast, information refers to data that have been organized and processed in some way for a particular objective. Knowledge refers to contextualized information that has been used and interpreted to produce certain outcomes in a certain context. Thus, the concept of knowledge is far richer and broader than the concepts of data and information [12].

Knowledge sharing (KS) refers to the process of exchanging relevant information, ideas, suggestions, and experiences among individuals [5]. At the individual level, KS refers to talking to colleagues to help them get something done better, more quickly, or more efficiently [36]. However, KS is not an intuitive behavior that people perform instinctively or voluntarily. Rather, KS involves an extra-role behavior and individuals need to be convinced, encouraged, and motivated to share their knowledge [33].
Factors affecting individuals’ motivation to share knowledge have attracted considerable research attention. Such factors include monetary and non-monetary rewards [5,7,8], culture [48], and knowledge management technologies [1,52]. As noted earlier, KS attitude has emerged as a pivotal antecedent to KS behavior [10,32,33,47,49,52]. Since changing people’s beliefs and attitudes about KS represents a great obstacle to successful KS processes [36], better understanding of the composition and structure of KS attitude is essential to understanding its antecedents and offers valuable practical implications for establishing and sustaining an environment that is conducive to KS practices.

RESEARCH MODEL

---

Insert Table 1 about here
---

The proposed research model guiding this study is presented in Figure 1. Unlike most past studies which used attitude as a one-dimension construct without considering its underlying elements, this study recognizes KS attitude as a multidimensional concept and empirically examines its three dimensions. In addition, the research model also suggests that perceptions of group cohesion and self-efficacy for group work will have positive effects on the cognitive, affective, and behavioral dimensions of KS attitude. Finally, the research model suggests that perceptions of group cohesion will have a positive effect on self-efficacy for group work. The research variables and their relationships are discussed next followed by the relevant hypotheses.

Knowledge Sharing Attitude

Attitude is a learned predisposition to respond positively or negatively to an object or stimuli [20]. KS attitude, one’s propensity to respond favorably or unfavorably to KS stimulus, has been integrated into various research models pertaining to KS behavior [7,32,37,45,47,49].
As noted earlier, findings related to the relationship between KS attitude and KS behavior have been mixed [10,51]. For instance, Bock et al. [8] found a negative relationship between rewards and KS attitude whereas rewards demonstrated a non-significant relationship with KS attitude in other studies [33,37]. Yet, Kim and Lee [30] found that rewards had the strongest impact on KS among employees.

Attitude is a complex construct that includes cognitive, affective, and behavioral dimensions [3,20]. The cognitive dimension of attitude refers to awareness about an object or behavior, e.g. knowing or understanding the importance of KS. The affective dimension refers to positive or negative feelings about the object or stimulus. Lastly, the behavioral dimension pertains to the behavioral intention, covert, or overt actions toward the object. However, most studies focused on cognitive attitude and neglected other aspects of attitude such as affection [21]. With respect to KS attitude, most studies have used broad measures of KS attitude which focused primarily on the affective aspect of attitude. Such mixed results concerning KS attitude may be linked to the insufficient conceptualization attitude.

Differentiating among dimensions of attitude enhances understanding of the relationship between attitude and behavior. First, the distinction among the dimensions of attitude is more closely aligned with attitude theory which presents attitude as a multidimensional concept [3,9,20]. Second, a single-dimension, broad attitude may be considered as a trait-oriented belief which may be difficult to change or manipulate, whereas the attitudinal dimensions are considered state-oriented beliefs that are susceptible to manipulation and change [39]. For example, affective and cognitive attitudes may be enhanced by persuasive appeals that are affective or cognitive in nature [15]. Finally, multidimensional attitude offers a much better explanation of behavior than the one-dimension attitude model [3,9].

