



*The impact of social capital on knowledge sharing*

*The case study of CRBt, Constantine, Algeria*

*Bachir Hasnaoui <sup>(1)</sup>*

*Bensaad Aicha <sup>(2)</sup>*

*E-mails: hasnaoui.bachir@cu-tipaza.dz*

*E-mails: a.bensaad@univ-djelfa.dz*

*Ph.D. Candidate, Lab for*

*Associate professor, Lab for*

*Entrepreneurship and tourism*

*MAQEMADD*

*development*

*University of Djelfa, Algeria*

*University center of Tipaza, Algeria*

*Received:28/01/2024*

*Accepted:24/02/2024*

**Abstract:**

This study used a quantitative analysis to investigate the impact of social capital (SC) on knowledge sharing (KS) behavior. The research was conducted with a convenience sample, and data were collected through a self- survey questionnaire distributed to a sample of 84 employees working at CRBt, Constantine, in Algeria. Reliability test was assessed by ( $\alpha = 0.888$ ). Collected data were analyzed with SPSS, and linear regressions analyses were used to test the hypotheses. Results revealed that social capital is moderately correlated with knowledge sharing. Hence, the findings showed that in general, the level of social capital in CRBt is considered to be moderately effective for enhancing knowledge sharing process. The main hypothesis

of the empirical study was confirmed and supported, which predicted a significant relationship between SC and KS ( $r = 0.540$ , significant at the 0.001 level). In addition, the three sub-hypotheses predicted significant relationships between knowledge sharing and the dimensions of social capital. Therefore, Implications of the research and recommendations for further research have been reflected upon.

Keywords: Social capital, Knowledge, Knowledge sharing, Knowledge management, CRBt.

JEL Classification Codes : J24, D83

## 1. Introduction

Drucker (2002) argued that, “the next society will be the knowledge society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce”.

In today's dynamic and complex global competition, knowledge is a highly valued commodity for organizations to achieve sustainability and success. Nonaka et al. (2000) consider knowledge as one of the most crucial resources of organizations to achieve competitive advantage, and organizations intensify their innovation through integrating knowledge. Knowledge sharing (KS) indicates the process of exchanging knowledge between employees (Chow & Chan, 2008).

Therefore, modern organizations make great efforts and adopt multiple strategies to intensify and facilitate the sharing of knowledge among employees, to improve individual's creativity and innovation, in order to lead organizations to a sustainable competitive advantage. Moreover, knowledge can be exchanged through information and experience transfer or through interactions among members within a community, thereby facilitating the accumulation of knowledge (Lin et al., 2009).

Social capital (SC) is a new concept playing much more important role compared to other forms of capital (physical, personal and financial) in organizations and society (Prusak and Cohen, 2001). Further, Nahapiet and Ghoshal (1998) pointed out that SC

is involved in the creation of intellectual capital in organizations. Prusak & Cohen (2001, p. 4) argued that SC consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible. Nahapiet and Ghoshal (1998) suggest that establishing social relationships can enhance social interactions among network members. These social interactions, besides sharing common goals, develop trusting relationships among network members. Moreover, Nahapiet & Ghoshal (1998) argue that SC comprises of three dimensions (structural, relational, and cognitive). Besides, Social interactions reflect the structural dimension of SC, whereas shared goals represent the cognitive dimension (Tsai and Ghoshal, (1998). In addition, these dimensions can affect KS through sharing a common ability that aids in the correct assessment and interpretation of other people's knowledge (Van den Hooff & Huysman, 2004).

Considering the scant research efforts on social capital and its possible relationship with knowledge sharing in the Algerian organizational context, this research intended to clarify the reality of adopting and fostering the concepts of SC and KS within CRBt center, in particular, and in Algerian organizations, in general.

### 1.1- Statement of the problem

Social capital and knowledge sharing have been significant topics of interest, and critical to organizations over the last decades. It has long been argued that social capital as a concept, represented by the value embedded in the social relationships of individuals and groups constitute strategic resources for organizations. Further, organizations perceive knowledge management and knowledge sharing in particular as a way to nurture learning and foster performance. However, while much is being written about these two concepts, there is still much to learn, particularly within the Algerian business environment. This study is conducted to discover the determinants

of social capital and how they influence the knowledge sharing behavior of employees working in CRBt, Constantine, Algeria.

### 1.2- Research questions

This paper attempted to explain how SC (by its dimensions: structural, relational, and cognitive) enhance and foster knowledge sharing in order to diffuse creativity and innovation for growth and economic prosperity. Therefore, the main research question of this study is as follows:

Does social capital impact knowledge sharing at CRBt, Constantine, Algeria?

This question can be divided into the following sub-questions:

RQ1. What is the impact of the relational social capital on knowledge sharing at CRBt, Constantine?

RQ2. What is the impact of the structural social capital on knowledge sharing at CRBt, Constantine?

RQ3. What is the impact of the cognitive social capital on knowledge sharing at CRBt, Constantine?

RQ4. What is the impact of the demographic variables on knowledge sharing at CRBt, Constantine?

### 1.3- Research hypotheses and conceptual model

In order to answer the research questions, the following hypotheses are formulated to be examined further.

Main hypothesis: There is a positive significant impact of social capital on knowledge sharing at CRBt, Constantine, Algeria.

