

The Role of Social Capital in Knowledge Sharing in Higher Education Institutes

Abdulqadir Diriye

Jubail University College, Saudi Arabia

diriyea@ucj.edu.sa

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Abstract: A majority of the activities performed in higher education institutions are routines that need to be learned, remembered and refined for improvement. These include academic and administrative tasks that are central to the proper functioning of the institution. In addition to this, as any business, higher education institutions need to compete and innovate at a time when their performances are measured in detail by their management, students, governments and other external bodies. Staff members in various roles often become familiar with certain routine tasks. Although an institution may rely on these members and others who master a particular activity whenever needed, there is no guarantee that staff members or even teams will stay with the institution. Therefore, it would be necessary to ensure that institutional knowledge does not become synonymous with individual staff members and, therefore, the knowledge is available only when these individuals are present and absent when they are away. This paper looks into how higher education institutions can enhance their knowledge sharing practices by cultivating social capital among its employees. It employs a set of semi-structured interviews to gauge the attitudes of employees of two institutions in Saudi Arabia. This is complemented by a literature survey looking into how social capital theory is adapted by earlier researchers in the area of knowledge sharing. The findings indicate that trust, social interactions, participation and rewards have strong influence in knowledge sharing.

Keywords: social capital, higher education, knowledge sharing, Saudi Arabia, socialization, trust, participation, rewards

1. Introduction

The purpose of this paper is to investigate the relationship between knowledge sharing in Higher Education Institutions (HEIs) and the social capital within these institutions. It adopts a case study approach and its data is collected from two governmental colleges in the eastern province of Saudi Arabia. The two colleges offer various degree programs and have staff members of diverse countries of origin, academic disciplines and religious backgrounds. They come under the same administrative umbrella and share some services and resources but are managed differently. The colleges will be identified as College A and College B in this paper.

The research does not aim to compare the two institutions therefore the data collected will not be identified separately.

Although previous literature elaborated on the relationship between knowledge sharing and social capital, the link of these two to the higher education has not attracted much attention from researchers. Therefore, this paper focuses primarily on two main questions: does strengthening the social capital in HEIs affect how employees share knowledge? And, is it possible to measure social capital in organizations? It adopts a qualitative approach and employs a set of semi-structured interview as its data gathering technique and the results are analysed using simple thematic analysis. Qualitative research best serves when studying cultural and social aspects of organizations (Myers 2013).

Organizations create knowledge by absorbing information from their working environment or from external sources and transforming it to knowledge. Whatever the source of knowledge, it needs to be stored, codified and applied to make it useful to the organization. In addition to that, it is necessary to make this knowledge available to the relevant users. It is here that the organization needs to have clear knowledge sharing policies that can be put into operation. Globalized organizations and those with geographically distributed teams and processes may further need to streamline their knowledge across their various locations.

Knowledge sharing can be described as the most central of all activities through which employees can contribute to knowledge application, innovation and, ultimately enable their organization to be more competitive in its field (Wang & Noe 2010). It would be relatively meaningless to an organization if every employee has to create, codify and store his/her knowledge for his/her future use. Similarly, if every team

managed their knowledge for the sole use of their own members, it would be insignificant for the overall success of the organization.

A vital prerequisite before any knowledge sharing activity can take place is the existence of a group of people with knowledge to share. Therefore, knowledge sharing is primarily a social activity. The theory of social capital emphasizes the importance of social networks as capital.

This research looks into the relationship between social capital and knowledge sharing in higher education institutions (HEIs).

2. Literature Review

Several studies have attempted to conceptualize social capital theory into measurable dimensions. Nahapiet and Ghoshal, (1998) suggest three clusters of social capital: the structural, relational and cognitive dimensions.