Empirical studies corroborate the value of distinguishing among the dimensions of attitude. A research model of technology acceptance that excluded attitude explained 31% of the variance in systems acceptance, but when cognitive and affective attitudes were introduced, the explained variance increased to about 46% [21]. Likewise, affective and cognitive attitudes predicted information systems acceptance better than did general attitude [53]. In the context of KS, it is recommended that attitudinal elements should be considered in studying KS behavior.
Based on suggestions that complete description of attitude requires assessing of all three dimensions of attitude [3,9,20], the present study recognizes KS attitude as a multidimensional construct with interrelated cognitive, affective, and behavior dimensions. Thus, the following hypothesis is suggested:

\[ H1: \text{Cognitive, affective, and behavioral dimensions of KS attitude are significantly correlated.} \]

**Group Cohesion**

Group cohesion refers to the extent to which members of a group feel a sense of affection and belonging to the group [14]. Group cohesion has been shown to have significant effects on group performance in an idea generation tasks [29] and group’s cooperation, communication, planning, quality of work, quantity of work, and overall job performance [35]. Group cohesion is a key ingredient group performance and effectiveness [13]. In information systems settings, group cohesion demonstrated a stronger impact on task participation than the communication media type, audio conferencing vs. desktop video conferencing [54]. Similarly, group cohesion demonstrated significant effects on individual and teamwork performance during IS development [53].

Because a more cohesive group is better able to coordinate the efforts of its members and ensure their compliance with group norms [25] and members belonging to more cohesive groups are more willing to help one another and avoid conflict and political infighting [29], group cohesion improves participation among group members, resulting in more effective groups [54]. Likewise, greater group cohesion increases group interaction and activates members’ concerns for group outcomes [29]. Other researchers have recommended investigating group cohesion as a factor affecting group performance and knowledge sharing [41]. Hence, the following hypotheses are suggested:

\[ H2: \text{Group cohesion will have positive effect on cognitive KS attitude.} \]
\[ H3: \text{Group cohesion will have positive effect on affective KS attitude.} \]
\[ H4: \text{Group cohesion will have positive effect on behavioral KS attitude.} \]
Lent, Schmidt, and Schmidt [34] found that group cohesion had significant effects on self-efficacy at the individual and group levels. Group cohesion is likely to increase confidence and participation among group members, resulting in more capable and successful groups [54]. Researchers suggest that individuals consider the support and assistance available to them in their group when they develop their self-efficacy beliefs [18]. Thus, group cohesion is expected to have a direct impact on self-efficacy for group work as the following hypothesis suggests:

\[ H5: \text{Group cohesion will have positive effect on self-efficacy for group work.} \]

**Self-Efficacy for Group Work**

Self-efficacy refers to people’s confidence in their abilities to organize and execute needed skills in order to perform a target behavior successfully [4]. Self-efficacy is not concerned with the actual skills that people have; rather it pertains to what people believe they are capable of doing with whatever skills they have. According to self-efficacy theory, individuals who have high self-efficacy beliefs, i.e. strong confidence in their capabilities and skills, set higher performance goals for themselves, select challenging tasks, exert more effort to perform successfully, and persist longer to surmount arising difficulties in the course of performing their chosen behavior.

Based on the assertion that self-efficacy is a malleable concept that can be extended to various behavioral domains [4], self-efficacy has been examined as an antecedent to diverse group behaviors and outcomes. Lin [36] found that knowledge self-efficacy was positively associated with KS attitude and behavioral intention and suggested that self-efficacy be included in additional KS research models. Self-efficacy demonstrated significant effects on group success [23].

The concept of self-efficacy was successfully extended to group work [17]. Self-efficacy for group work refers to an individual’s perceptions of his/her capabilities and skills to work in a group successfully and their empirical results demonstrated a significant correlation between
Self-efficacy serves as a valid framework for understanding KS behavior [11]. Since KS behavior requires individuals’ efforts to transfer knowledge to others within the organization [51], individuals who harbor high self-efficacy beliefs are more assured of their abilities to share knowledge and are more likely to engage in knowledge sharing [10]. Moreover, self-efficacy was successfully used to predict KS behavior in several studies [18,38]. Thus, the following hypotheses are presented:

\textit{H6: Self-efficacy for group work will have positive effect on cognitive KS attitude.}

\textit{H7: Self-efficacy for group work will have positive effect on affective KS attitude.}

\textit{H8: Self-efficacy for group work will have positive effect on behavioral KS attitude.}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{research_model.png}
\caption{Research model}
\end{figure}

\textit{References furnished upon request.}