This hypothesis can be divided into the following sub-hypotheses:

H1: There is a positive significant impact of the relational social capital on knowledge sharing at CRBt, Constantine.

H2: There is a positive significant impact of the structural social capital on knowledge sharing at CRBt, Constantine.

H3: There is a positive significant impact of the cognitive social capital on knowledge sharing at CRBt, Constantine.

H4: There is insignificant impact of the demographic variables on knowledge sharing at CRBt, Constantine.

Based on relevant literature to the study variables, the following conceptual research model was proposed as a platform for exploration of the impact of social capital on knowledge sharing. The research work hypotheses constructed in the way shown in (Figure 1). Each arrow of this figure represents one hypothesis.

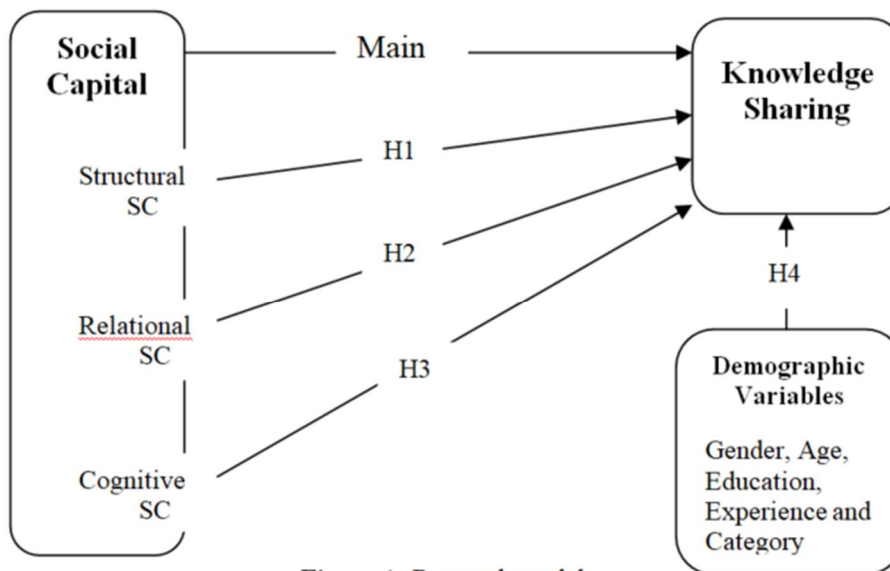


Figure 1: Research model

#### 1.4- Significance of the study

The implementation of this study is significant to people in the academia, decision makers, stakeholders, leaders, and employees for several reasons. First, very few studies have been conducted to date, that examine the relationship between SC and KS in organizations, in Algeria. Further, the present study makes managers, leaders and employees to be aware of the significant role that SC and KS play to raise productivity among employees; to improve organizational performance and achieve competitive advantage. Additionally, this research can be considered as a useful starting point for further studies into the exploration of SC and KS in the Algerian

organizational context, which will positively provide academics, decision makers and employees with valuable insights into the current state of SC and KS in this country.

## **2. Theoretical framework**

### **2.1. Social capital**

SC has become one of the most important topics that have attracted great interest from numerous scholars and authors in social sciences. SC has since gets increasingly applied in disciplines such as, sociology (e.g., Bourdieu, 1986; Coleman 1988; Nan Lin, 2001), economy (e.g., Fukuyama, 1995), business and management (e.g., Nahapiet and Ghoshal, 1998), political science (e.g., Putnam, 1993, 2000; Woolcock, 1998). This concept is generally associated with social networks as well as trust and norms of cooperation that enable interactions among actors.

#### **2.1.1- Evolution of social capital**

SC as a concept is quite old, and has been formulated fairly recently (Claridge, 2004). The modern development of the concept came from three key authors, Bourdieu, Coleman and Putnam with many other authors contributing to the current multidisciplinary theory. Hanifan (1916, p. 130), who argued that local school performance could be enhanced by “If an individual comes into contact with his neighbor, and they with other neighbors, there will be an accumulation of SC, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community” (Hanifan, 1916, as cited in Joe et al., 2003, p. 3).

After Hanifan the notion of SC disappeared for several decades but was reinvented in the 1950s by a team of Canadian urban sociologists (Seeley, Sim and Loosely, 1956), in the 1960s by an exchange theorist (Homans, 1961) and an urban scholar (Jacobs, 1961), and in the 1970s by an economist (Loury, 1977). None of these writers, interestingly, cited earlier work on the subject, but all used the same umbrella term to encapsulate the vitality and significance of community ties (Joe et al, 2003, p. 3).

The French scientific Pierre Bourdieu is considered the one who formulated the concept in its current form. According to Bourdieu (1986), capital is nothing but the force through which social differences take form, and he distinguishes between three kinds of capital: cultural, social and financial.

Bourdieu's work was carried forward by the American sociologist James Coleman, who has described the relationship between SC and human capital (Coleman, 1988). He also used three different kinds of capital: physical, human and social. As with Bourdieu, SC is something that develops between people, it is not an individual characteristic (Colman, 1988, cited in Joe et al, 2003, p. 3). The American political scientist Robert Putman was the first to open a broader debate about SC when he published some startling studies of the development in different regions in Italy. In the 1990s, the article "Bowling Alone: the Collapse and Revival of America Community" (Putnam, 1995) constitutes a turning point in the history of SC. The importance of this work does not lie only in its theoretical contribution to the subject, but in the extent that will take the use of the term subsequently (Sonia, 2009, p.22).