The structural refers to the properties or the patterns of the social network. It includes identifying who communicates to who and how, the easiness of joining a network, and the configuration of the network, (Narayan & Cassidy 2001). On the other hand, the relational dimension includes the type of relations members have developed through their history of interactions. Examples of these include the respect and friendship that develops among staff members through their use of a knowledge sharing network. The last cluster, the cognitive dimension, points to the resources that provide interpretations and meanings among members of a network like shared language and shared narratives.

Previous literature indicates that when members of a community facilitate knowledge sharing, their mutual aid creates new knowledge. This leads more members to engage in mutual aid. However, since the knowledge created by the mutual aid is available to all members, this gradually erodes the need for mutual aid (Araujo & Minetti 2011). Through the structural dimension of the social capital, which entails social interaction, members can share tacit knowledge. Individual or group interactions would enable members to engage in a conversation that leads to the less knowledgeable member gain knowledge and skills. During the first periods of the group formation, individuals may not know each other's potential and hence the level of 'trust' among members may be low. However, over time, frequent interaction among members will strengthen the social bonds among members and the relational dimension of social capital will develop and employees will be more willing to share or seek knowledge from other members that they deem trustworthy (Tsai and Ghoshal, 1998; Chang *et al.*, 2012). This prolonged interaction will also result in the development of trust, where actors behave trustworthy as the expectation of incentives and prospects for opportunism diminish, (Jong and Klein-Woolthuis, 2004). It also increases the norms of reciprocity, and the shared identity among members, (Filiari *et al.*, 2014).

The cognitive dimension indicates the existence of a shared cognition among members. This shared understanding will enable employees to exchange knowledge with relative ease. The cognitive social capital minimizes the potential for misunderstanding among members during knowledge sharing interactions (Hu & Randel 2014). Departments, teams or even individual employees of an organization possess knowledge that is necessary for their work. That same knowledge is also required by others who perform similar activities in the organization. When organizations encourage and facilitate bridging the gaps in the network structure, the privately held knowledge will become accessible to all, and hence, the overall organizational performance, value creation and its competitive prowess will improve. As members develop their social bonds, they voluntarily manage organizational knowledge with limited or no incentives or monitoring mechanisms. Social capital therefore replaces the formal contracts that are otherwise required to foster knowledge management (Hoffman *et al.* 2005).

In research focusing on European social capital, Oorschot and Arts, (2005) identify three measurable dimensions of social capital: networks, trust and norms. As these researchers were targeting 'societies' rather than business 'organizations', some of the terms they use as yardsticks for measuring social capital may not be applicable to organizations.

2.1 Measuring Social Capital

An apparent problem with social theories is the difficulty in devising a mechanism to measure them. This is more evident in the way researchers of the theory of social capital struggle to develop a stable list of measurable indicators for the theory (Enfield and Nathaniel, 2013). These theories include abstract concepts that are difficult to translate into operational measures, (Narayan & Cassidy 2001). However, several researches have tried to find a way to propose a measurable framework of constructs to social capital, (Grootaert, 2003; Gaag and Snijders, 2005; Siegler, 2015; Engbers, Thompson and Slaper, 2017). Table 1 below shows these proposed constructs.

Table 1: Social Capital Constructs

Researcher	Constructs
Siegler, 2015	Personal Relationships
	Social Network Support
	Civic Engagement
	Trust and Cooperative Norms
Narayan and Cassidy, 2001	Group Characteristics
	Generalized Norms
	Togetherness
	Everyday Sociability
	Neighborhood Connections
	Volunteerism
	Trust
Grootaert et al., 2003	Groups and Networks
	Trust and Solidarity
	Collective Action and Cooperation
	Information and Communication
	Social Cohesion and Inclusion
	Empowerment and Political Action
Engbers et al., 2017	Social trust;
	Formal membership and participation in groups
	Altruism
	Informal interaction among individuals
	Shared norms

The above elements can be grouped into three main items of social capital: **socialization** (personal relationships, social network support, group characteristics, togetherness, everyday sociability, neighborhood connections, groups and networks, social cohesions and inclusion, Informal interaction among individuals) **trust** (Trust and Cooperative Norms, trust, Trust and Solidarity, Social Trust) and **participation** (Civic Engagement, Volunteerism, Collective Action and Cooperation, Empowerment and Political Action, Formal membership and participation in groups) .

