Sharing of tacit knowledge and service innovation performance

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Abstract: This paper examines the relationships among tacit knowledge, knowledge sharing, and service innovation performance. To examine the relationships, we collected the survey data by targeting employees in a service industry, The Lebanese Broadcast Corporation International (LBCI) located in Lebanon (n = 162). It is a leading Lebanese and Arab television station. The results indicate that there exists a positive relationship between (1) tacit knowledge and service innovation performance; and (2) knowledge sharing and service innovation performance. Also, this study finds that knowledge sharing mediates the relationship between tacit knowledge and service innovation performance. The value of the current study is presented in examining the mediating role of knowledge sharing. Our findings suggest that firms could encourage and motivate their employees to share their knowledge in order to enhance service innovation performance.

Keywords: tacit knowledge; knowledge sharing; service innovation performance.

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Biographical notes: Rana Ezzeddine Jisr received her doctorate degree from Grenoble Ecole de Management, France. She has a vast experience in knowledge management, and has published several articles in peer-reviewed journals. She has participated in numerous conferences and symposiums in various genres of knowledge management and innovation performance. Currently, she is an Assistant Professor at the Lebanese University in Lebanon and an affiliate Professor at Balamand University in Lebanon and at Grenoble Ecole de Management, France.
1 Introduction

Knowledge has always been a primary tool for generating wealth to organisations. For this reason, this paper investigates psychological factors such as enjoying sharing knowledge and motivating employees to share their knowledge with their colleagues (Alwis and Hartmann, 2008). Since employees tend to spend the majority of their time with their colleagues, it is likely that positive relationships are formed among them at work. Accordingly, many researchers have shown great interest in how knowledge and knowledge sharing contribute to new product and service development. Despite a growing contributions of the literature, the implications are still broad and more studies are needed to understand how knowledge sharing can be a prerequisite to enhance performance (Mohamed et al., 2004; Finnegan and Willcocks, 2006; Hallin and Marnburg, 2008; Hu et al., 2009).

As a whole, previous literature has left two important research gaps unfilled. First of all, despite the critical role of knowledge for service industry in dealing with enhanced competitions, most of the studies focus on the role of knowledge in technology and manufacturing-intensive industries (Matthing et al., 2004). In particular, knowledge has become an important issue in service industry, as customers’ needs and demands are becoming more sophisticated than ever. Also, organisations are relying on their employees to respond to the changing environment and come up with creative products and services (Hoegl et al., 2007).

Secondly, little attention has been paid to the ability of knowledge sharing in stimulating service innovation performance. In this sense, investigating how the articulation of customer needs and demands via knowledge sharing influences the outcome of service innovation is important. The last ten years, the literature has witnessed a constant call for addressing in depth the origin of knowledge sharing and the implications of service innovation performance (Ottenbacher and Gnoth, 2005; Victorino et al., 2005; Ottenbacher et al., 2006; Hu et al., 2009). Taken altogether, the objective of this paper is to investigate the effect of knowledge and knowledge sharing on service innovation performance in the service industry.

Based on the research objective, this study first examines: (1) the relation between knowledge and service innovation performance; and (2) the relation between knowledge sharing and service innovation performance. Specifically, we tested the role of tacit knowledge in service innovation, the reason behind this is that many service companies rely more on tacit knowledge than explicit knowledge. According to Jisr (2015) “the marvellous capacity of firms today is woven in each individual tacit power”. “Explicit knowledge is easier to manage, combine, and communicate more than tacit knowledge” (p.146). Furthermore, (3) the mediating effect of knowledge sharing on the relation between knowledge and service innovation is examined. The study of mediation is essential to better understand why the success of organisations is highly dependent on knowledge sharing at individual-level (Hislop, 2003).
The remainder of this study is organised as follows. Section 2 begins with reviewing the streams of literature to develop hypotheses. Section 3 entails methodological approach and process along with descriptive statistics of the samples. Section 4 presents the results of the empirical analysis, which used structural equation model. The last section provides the implications drawn from the findings and future directions of the research.