By the late 1990's the number of contributions in SC has developed based on the work of the contemporary authors discussed above. Elsayed (2011, p. 23) indicates that SC has been explored by numerous scholars in social science disciplines: sociology (Warde et al., 2005; Crow ,2006), psychology (Watson and Papamarcos, 2002; Tansley and Newell , 2007), political science (Inkeles, 2000; Tsai, 2007), economy (Berggren and Jordhal, 2006; Chou , 2006), business studies (Adler and Kwon, 2002; Inkpen and Tsang, 2005; Cooke, 2007), management (Hoffman et al., 2005; Tien-Shang and Sukoco, 2007) and marketing (Tsai, 2006).

#### 2.1.2- Definition of social capital

Bourdieu discussed the effects of SC, particularly on an individual level. Coleman explicitly developed the theory by placing it at group level. Putnam theorized social development in terms of SC (Catalin, 2019, p. 66).

SC has been used in various social science disciplines. However, there is a lack of consensus among scholars and researchers on the definition of this concept. For this reason there is no set and commonly agreed upon definition of SC and the particular definition adopted by a study will depend on the discipline and level of investigation (Robison, 2002).

The first systematic analysis of SC is proposed by Bourdieu (1986), where he describes SC as: actual or potential resources embedded in a durable social network of institutionalized relationships. He defines SC as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu, 1986, p. 248). Further, Bourdieu and Wacquant (1992, p. 119) suggested that SC is “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition”.

In Coleman’s approach, the social context is characterized by the organization of relationships between actors. Coleman confirms that SC is enclosed by the structure of social relations of individuals. He stated that “SC is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure” (Coleman, 1990, p. 302).

Putnam (1995, p. 67) claimed that SC refers to “Features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit”. It is seen as an active resource created from the social network and the associated norms of reciprocity. Putnam (2000, p. 19) stated that SC is “the connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them” (Putnam, 2000, As cited in Michele, 2016, p. 30).



Fukuyama (1999), argues that only certain shared norms and values should be regarded as SC, “the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them”. SC represents the ability of actors to gain benefits by virtue of membership in social networks. However, Lin (2001) discussed SC as an investment in social relations with expected returns. SC is typically defined as “resources embedded in a social structure that are accessed and/or mobilized in purposive actions”. Further, it is “resources embedded in one’s social networks, resources that can be accessed or mobilized through ties in the networks” (Lin, 2001, p.75).

A wide range of studies argued that organizations with enhanced levels of SC report better workplace dynamics including increased worker satisfaction, and overall, increased organizational outcomes. Adler and Kwon (2002, p. 10) clarify that Social capital “is in its internal structure – in the linkages among individuals or groups with the collectivity and, specifically, in those features that give the collectivity cohesiveness and thereby facilitate the pursuit of collective goals”.

Emphasizing the concept of intellectual capital, Nahapiet and Ghoshal (1998) proposed a comprehensive model of SC that could be adopted by organizations. They defined SC as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (p. 243). The theory of Nahapiet and Ghoshal (1998), explaining the superiority of the firm over the market, as a model of value creation, was able to integrate these facets of SC at the level of three dimensions, namely the structural dimension, relational and cognitive, and to analyze the contribution of these different dimensions to promoting the exchange and combination of knowledge between individuals and consequently the renewal of intellectual capital.

### 2.1.3- Dimensions of social capital

SC is often discussed in different contexts and at different levels of analysis. Some

authors treat SC as a private good, some as a public good, and others as having both private and public good characteristics (Alguezau & Filieri, 2010). In the traditional literature, SC has been understood as a unidimensional concept, but recent researchers have adopted a multidimensional perspective of SC (Nahapiet and Ghoshal, 1998). Numerous scholars and researchers agreed that there are three dimensions of SC to be considered in the context of organizations. Despite extremely diverse views, there has been a coalescing of agreement around these three components with most definitions including some form of all three (Claridge, 2020). Respect to the multidimensional viewpoint, SC encompasses three main integrated dimensions; structural, cognitive and relational.

**Table 1:** Summary of recent studies of SC (expressing dimensions)

Author (s)	Dimensions		
	Relation	Structura	Cognitiv
Nahapiet and Ghoshal (1998)	√	√	√
Tsai and Ghoshal (1998)	√	√	√
Leana and van Buren (1999)	√	√	
Chua (2002)	√	√	√
Requena (2003)	√	√	
Inkpen and Tsang (2005)	√	√	√
Yang and Farn (2009)	√		√
Villena et al.(2010)	√	√	√
Andrews (2010)	√	√	√
Kim et al. (2013)	√	√	√

Respect to Table 2.1, most of SC studies considers that multidimensional SC covers three dimensions (relational, structural and cognitive).