This research also adds two more elements in the measurement: the expectation of rewards (Flap and Boxman, 2001; Giudici, Guerini and Rossi-Lamastra, 2018) and the attitude to knowledge sharing (Esmaeilzadeh *et al.*, 2015; Tangaraja *et al.*, 2015).

2.2 Social Capital in Organizations

Organizations, including academic institutions, require its members to share knowledge with other members in the wider organization or within a close team. In such an environment, the theory posits that the members of a group will promote collective goals over individual interests. This assumes every individual understands that improving the overall group performance will also improve his/her individual status. Researchers like Ju, Chen and Ju, 2006; Lin, (2006) found that people are more likely to share their knowledge when knowledge sharing enhances their social network. According to Lesser (2000a), one of the drivers of the interest in social capital is the rise of knowledge-based organizations. He argued that as knowledge moves to replace the traditional production factors; land, labor and capital as the primary source of competitive advantage, organizations realize the importance of creating new knowledge, share the existing knowledge and apply the organizational knowledge. As such, strengthening social bonds within the members of staff becomes of paramount importance. The management style of the organization and the culture within the team may shape

how individual members of staff perceive their position in the group and how they react to other members' actions.

Furthermore, the literature indicates that one of the embedded values of social capital is that it facilitates the flow of information (Lin, 1999).

The theory of social capital attempts to explain how the relationships between the members of a group exerts influence in how they behave in organizations, including academic institutions.

Although academic environments are thought to be the hub where knowledge is created, aggregated, and shared, ensuring that the culture within the institution is conducive to knowledge seeking and sharing is vital. Moreover, setting effective knowledge sharing policy and procedures is also necessary for the smooth flow of institutional activities.

Social capital is also found to give researchers at academic institutions access to the resources they require for success (Angervall, Gustafsson and Silfver, 2018). Novice academics, therefore require to actively build 'academic capital' by joining networks to become familiar with the 'trade secrets' and start gaining symbolic or material capital (Maritz and Prinsloo, 2015). These networks allow academics to share knowledge and other valuable resources and it is possible for HEI management to tap into the various group connections and use them as a knowledge sharing vehicle.

2.3 Knowledge sharing

The routine work activities in higher education enable employees to extend their knowledge. In other words, they learn from their actions. Although such knowledge forms in the minds of employees (Nonaka, 1994), their interaction with their colleagues strengthens their knowledge and often transfers the knowledge from the personal domain to the organizational domain.

Nonaka proposed a model showing how different types of knowledge could be transferred from source to destination. The premise of this model is that knowledge is either explicit or tacit. Explicit knowledge is the knowledge that can be codified (Smith, 2001; Mathiassen, 2003), uttered and captured in drawings and writing (Nonaka and Krogh, 2009) documented and transmitted (Sajjad Jasimuddin, JH Klein, 2005), can be expressed directly in terms of rules, data or knowledge representations (Moss and Kubacki, 2007). On the other hand, tacit knowledge is defined as the knowledge that is unstructured, implicit, not self-evident and can not be expressed, difficult to transfer (Sharon Ryan and O'Connor, 2013), and attached to person's mind (Panahi, Watson and Partridge, 2013).

The four modes of transfer or conversion proposed by Nonaka are as follows: knowledge can be converted from tacit to another tacit through socialization. This is where the two individuals interact so that the less knowledgeable learns skills and experience from the more knowledgeable one. Coaching and mentoring are examples of the methods through which socialization can take place.

The second mode is when tacit knowledge is converted into explicit knowledge through externalization. This requires the individual that owns the tacit knowledge to articulate their views, ideas and mental images to make them understandable to others. When knowledge is transferred from manuals, documents and any explicit form to a new person, this is called internalization. This mode is where information technology is most helpful.