2 Literature review and hypotheses

2.1 Tacit knowledge and service innovation performance

Organisations acknowledge that creating and using explicit and tacit knowledge are critical for their success. Explicit knowledge refers to knowledge available in books, magazines, on the web, and various other communicative tools which can be easily stored and shared. However, the concept of tacit knowledge is multidimensional and refers to knowledge that is difficult to codify and communicate to the rest of the organisation (Valkokari et al., 2012). The word originates from the Latin “tacere”, which means “silent” (Sapienza, 2002). Tacit knowledge is described by Polanyi (1966, p.4) as “we know more than we can tell”. This kind of knowledge is difficult to store and share.

Nonaka (1994) divides tacit knowledge into two dimensions: cognitive and technical. Whereas the first dimension refers to beliefs, perspectives, and viewpoints, the second dimension refers to skills, practical experience, and talents. Other researchers suggest that ‘tacit knowledge’ and ‘tacit skills’ can be used interchangeably (Ambrosini, 2002). The above two researchers classified tacitness into “tacit skills that can be imperfectly articulated” and “tacit skills that could be articulated” (Ambrosini, 2002, p.816).

Moreover, other researchers argue that tacit knowledge is acquired in two different ways: informal learning and training (Wagner and Sternberg, 1999). Similarly, there exists a “widespread agreement that personal contact with observation of others is critical factor in acquisition” (Leonard and Sensiper, 1998, pp.121–124). Furthermore, little is mentioned about “what ‘personal contact’ means, detailed accounts suggest a complex iterative process of acting on the materials or processes being transformed, working with others more expert in the field and receiving their judgment on organizational transformation efforts” (Collins, 2001). The literature of knowledge management has linked individual and group tacit knowledge to an enhanced performance in organisations (Wagner and Sternberg, 1986; Wagner, 1987; Sternberg et al., 1993; Berman et al., 2002). Although tacit knowledge is an interesting concept, but it is too abstract to measure. Berman et al. (2002) find that if we are able to measure tacit knowledge, then it can be codified, and thus become explicit knowledge.

According to some studies, organisations that value tacit knowledge are ready to adapt to everyday challenges and can easily innovate (West, 1992; Nonaka, 1994; Harari, 1994). “Managers should recognize that the skills of human resources and the motivation level make possible creative suggestions, different proposals, and research activities to build up innovation” (Carneiro, 2015, p.34). Furthermore, the researcher adds that managers are expected to encourage knowledge within workers to obtain a high level of technological and economic innovation.

As mentioned earlier, tacit knowledge is a multidimensional construct of two dimensions: cognitive and technical skills (Nonaka, 1994). Cognitive skills are the skills
needed to perform a certain task such as demonstrate self-control at work, willingness to be trained and well organised work agenda (Insch et al., 2008). Technical skills are the skills or know-how needed to complete a particular task through the appropriate technology. Furthermore, technical skills are associated with the ways or practices needed (like driving a bike). The first time we drive, we think about each step, while over time, driving becomes an automatic practice unless we experience a specific problem (Insch et al., 2008). Wagner (1987) finds that tacit knowledge of an individual increases with practice and experience. As to innovation process, it involves the establishment of relevant tacit knowledge (Alwis and Hartman, 2008). Furthermore, exchanging tacit knowledge in organisations facilitates service innovation activities (O’Cass et al., 2012). Although knowledge literature is prolific in tacit knowledge studies, there still exists some obstacles in exchanging this knowledge and exploring it in the organisation. This fact has led Spender (2003, p.267) to state that: “it is not easy to transfer tacit knowledge as this kind of knowledge is directly related to what is called the human processes that actualize the firm”. From this perspective, a number of studies have positively related tacit knowledge to innovation performance in firms. This has triggered the authors of this research to examine whether tacit knowledge has an active part on innovation in the service industry.

Innovation is not only crucial for supporting competitive markets worldwide (Phusavat, 2012), but also a prerequisite for entering new markets (Stock et al., 2002). Innovation in service companies is “rarely science or even technology-based: its primary dynamic is often social as in the conceiving of new ways to access both employees and customers” (Hu et al., 2009, p.42). Johne and Storey (1998) present six themes to the service development process: corporate environment, process, people, searching opportunities, extending and implementation. The results of previous studies reveal that service product process is a complex process that includes different elements. As mentioned in the introduction of this paper, there is a need to examine service innovation performance since the world’s economy is watching a shift in emphasis from production of goods to that of services, over the last two decades. Indeed, service innovation is the force that leads an organisation to adapt to current changes in the market. It is an attitude that looks to the future as if it is today.