#### 2.1.3.1- Relational social capital (RSC)

The relational dimension of SC is referring to the connections and relations that individuals make through mutual interactions. In fact, this aspect considers the

effective relationship among colleagues who love each other, trust in each other, and take identity together (Chang & Chuang, 2011). Further, trust is needed in order to share what you know. This dimension influences access to other parties in the structure; it underlines the expected value through exchange, and the motivation of parties to engage in knowledge creation.

Therefore, this dimension focuses on personal relationships which develop through a history of interaction between individuals (Inkpen and Tsang 2005). According to Nahapiet and Ghoshal (1998), people satisfy their social motives (e.g. sociability, approval, and prestige) through personal interaction. In terms of knowledge exchange, the willingness of individuals to share knowledge is influenced by the level of trust between two parties (Inkpen and Tsang 2005).

#### 2.1.3.2- Structural social capital (SSC)

SSC Refers to social interactions among actors, who can access valuable resources through the positions they possess in a social structure. Nahapiet & Ghoshal define the structural dimension of SC as relational patterns between the members of a group or social unit that is consisted of network linkage, the elements (ingredients) of network and network stability (Nahapiet & Ghoshal, 25: 1998). It includes network connections, network configuration, and adaptability of the networks among people. Generally, this aspect investigates an area in which people in the organization get connected together, the relationship patterns among the personnel are described, and the profitability of such relationships is studied (Bolino et al. 2002). The structure is essential channel for information sharing and development and use of SC in an organization. This dimension is characterized by network ties and network configuration; the presence of network ties between actors and network configuration are the most important facets of this dimension (Nahapiet & Ghoshal, 1998). Structural connections between organizational members can rely on the mediation role of manager that also connects the company with external parties (Burt, 1997).

### 2.1.3.3- Cognitive social capital (CSC)

The cognitive dimension refers to how actors deal with information; it is operationalized in terms of sharing: norms, narratives and language, common goals and perceptions that have been accepted and remained among network members. This dimension is created by mutual understanding among the staff through language, and common senses and interpretations. The most important aspects of this dimension are that language, codes and common narrations develop and there will be a time that the members of the network would have common objectives (Li et al. 2014). In addition, the cognitive (or content) dimension is the foundation for SC as well as a key mechanism in generating further organizational goals like intellectual capital.

This research applies cognitive dimension in order to identify resources which provide shared representations, interpretations, and systems of meaning in groups, including shared language and narratives (Nahapiet and Ghoshal 1998). Inkpen and Tsang (2005) suggest that cognitive dimension has two key facets: shared goals and shared culture. This dimension also refers to the concept of a shared vision from Tsai and Ghoshal (1998) as collective goals and aspirations which inform how people should interact.

## 2.2- Knowledge sharing (KS)

Knowledge sharing is a crucial process of knowledge management, due to the essential role of making knowledge available to those who need it. Hence, modern organizations strive to facilitate knowledge sharing among individuals, who are the critical source of organizational knowledge. There has been an immense concern in exploring the factors that facilitate or restrain individual's knowledge sharing in social networks.

### 2.2.1- Definition of knowledge sharing

Knowledge sharing has become a key concern to organizations, due to the crucial role playing in KM process. Despite the large number of studies conducted on KS at different levels and from multiple points of view. There is no widespread agreement on a definition of KS or a description of its core components and practices.

KS is defined as “a set of individual behaviors involving sharing one’s work-related knowledge and expertise with other members within one’s organization” (Yi, 2009). Knowledge sharing can be seen as "a process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge" (Kamasak and Bulutlar, 2010). Knowledge sharing has also been defined as "The dissemination of information and knowledge throughout the organization (Ling et al., 2009). Furthermore, knowledge sharing is "The process through which one unit is affected by the knowledge and expertise of another unit" (Friesl et al, 2011).

The terms ‘knowledge sharing’, ‘knowledge transfer’, ‘knowledge diffusion’ and ‘information transfer’ are often used interchangeably to depict knowledge dissemination among people within or across organizational boundaries (Yi 2009).

But Szulanski et al.(2004) believe that knowledge sharing differs from knowledge exchange and knowledge transfer; they argued that knowledge transfer describes the movement of knowledge between different units, divisions, or organizations while, knowledge sharing typically has been used to identify the knowledge movement between individuals. It is an activity of sharing experiences and individual information in an organization. It takes place as social interaction that involves the exchange of employee knowledge, experiences, and skills throughout an organization by some form of communication (Lin, 2007).

### **3. Methodology**

The current study is an empirical research; hence, the descriptive and analytical approaches are adopted to establish quantitative measurement and analysis. Consequently, and since the main objective of the current study is to measure the

impact of SC on KS behavior within the context of the studied organization; a quantitative method in the form of a questionnaire survey was adopted and found suitable for collecting and analyzing the data.

Organizational members are the focal element in the KS activity; for this reason, the role of the team or workgroup should also be considered but is measured as perceived by the individual responding to the survey. Therefore, this research is based on a single unit of analysis that is individuals working at the studied organization (CRBt, Constantine, Algeria).

The survey was conducted using a sample of employees under various organizational levels; this includes management executives, researchers, engineers, technical and administrative staff. Currently, the Center has approximately (300) employees. A simple random sampling was preferred, since it gives all respondents an equal chance of taking part in the research process. In total, a sample size of (110) subordinates was targeted. Table (4.8) in chapter four illustrates the sample characteristics distribution according to the demographic variables. A self-administered questionnaire was developed as a paper-based survey. Out of (110) distributed questionnaires, (86) were collected, of which (2) were invalid. Therefore, (84) questionnaires were valid for the study, with an overall response rate of (78.20%), which can be considered as a high rate.