The last part of Nonaka's model of knowledge conversion is combination whereby explicit knowledge is converted into a different form of explicit knowledge by expanding or reconstructing it.

If knowledge is constructed meaning, what is it that is transferred from a person to person? Matthews and Shulman (2001) argue that the notion of transfer is more relevant to information than knowledge. If knowledge is constructed by the individual based on the information they receive, it would then be difficult to share knowledge, rather, what is transferred from individual to individual is actually the information and not the knowledge. It is, however, hard to differentiate between knowledge and information in the sharing context (Alavi and Leidner, 2001; Zins, 2007).

3. Methodology

This research employs qualitative data collection and analysis techniques. It attempts to study the higher education employees and their attitudes about knowledge sharing. As employees interpret their organizational environment to form their attitudes, qualitative research was thought to be the most relevant approach to study human behaviour (Jovanović, 2011; Hammarberg, Kirkman and de Lacey, 2016; Flick, 2018). Semi-structured interviews were used to collect data for this study. Interviews are defined as planned, structured conversation between a researcher and a participant(s). In general, this method may be used in both qualitative and quantitative researches and it is useful when the interviewer wants to gather data about the background, experience and attitudes of the interviewee/s or when searching for sensitive information (Oates, 2005).

The purpose of the interview was to investigate the views of managers regarding knowledge sharing and the organizational culture. Managers are the decision makers in the organization and are therefore, a principal factor in any knowledge sharing initiative. Moreover, it is found that there is a link between the culture in the organization and attitudes of managers (Wang and Noe, 2010; Tangaraja *et al.*, 2015). The interviewees were selected based on their job titles. The targeted managers were in a position to comment on the knowledge sharing activities of the teams they manage and how these activities are related to the culture within the team or with the general organizational culture. Table 2 shows the targeted job titles and their responsibilities.

Table 2: Job titles and their responsibilities

Job title	Role
Department Chairperson (5)	Chairs department meetings, assigns tasks to staff members, monitors teaching/learning activities, resolves conflicts, sets staff development targets.
Chairperson of the Quality Committee (1)	Chairs committee meetings, sets policies and procedures for all college activities, ensures all programs and courses meet the criteria set by accreditation bodies, seeks accreditation for programs, ensures all activities comply with internal policies and procedures, and reminds staff about the quality cycle deadlines.
Course Director (8)	Sets and reviews course descriptions, ensures that courses are delivered according to the course description, writes course reports. Reviews the course material.
Program Director (3)	Designs and reviews degree plans, writes annual program reports,

Although the participants were interviewed under their current job titles, many of them held various managerial positions during their time as employees of this organization. This gives them a broad background knowledge to bring to the interview as they see events from different perspectives.

3.1 The interview structure

The interview contained 12 questions focusing on trust, socialization, organizational participation, rewards and knowledge sharing activities. The majority of the questions in the interview were open ended to allow interviewees to give the fullest possible answers to the questions. There were few questions that were worded in a manner that required a simple yes/no response, but they were often supported with follow-up questions if further clarification was needed. It was important to gain the confidence and the full consent of the interviewees before the interview started. The researcher therefore gave them the necessary information about the research and the reasons behind the interview. In addition to this, the interviewees received full assurances regarding their privacy and the confidentiality of their contributions. The interview questions were developed to address the five constructs outlined in the literature review. The questions were also tailored to the broad research question stated above.

Qualitative interviews can take various forms all of them allowing the interviewee to tell their narrative uninterrupted as postulated by Edwards & Holland (2013) who also propose the possibility of the researcher taking part in the discussion by sharing their own narrative especially when the interview is about a narrative shared by both sides. In this type of interview, the researcher is aiming to encourage the interviewee to discuss their narrative. The researcher and the participant are seen as co-producers of the narrative in such a situation. In the current research, although the interviewees and the researcher shared the same narrative as

they worked in the same organisation the researcher decided to avoid interrupting the flow of the interview by not sharing anything other than questions or necessary clarifications.