Finally, one researcher finds that service innovation consists of more than just new service and product development; it includes adjusting the allocation process of existing product and services (Drejer, 2004). This has led to formulate the following hypothesis:

\[ H1: \text{Tacit knowledge significantly and positively affects service innovation performance.} \]

2.2 Sharing of tacit knowledge and service innovation

Knowledge sharing is referred to exchanging knowledge between two or more individuals (Usoro and Kuofie, 2006). Knowledge sharing is the most important component of knowledge management (Senge, 1990). Bartol and Srivastava (2002) postulate that knowledge sharing is an “individual sharing organizationally relevant information, suggestions, and expertise with one another” (p.65). In other words, it is perceived as a mechanism that allows transmitting knowledge between individuals that includes new values and enables innovative practices. Other researchers, such as Davenport and Prusak (1998) view knowledge as a dynamic process rather than a static one. It facilitates solving problems and results in attaining a competitive advantage (Lin, 2007). According
to Senge (1997) knowledge sharing is the most crucial factor in knowledge management. Its role is not in passing knowledge to others only, however, it helps recipients to obtain useful information. “Knowledge sharing is a mechanism through which knowledge is transmitted from one to another. Through the transformation, individuals gain a new edge to enable new actions. Thus, knowledge sharing adds values to existing knowledge within organizations” (Kuo et al., 2014). A significant impediment to this mechanism exists, however, when individuals are reluctant to share their knowledge in the organisation. This resistance includes explicit or tacit knowledge, and could result in an inability to resolve problems and create new concepts (Nonaka et al., 1994). This dynamic role of knowledge triggered the authors of this study to present it in the knowledge model and examine its effect on service innovation performance. Indeed, the literature identifies the positive relationship between knowledge sharing and innovation performance and finds them cyclically interrelated with each other (Davenport and Prusak, 1998; Bennett and Gabriel, 1999; Gupta et al., 2000; Parikh, 2001; Bouthillier and Shearer, 2002; Qianwang and Dejie, 2006; Xu et al., 2010). Furthermore, a recent study has revealed the important role of knowledge sharing among employees with service innovation (Kuo et al., 2014). Another study reveals a significant impact of knowledge management on competitiveness and innovation (Carneiro, 2015). Some studies have presented knowledge management as a moderator to the relationship between self-directed learning (Ho, 2008) and organisational performance. Others, demonstrate knowledge sharing as a mediator that affects the influence of some factors of organisational performance on human resource management, organisational learning (Lin and Kuo, 2007), and information technology (Lin et al., 2007).

**Figure 1** Research model

Other barriers to knowledge sharing are outlined by Leonard and Sensiper (1998). The two researchers mentioned inequality in status as a major barrier for knowledge transmission. In the same sense, researchers have always been interested in sharing tacit knowledge in business organisations (Desouza, 2003). Managers have tried utilising the reward strategy to motivate their co-workers to share their knowledge with other colleagues. Nevertheless, sharing knowledge is a voluntary action and cannot be directly rewarded due to its intangibility (Jarvenpaa and Staples, 2001; Desouza, 2003). In line with Jarvenpa, Staples, and Desouza, this study tries to explore some intangible options.
that might encourage or constrain sharing tacit knowledge in organisations. Based on the above reviewed literature, the following hypotheses are tested (see Figure 1):

\( H2: \) Knowledge sharing significantly and positively affects service innovation performance.

\( H3: \) Knowledge sharing mediates the relationship between tacit knowledge and service innovation performance.

3 Method

3.1 Research design and sample

Similar to any other developing country, Lebanon is perceived as having currently entered a phase of manufacturing structural evolution. The swiftly expanding technological production offers numerous opportunities to enhance the performance of the service industry in general, and the media industry in particular. Consequently, the key to success lies in whether the industry mentioned is able to grasp the core capacity of the knowledge economy and achieves its competitive advantage through innovative practices.