### **3.1. Survey instrument development**

The survey questionnaire and measurement scale were developed on the basis of the literature review and the objectives of the study. For the purpose of the study, the data were collected through 38 items (questions). The questionnaire was made of three sections. The first section collected the demographic information about the respondents, the second and third sections collected the required information to evaluate the variables of interest in the study.

1. Section A: General information including age, gender, education level and years of

working experience and job category, were collected with closed-ended questions, through (5) factors.

2. Section B: This section measured SC through (21) items:

- Structural dimension measured through (7) items.
- Relational dimension measured through (7) items.
- Cognitive dimension measured through (7) items.

3. Section C: Contained the scales measuring KS through (12).

#### **4. Research Findings**

Table 2 reports the means, standard deviations, and correlations of all variables. Generally, the results showed significant correlations between dependent and independent variables.

##### **4.1- Correlation analysis**

In supporting the main aim of the empirical study, a correlation analysis was conducted to describe the strength and direction of the relationship between the study variables, social capital and knowledge sharing.

According to Cohen (1988), the correlational values for Pearson approximately equal to  $r = \pm 0.10$  are considered weak;  $r = \pm 0.30$  are considered moderate; and  $r = \pm 0.50$  are considered strong. Weinberg and Abramowitz (2002) confirmed the dispensation and wide usage of this scale as well as its appliance for behavior science. Therefore, our study adopted this classification for correlation analysis.

The results presented in Table 2 indicate the presence of a strong positive relationship between the overall social capital and knowledge sharing with a score of ( $r = 0.527$ ). The Pearson's ( $r$ ) coefficients for RSC (0.384), CSC ( $r = 0.451$ ) and SSC ( $r = 0.374$ ), indicating moderate positive relationships. In addition, all correlations were statistically significant at ( $p < .001$ ).

**Table 2:** Means, Standard Deviations, and Correlations of KS and SC

	Mean	SD	KS	RSC	SSC	CSC	SC
Knowledge sharing	3.47	0.62	1				
Relational SC	3.73	0.64	0.384**	1			
Structural SC	3.51	0.59	0.451**	0.434**	1		
Cognitive SC	3.61	0.61	0.374**	0.449**	0.234*	1	
Social capital	3.62	0.47	0.527**	0.833**	0.719**	0.736**	1

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

Source: based on the SPSS output, 2020

As reported in Table 3, very Low correlations were found between knowledge sharing and the demographic variables. All the Pearson's (r) coefficients were less than (0.20), which can be considered negligible. In addition, it is remarkable that the p-value (Sig.) for each variable was greater than the level of significance ( $\alpha = 0.05$ ). Hence, it can be argued that there is insignificant relationship between knowledge sharing and the demographic variables.

*Therefore, this result provides support for hypothesis H4.*

**Table 3:** Pearson's (r) – correlations of knowledge sharing and demographic variables

	KS	Gender	Age	Educ.	Exp.	Cat.
Knowledge sharing	1					
Gender	-0.080	1				
Age	0.146	-0.130	1			
Education	-0.020	0.183	-0.162	1		
Experience	0.031	-0.216*	0.601**	-0.251*	1	
Job category	0.039	-0.012	0.020	0.517**	0.058	1

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

Source: based on the SPSS output, 2020



## 4.2- Regression analysis

Regression analysis is a statistical test for estimation of any relation among one or several independent variables with one dependent variable. The multiple regression analysis was conducted in support of the previously conducted correlation analysis, as well as to help us predict the accuracy of the study hypotheses. Social capital dimensions were used as the independent variables (predictors), whereas the knowledge sharing was the dependent variable (predicted).

Respect to Table 4, the independent variable of SC had a regression coefficient of (0.292). This relationship was positive and statistically significant at the .001 level. Thus, this relationship suggests that when the level of the overall social capital goes up by one standard deviation, the knowledge sharing increases by (0.292) while the remaining 71% could be due to the effect of other variables not captured in the model. Even though, the regression value of (0.292) is not a large weight, it is still a relatively regression weight. In addition, F value of (10.983) which is greater than the F tabulated) is statistically significant at ( $p < .001$ ). Thus, these results indicate that social capital as a whole has a positive impact on knowledge sharing.

**Table 4:** Impact of social capital on knowledge sharing (Multiple linear regression)

		Dependent - KS						
		r	R <sup>2</sup>	F Value	F - Sig.	B	t	t - Sig.
Independent SC	SC	0.540	0.292	10.983	0.000	0.876	1.904	0.060
	Relational SC	0.384				0.127	1.155	0.052
	Structural SC	0.451				0.357	3.239	0.002
	Cognitive SC	0.374				0.241	2.242	0.028

Tabulated  $F = 9.28$

Source: based on the SPSS output, 2020.