As found by Alawi, Al-Marzooqi and Mohammed (2007), trust, communication, rewards and organization structure positively influence knowledge sharing in organizations. The theory of social capital is also an important component in this investigation as we need to shape our enquiry under a theoretical foundation. As mentioned above, three main themes of social capital were identified: trust, social connection and active participation. Furthermore, the interview also looked into attitudes of staff towards knowledge sharing in general, rewards and their relationship with knowledge sharing attitudes.

A simple thematic analysis (Braun and Clarke, 2006) was used to categorize the interview responses. Statements recurring in the responses were grouped together to extract meanings conveyed by respondents. The original ideas expressed by respondents were used in this research instead of the implicit meanings usually discovered in in-depth thematic analysis (Vaismoradi, Turunen and Bondas, 2013). Table 3 below shows the list of questions contained in the interview:

Table 3: interview themes and questions

Theme	Question
Trust	To what degree you think staff members are willing to share their knowledge?
	Do you have any programs that enhance intra/interdepartmental bonds?
Participation	How far do you consult the staff members you manage when developing policies or involve them in the policy making process?
	Are there any mechanisms to encourage employees to voice their views in improving their work system?
Rewards	How far do individual performances contribute to staff rewards?
Knowledge Sharing	How do you connect your staff to other more knowledgeable people to solve problems?
	How do you ensure that you do not lose your knowledge anytime a member of your staff leaves your organization?
	How do you encourage your staff to refer to the available information when making decisions?
	Do you have any policy or procedures to encourage staff to share the knowledge they create with other members of staff?
Socialization	Do you encourage or facilitate staff meetings outside working hours? Please explain further.
	To what degree do you value social interaction among employees and its importance in organizational effectiveness?

4. Findings and Discussion

4.1 Trust

Trust has been found to have positive influence on knowledge sharing (du Plessis, 2006; Darmasetiawan *et al.*, 2013; Tong, Tak and Wong, 2015). The majority of respondents indicated the existence of 'willingness to share knowledge' among staff members they managed or worked with in this organization. Examples were cited where many new employees gained organizational knowledge without getting formal training or even initial orientation. Training and development do not only improve employees' knowledge related to their routine work processes, but it can also be used to cultivate a culture of knowledge seeking and sharing. The lack of training and orientation may hamper the ability of the organization to learn and innovate (Babaahmadi, Hemmat and Poor, 2014), however, as the results of the interview show, the two organizations sampled for this research display a level of trust that motivates existing employees to continuously share their knowledge with their new colleagues as stated by the following respondent.

"In fact, I can't remember any formal induction given to new staff members for the last three years, but they are doing fine. They teach, take assessments and follow procedures as anyone else. This is because we fully welcome everyone into the department and, without any formal procedures, ensure that new colleagues can do all their daily tasks with minimum errors." Chairperson.

Reciprocal trust can be seen from the above description as the two sides need to believe in the benevolence and/or competence of the other before they engage in the knowledge sharing process (Wasko and Faraj, 2005; Moss and Kubacki, 2007; Evans and Evans, 2012). Trust nurtures an environment of cooperation and smoother interaction among the knowledge contributor and knowledge seeker (Hashim and Tan, 2015). One of the two institutions sampled for this study, College A is relatively new and is actively seeking national and international accreditation. This requires its different academic and administrative departments to collaborate and share information in support of its accreditation process. When one of the programs succeeds to receive accreditation, the same process can be applied to other programs. The reciprocal or mutual aid that develops among individual members, teams or departments is found to help the creation new knowledge (Araujo & Minetti 2011).

The majority of respondents indicate the lack of formal policy or procedures that is aimed at strengthening intra/inter departmental bonds. The interaction between members of staff within or outside the department/team stimulates knowledge sharing especially the type of knowledge that cannot be readily articulated or documented in manuals (Ryan & O'Connor 2013). Below is a response from one of the participants when asked whether they knew of any programs that encouraged inter/intradepartmental bonds:

"I don't know any such program. But if you see how we work in the department, we are open to each other and I think the bonds are somewhat strong among colleagues. Again, we don't have any formal thing to encourage us to interact with other departments, but some of my departmental colleagues are members of college committees and that is the closest we get to interacting with other departments. Obviously, in addition to proctoring examinations where all college staff come together in the exam hall and see each other or sometimes communicate." Program Director/Chairperson

This again emphasizes the above mentioned culture where staff members voluntarily assist each other in acquiring knowledge. Although this culture of altruism shows to be effective in this organization, a weakness of such grassroots initiatives that are not supported by formal procedures is that it may take longer to bear fruits than when supported by top management (O'Dell & Leavitt 2004).

4.2 Participation

Enabling employees to participate and freely share their views and concerns is found to foster readiness to knowledge sharing in organizations (Rusly, Yih-Tong Sun and L. Corner, 2014). Respondents had varying views on the existence or the level of participation in their work environment. When asked whether employees are consulted on the decisions concerning their work environment, the following respondent who worked as departmental chair and was a long standing member of both Curriculum Development Committee (CDC) and Quality Assurance Committee (QAC) had the view that employees are fairly given the chance to shape their work processes:

"Yes, during meetings all of us discuss matters that are related to our work. In addition, the CDC and QAC are the ones that formulate all policies and almost every department has a member in these committees, whether the members consult their departmental colleagues before they come to meetings, is something I don't know. But they should." Chairperson

The varying responses may be rooted on how respondents view their role and the information they had on how decisions are made in the college. The following respondent (a Course Director) portrays an environment where, although mechanisms may exist to openly share one's views, there are some obstacles that may hamper the effectiveness of such mechanisms.

"During meetings people are allowed to air their opinions, yet, as said before, some do not want to listen and follow new ways. Opinions are often seen as criticism and therefore staff members are reluctant to say anything. Some staff members are also afraid of airing their views and just follow instructions - irrespective whether they agree or not. No other method of feedback or raising concerns and issues" Course Director

Two team characteristics are displayed in the above quote. The first one is the team leaders who are reluctant to accept change. This behaviour probably leads to the second one which is team members who do not speak up their views. If staff members know that their leaders do not embrace change or accept dissenting views,

they may prefer not to voice their views and simply follow 'instructions' as in the above description. Nonaka, (1994) points out that organizations can enhance their innovative abilities when they empower their employees to express their opinions freely. Even when the discussions pertaining policy making are confined only among few committee members and the rest of employees simply receive instructions to implement those policies, the few may feel included but the rest will be reduced as mere followers. The following two course directors portray a slightly different picture on the flow of decision making process in College B:

"The need for new policies is usually discussed with subordinates. The main features of the policies are discussed. But policy details and guidelines are prepared jointly with managers only. Procedures, forms and work instructions are developed in complete consultation with staff." Course Director

"Well, not all the time. Especially anything to do with policy making, this is done by committees and top management. We also have some other decisions that come from the top and we only follow what it says. But anything that is within the department and is not against general college policies, all members share their views in the regular meetings." Course Director

A head of department in College B states the following in response to how far he consults department staff before he takes a decision:

"Very much. We have highly structured hierarchy; every task is discussed thoroughly at the department level before it is finalized or sent to the higher levels" Chairperson

It seems that a majority of respondents agree on the existence of such a hierarchical level of decision making and the availability of some sort of 'consultation' with all members. Whether the members who hold no managerial or supervisory roles feel fully empowered to exercise these powers is where the respondents' views are in disagreement. When the same above respondent was asked whether the college has mechanisms to encourage staff members to participate in the decision making process, he said:

"Yes, we have suggestion boxes, anonymous surveys that are dropped in the boxes and these tell us about the performance of the department leaders." Chairperson

Another respondent however, states that these surveys are not anonymous. When the surveys are accessed through the college network, or require usernames and passwords to start, employees may not consider them as anonymous. However, only one respondent mentioned physical drop-in surveys and suggestion boxes.