The results in Table 4 indicate a significant relationship between the Relational SC and knowledge sharing, where the ( $R^2$ ) value was of (0.292), ( $F = 10.983$  which is greater than tabulated  $F$ , and significant at  $p < 0.001$ ). Besides, the value of ( $B = 0.127$ )

and ( $t = 1.155$ ) indicating that the Relational SC has a significant positive impact on KS. Hence, this relationship suggests that a one unit increase in the Relational SC results in a 0.127 increase in knowledge sharing.

Therefore, Hypothesis H1 was found to be confirmed/ supported.

Based on the results in the same table, the values of ( $B = 0.357$ ;  $t = 3.239$ ;  $p < .001$ ) indicate that the Structural SC has a significant positive impact on KS. Hence, the results suggest that a unit increase in the level of SSC would result an increase in the level of knowledge sharing by (0.357).

Therefore, this result confirms and supports hypothesis H2.

Further, as shown in Table 4, the Cognitive SC is positively associated with knowledge sharing. The values of ( $B = 0.241$ ;  $t = 2.242$ ;  $p < .001$ ) indicate that the CSC has a significant positive impact on knowledge sharing. The results suggest that for every increase in the CSC, knowledge sharing will increase by 0.241. Therefore, hypothesis H3 was confirmed and accepted.

Figure 2 illustrates the relationship between the study variables, by indicating the path coefficients and the level of significance.

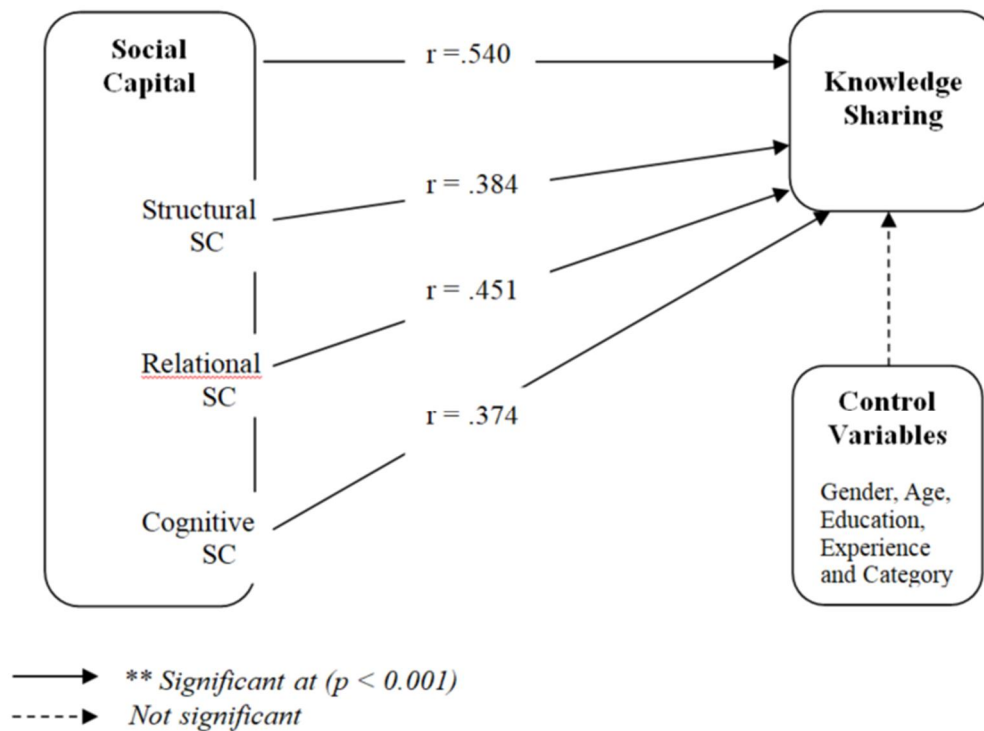


Figure 2: Research model with path coefficients and level of significance.

Based on the results shown in tables – 2, 3 and 4, it can be concluded that social capital dimensions have positive impact on knowledge sharing behavior at CRBt, Constantine, Algeria. Thus, the all previously conducted hypotheses are supported and confirmed.

**Table 5:** Summary of hypothesis testing results

Hypotheses	Test result
<b>H1:</b> There is a positive significant impact of the relational social capital on knowledge sharing at	Confirmed / Supported
<b>H2:</b> There is a positive significant impact of the structural social capital on knowledge sharing at	Confirmed / Supported
<b>H3:</b> There is a positive significant impact of the cognitive social capital on knowledge sharing at	Confirmed / Supported
<b>H4:</b> There is <u>insignificant</u> impact of the demographic variables on knowledge sharing at CRBt,	Confirmed / Supported
<b>Main hypothesis:</b> There is a positive significant impact of SC on KS at CRBt, Constantine.	Confirmed / Supported

## 5. Results Discussion

The objective of this study was to examine the impact of social capital on knowledge sharing. In this section the answer to the study questions is formulated by discussing and interpreting the results in the previous tables

### 5.1– Overall social capital and knowledge sharing – To answer the main RQ.

Overall, the results of this study supported the proposed model, which was deeply rooted in the theoretical foundation of SC theory and knowledge sharing. The statistical results showed a positive impact of SC on KS within CRBt center. In previous researches (Watson and Papamarcos, 2002; Wasko and Faraj, 2005; Chiu et al, 2006; Presutti et al, 2007; Chow and Chan, 2008; He et al, 2009; Villena et al, 2010; Mohammad and Narjes, 2013; Mansooreh, 2016); the overall SC was observed positively related to knowledge sharing. Likewise, the empirical research in this study showed that the positive relationship between these variables exists. According to Nahapiet and Ghosal (1998) SC is linked with intellectual capital, which refers to the knowledge and knowing capability of organizations.