4.3 Socialization

Socialization is necessary for transferring social capital. It reduces free loading because only those members who socialize will gain more social capital from each other (Chakraborti et al. 2016). Although employees can interact through social media, it is not as effective and reliable as face-to-face interactions (Davenport & Prusak 1998).

Interview responses have shown that employees differ in their understanding of what constitutes socialization. They all state the existence of departmental meetings where pre-set agendas are discussed. One respondent described these meetings as very formal events where chairpersons have full control of the discussion and many members simply show their presence without taking part in the discussions. Whatever the case, it is clear that staff members share knowledge through their interactions in the workplace rather than their socializations outside workplace. The majority of respondents describe an environment where very limited face-to-face interaction of employees exists outside the workplace. With that said, some respondents consider communicating through social media as effective as face-to-face meetings. When asked whether he encouraged staff to socialize outside workplace, the following respondent said:

"That [encouragement] is very hard. Well, we only have some occasional events that take place outside the college like closing ceremonies, but they most likely take place in RC [Royal Commission] owned facilities. Some departments may also arrange their own events, like farewell events when one of them is leaving, where they lunch outside in a restaurant. These are not planned far in advance, they are usually announced few days before the event. There are also some employees who live in the same compound and they may have chances to meet outside." Chairperson of Quality Assurance Committee

None of the respondents stated any form of formal induction that uses mediums like lectures, videos or documents taking place. However, as mentioned earlier, many respondents agree that new employees get quickly accustomed to the routine tasks they are expected to perform within a short period of time. If the purpose of socialization is to ensure that employees share knowledge, especially the type of knowledge that is hard to formalize, then a practice of socialization has to be cultivated among the employees either as a spontaneous culture which needs no backing from top management or as a planned policy initiated and supported by the management.

One of the reasons for the lack of meetings outside the workplace may be because evenings are the only times members have to rest after a long day's work. In response to whether he encourages staff members to meet outside workplace, the following respondent says:

"I cannot claim that we actively encourage this but we do facilitate if required. The work here is very tough and we all need to relax in the evenings but there are times in the semester that some members feel that we should meet outside in a restaurant or at the beach. As chairperson I try to facilitate that by sending emails to all members, perhaps calling them in the afternoons and so on. We usually contribute the costs if there is no petty cash from the department purse." Chairperson

This view is also held by the following respondent (answering if he encourages or facilitates meetings outside working hours):

"No. We work 8 hours a day five days a week and it is extremely difficult to organize meetings outside work. Again, we have members from different backgrounds, cultures, interests and it is not easy to make benefit of meetings that are not related to their work and I think that we can achieve almost anything during working hours." Chairperson.

Informal interactions could enable employees share or gain more knowledge than formal meetings (Becerra-Fernandez & Rajiv Sabherwal 2010).

Almost all respondents agree on the importance of informal interaction and its role in organizational effectiveness.

"Well I think this is important in all organizations. In our department this happens every day in our office when members are not teaching or are not busy with administrative duties, they often gather around and talk about their work, their general life, or even discuss current events. There is no much contact among staff outside workplace though." Course Director

4.4 Rewards

Tracey and Tews, (1995) argue that, when employees cannot link the knowledge they acquire on the job with rewards, this may lead to lack of training transfer. The results showed that a majority of the employees would like to participate more in the knowledge sharing process if they knew they would be rewarded.

The interview also aimed to measure the relationship between staff performances and rewards. With the assumption that, knowledge sharing is part of the general performance measured in the organization.