### 5.2– Relational social capital and knowledge sharing – To answer the RQ1.

The results of the study demonstrate that the relationship between the RSC and KS is significantly positive. This finding indicates that employees (at CRBt) with higher levels of RSC perceive higher levels of knowledge sharing. The results are consistent with previous studies in the literature. As mentioned in the literature review section, determinants of RSC, including trust, norms, and personal interaction may influence KS in various ways. Trust is a critical factor of RSC. The higher the levels of trust in general, the more likely people are to cooperate and share their knowledge in particular (Nahapiet & Ghosal, 1998). Personal interaction is another important factor of RSC. When norms of personal interaction exist in a social structure, people are expected to engage more in knowledge sharing. In addition, according to Watson & Papamarcos (2002) reciprocity norms develop work environments in which trusting

relationships exist among workers because individuals who trust others are more likely to expect that others will reciprocate their efforts.

### **5.3– Structural social capital and knowledge sharing - To answer the RQ2.**

The empirical results in this study support H2, which predicted that the SSC is positively related to knowledge sharing. Hence, it can be concluded that a higher level of SSC is assumed to improve the process of sharing knowledge among employees. The findings of this study were in line with the findings of (Nahapiet and Ghosal, 1998; Adler and Kwon, 2002; Coff and Blyler, 2003; Alguezaui and Filieri, 2010), each somehow examined the relationship between SC and knowledge sharing. SC facilitates acquisition, integration, recombination and release of resources for firms (Coff and Blyler, 2003). More specifically the strength of ties and network's density - SSC- provide access to numerous information sources and improve the quality and relevance of the acquired knowledge (Adler and Kwon, 2002). In explaining the results of this study, it seems that SSC as one of the positive and influential predictors of successful KS process should be sufficiently considered. Therefore, it can be argued that the extent, to which the CRBt strengthens its social network with both its employees and managers, can create and develop a sustainable communication network, so that everyone in the organization can appreciate and contribute knowledge.

### **5.4– Cognitive social capital and knowledge sharing- To answer the RQ3.**

The results in this study support H3, which show that there is a statistical significant impact of the CSC on KS. These results are in line with research conducted by Tsai and Ghoshal (1998), which states that that social interaction plays an important role in setting common goals and values between the different agents of a network. Li et al, (2014) point out that the social interaction process can also generate new sets of visions based on common interest and mutual understanding. In brief, CSC will allow organizations to access key network knowledge through their CSC.

## 6. Limitations and further research

As in any research, there are some limitations that should be taken into consideration for future research. First of all, this study measured SC with only three of the proposed dimensions; measuring SC with other dimensions could also prove to be interesting. Further, and based on the quantitative observations and the research outcomes outlined earlier. Another limitation of this study relates to the fact that the population studied is limited to CRBt center, and the findings are based on self-reported data. Findings may be suggestive of tendencies that might apply to the larger population, but further investigation is required to achieve results that can be generalized more widely. The study used only quantitative research approach as prevalent in the overwhelming majority of the similar research; hence, using qualitative research might produce a more reliable result.

Despite the limitations mentioned, this research opens the doors for further opportunities in research, since a deep understanding of the strength and value of social capital within organizations can strengthen and enhance the process of sharing knowledge among individuals and groups. Accordingly, future research could attempt to develop our research model and test the relevance of additional organizational characteristics.

However, since the current research is considered as one of very few researches of empirical research focusing on the impact of SC on KS in the Algerian business context. This study found insignificant relationship between the demographic variables and knowledge sharing; hence, future studies may examine the relationship of these variables on KS through SC dimensions (as mediating factors). Further, Conducting this research in different organizations or in different contexts and industries will help determine the extent to which the newly developed model can be generalized to other settings as well.

## 7. Conclusion

In summary, many of previous researches have indicated that a business on-going success depends to a wide extend on the presence of KS behavior among employees. In this case understanding of employees' perception in terms of SC appears to be one of the key elements of enhancing and facilitating knowledge sharing. SC becomes a valuable mechanism for organizations to enhance knowledge sharing behavior. For that reason, it is suggested that organizations should intensify the components of SC (trust, networks, and norms ...) to create and develop social interaction among employees. The current study is considered to be initiative reflection aimed at providing a conceptual framework and guidelines for an investigation of cognitive related benefits of SC, which could in its turn, become a powerful tool for the empowering and enhancing of KS process.

Therefore, this research will contribute to knowledge of employees' perception on SC and its interrelation with knowledge sharing behavior. This topic will never lose its relevance since organizations no longer compete solely on the basis of financial capital strength but on proper harnessing of knowledge, as a pivotal element for achieving sustainable competitive advantage, in a rapid and intense competitive business world. Hence, we expect that this research will stimulate fruitful new empirical work generating deeper understanding of social capital and how it can strengthen and empower the process of sharing knowledge.