There were opposing responses on whether individual performances are counted in the promotions and rewards. Some interviewees believed that performances are taken into consideration during the annual appraisals while others said that the criteria for promotions is not pronounced and it would be, therefore, difficult to know the factors that are counted in the promotions and those that are not.

Table 4 shows how participants responded when asked how far staff performance contributes to rewards.

Table 4: Relationship between performance and rewards

Response	Sample quote
Rewards are mostly tied with performances	"A lot. The annual evaluation is based on how that member of staff performed during that year. There are also performance appraisals, research rewards that take into account individual performance." Chairperson.
	"All the time. Emphasis has always been on teamwork, team collaboration and joint success." Program Director.
Rewards are, to some extent, tied to performances.	"To some extent, performances contribute to staff rewards but the rewards are not substantial. The yearly evaluations are often confidential although staff members see and sign the final form, they have very little input into it." Course Director.
	"To some extent, performances contribute to staff rewards but the rewards are not substantial." Course Director (new)
Not known or very limited relationship between performances are rewards.	"It is supposedly taken into account annually for appraisal." Course Director.
	"Very limited. The HR rules apply to all regardless of their roles as academics or otherwise. There are however, certain times when individuals that are noticed to have made continuous contributions are rewarded." Program director.
	"The problem with this is that the reasons for promotions are not necessarily pronounced. Therefore, the link between performance and promotion is not officilaized." Course Director.

5. Conclusion

The difficulty in converting the social capital theory into measurable constructs may cause some frustration for researchers. However, this research has combined a number of models from earlier researchers to propose a model to measure social capital in an organization. This research found that knowledge sharing in higher education institutions could be enhanced by building social capital bonds among staff. Trust, participation, socialization and rewards have been found to influence staff attitudes towards knowledge sharing in higher education. Even when employees practice social capital without any particular written policies or procedures obliging them to share and seek knowledge, it is found that new staff members quickly grasp the tasks they are supposed to perform. Socializing outside work place was not strong in the two colleges, however, the importance of such activity to knowledge sharing was acknowledged. Although respondents were not in agreement on whether rewards were tied with performance measurement in the two colleges, they indicated that they would be encouraged to share their knowledge if they knew that they will be rewarded.

There are two practical problems that may arise in some organizations: the first one is that knowledge is not always properly documented especially in a changing business environment where new work processes are continuously emerging. In such a situation, knowledge workers may not be able to keep up with the new developments and it may be extremely difficulty to document the newly created knowledge. The second problem is that even when the knowledge is documented, there may not be adequate dissemination and these knowledge manuals, whether in print or online, stay unused or often unheard of by knowledge users (Bock et al. 2005). This research has shown that social connections can solve these two problems because as the knowledge seeker builds his/her network of friends and colleagues it enables him/her to gain access to information and knowledge by communicating directly to a knowledgeable colleague. This is particularly vital in organizations where there is no formal induction training. A key finding of this research is that when employees voluntarily share information and knowledge, new staff members will face less difficulty in getting accustomed to their work environments. If knowledge is considered a capital (Lesser, 2000b), or a resource (Chatzkel, 2003), then it can be accessed as any other resource through social ties. In an academic environment where there is a strong social capital among employees, knowledge sharing will no longer be an activity where individuals simply seek to increase their personal knowledge, rather, the emphasis on social capital shifts the knowledge sharing initiative from the employee level to the organizational level.

This research uniquely contributes to the body of knowledge in its topic. No literature was found, by the author, in which the relationship between social capital and knowledge sharing in higher education was studied in Saudi Arabia. Nonetheless, generalizing the findings of this research may be constrained by its sample size and the lack of comparative data which could have given a more comprehensive understanding of the issues researched. With that said, it is arguable that the same organizational practices shaping the

attitudes of employees could be prevalent in different academic environments. Although harnessing employees' social capital is found to affect their knowledge sharing attitudes and practice, replicating this study in different social and managerial settings may shed more light on the effects of social capital in academic environments.

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