Author Bachir Hasnaoui , Bensaad Aicha	Title : <i>The impact of social capital on knowledge sharing</i> <i>The case study of CRBt, Constantine, Algeria</i>
---	---

## Bibliography

### 1. Books:

- Alguezaui, S. and Filieri, R. (2010), *Innovation across tech-firm's boundaries: a knowledge-based view* Cambridge University Press Cambridge
- Bourdieu, Pierre (1986), *The Forms of Capital*, Pp. 241-258 in J. Richardson (ed.) *Handbook of Theory and Research for the Sociology of Education*, New York:
- Bourdieu, Pierre and L. P. D. Wacquant (1992), *An Invitation to Reflexive sociology* Chicago University of Chicago Press
- Burt, R. S. (1997), *Structural holes: The social structure of competition*, Cambridge, Harvard University Press
- Cohen, J. (1988), *Statistical power analysis for the behavioral sciences* (2nd ed.), Hillsdale, NJ: Lawrence Erlbaum.
- Coleman, James (1990), *Foundations of Social Theory*. Cambridge, MA: Harvard University Press
- Lin, Nan (2001), *Social capital: A theory of social structure and action*, Cambridge, Cambridge University Press.
- Prusak L. & D. Cohen (2001), *In Good Company how social capital makes organization work*, Harvard Business School Press.
- Weinberg, S. L. and Abramowitz, S. K. (2002), *Data Analysis for the Behavioral Sciences Using SPSS*, New York: Cambridge University Press.

### 2. Theses:

- Claridge, T., 2004. *Social Capital and Natural Resource Management: An important role for social capital? Unpublished Thesis, University of Queensland*,
- Michele, T. (2016), *Organizational social capital and performance information*, (PhD thesis) Florida international university Miami Florida p. 30
- Sonia, T. R. (2009), *Essais en économie du capital social et développement*, (Thèse de doctorat), Université de Montréal, Montréal, p. 22.

### 3. Journal article:

- Adler, P. S. and Kwon, S. W. (2002), *Social capital: Prospects for a new concept*, *Academy of management review* vol 27(1) p. 9
- Bolino, M. C. and Turnley, W. H (2002), *Citizenship behavior and the creation of social capital in organizations*, *Academy of management Review*, vol. 17, p. 27
- Catalin, G. F. (2019), *Social Capital and Community Development*, *Social Research Reports* 2019 vol 11 Issue 1 p. 66
- Chang, Hsin and Chuang, Shuang-Shii (2011), *Social capital and individual motivations on knowledge sharing* *Information & Management*
- Chow, W.S. and Chan, L.S. (2008), *Social network, social trust and shared goals in organizational knowledge sharing* *Information & Management* vol 45 p. 65
- Inkpen, A. C. and Tsang, E. W. (2005), *Social capital, networks, and knowledge transfer* *Academy of Management Review* vol 30 p. 165



- Joe, W. and Paul K. (2003), Social Economics and Social Capital. *Academy of Management Review*, vol. 23(2), p. 89
- Kamasak, R. and Bulutlar, F. (2010), The influence of knowledge sharing on innovation. *Journal of European business review*, vol. 22(3), p. 306.
- Li, Y. and Sheu, C. (2014), Social capital, information sharing and performance Evidence from China, *International Journal of Operations & Production Management*, p. 11
- Lin, H. F. (2007), A stage model of knowledge management: an empirical investigation of process and effectiveness. *Journal of Information Science*
- Ling, T. N., San, L. Y. & Hock, N. T. (2009), Trust: Facilitator of Knowledge-Sharing Culture. *Journal of Communications of the IRIMA (CIRIMA)*, vol. 7
- Nahapiet, J. and Ghoshal, S. (1998), Social capital, intellectual capital, and the organizational advantage, *The Academy of Management Review*, vol. 23, p. 243-246
- Nonaka, I., Toyama, R. and Konno, N. (2000), SECI, Ba, and leadership: a unified model of dynamic knowledge creation. *Long Range Planning*, vol. 33, p. 34
- Putnam, R. D. (1995), *Bowling alone: America's declining social capital*. *Journal of democracy*, p. 65
- Robinson, D. (2002), Social Capital in Action. *Social Policy Journal*, New Zealand, p. 185
- Szulanski, G. (1996), Exploring internal stickiness: impediments to the transfer of best practices within the firm. *Strategic Management Journal*, vol. 17, p. 31
- Tsai, W. and Ghoshal, S. (1998), Social capital and value creation: the role of intrafirm networks. *Academy Management Journal*, vol. 41, p. 464
- Van den Hooff, B. and de Ridder, JA. (2004), Knowledge Sharing in Context: The Influence of Organizational Commitment, *Journal of Knowledge Management*, vol. 8, no. 6, pp. 116
- Yi, J. (2009), A Measure of Knowledge Sharing Behavior: Scale Development and Validation. *Knowledge Management Research*, vol. 7, p. 65
- Fukuyama, F. (1999), Social Capital and Civil Society, IMF Conference on Second Generation Reforms.
- Fukuyama, F. (2002), Social Capital and Development: The Coming Agenda, the SAIS Review, vol. 13, p. 66.

#### 4. Internet websites:

- Claridge, T. (2020), Individual Social Capital: viewed 15 July 2020, retrieved from: <https://www.socialcapitalresearch.com/individual-social-capital>