In the service industry, the value of knowledgeable workers relies on their approach towards dealing with this knowledge. If they can effectively share their knowledge and experience, then the channels of knowledge will ultimately benefit the entire workforce (Kuo et al., 2014). Finally, service innovation is a novel tactic in business strategies to restructure traditional processes and meet the needs of the markets (Chong et al., 2011). This paper aims at investigating the relationships among tacit knowledge, knowledge sharing and service innovation.

The current study is a quantitative research. The data were collected from a service company in Lebanon known as Lebanese Broadcast Corporation International LBCI, a television station that was founded in 1982. It provides daily news, and other entertaining programs and is considered as the first private television station in Lebanon. LBCI ranks the first in Lebanon holding the highest number of audience for the year 2017 (IPSOS Lebanon, 2016). Questionnaires were distributed by hand through the HR manager. Data collection process took two months, from the beginning of January to the end of February, 2013. A total of 198 surveys were retrieved, among which 162 were valid for analysis (81.8%). The respondents were full-time employees, and the majority of the participants were male (61.2%). The lowest percentage of participants was over 50 years old (7.4%).

3.2 Measures and methods for data analysis

All measures are adopted and revised from previous studies. The survey questionnaire consists of three constructs, namely tacit knowledge, knowledge sharing, and service innovation. All items are measured using a seven-point Likert-type scale (1 strongly disagree to 7 strongly agree). Six items for tacit knowledge are proposed by Insch et al. (2008) and adopted according to the research objective of the current research. The sample items are “demonstrate self-control at work”, “willingness to be trained” and “complete work on time”.
Knowledge sharing is measured by 3 items borrowed from Wasko and Faraj (2005). The sample items are “top managers encourage knowledge sharing”, “I enjoy sharing my knowledge”, and “I enjoy helping others by sharing my knowledge”.

Finally, service innovation is measured by three items borrowed from Hu et al. (2009). The sample items are “I seek new service technology”, “I come up with creative ideas” and “I sometimes propose my creative ideas and try to convince others”.

Collected data are analysed using SPSS 21.0 and AMOS 21.0. Pearson correlation, confirmative factor analysis, and structural equation modeling (SEM) are used for statistical analysis.

3.3 Data preparation

Data preparation process is necessary to confirm a normal distribution. For this purpose, all constructs underlie skewness and kurtosis testing. The result is a non-normal distribution for the three measured constructs. Thus, all constructs need rank transformation. As a rule of thumb, a normal distribution has a skewness and kurtosis of 0 (Hosking, 2006). Rank transformation enables picking the top or bottom rank of data and causes the normal distribution.

3.4 Scale reliability and validity

The next step is checking for construct validity for each construct. To test for reliability, Cronbach alpha is conducted for each construct in the study and the result is .653 for tacit knowledge, knowledge sharing .716, and service innovation .782 (see Table 1).

<table>
<thead>
<tr>
<th>Name of Construct</th>
<th>Items</th>
<th>Reliability</th>
<th>Mean</th>
<th>St. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge</td>
<td>6 items</td>
<td>.653</td>
<td>1.51</td>
<td>.81</td>
<td>.77</td>
<td>.82</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>3 items</td>
<td>.716</td>
<td>.724</td>
<td>.56</td>
<td>.442</td>
<td>-.413</td>
</tr>
<tr>
<td>Service innovation</td>
<td>3 items</td>
<td>.782</td>
<td>2.06</td>
<td>.76</td>
<td>.388</td>
<td>-.388</td>
</tr>
</tbody>
</table>

Table 2 Means, standard deviation, and factor loadings of the items

<table>
<thead>
<tr>
<th>Scale/Item</th>
<th>Mean</th>
<th>SD</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that I can demonstrate self-control</td>
<td>6.31</td>
<td>1.00</td>
<td>.66</td>
</tr>
<tr>
<td>I have the will to be trained</td>
<td>6.27</td>
<td>1.23</td>
<td>.64</td>
</tr>
<tr>
<td>I have my work done on time</td>
<td>6.34</td>
<td>.953</td>
<td>.46</td>
</tr>
<tr>
<td>I set a time-line for completing the job</td>
<td>5.62</td>
<td>1.59</td>
<td>.39</td>
</tr>
<tr>
<td>I ask questions during meetings</td>
<td>5.39</td>
<td>1.24</td>
<td>.22</td>
</tr>
<tr>
<td>I seek technical support from others</td>
<td>5.45</td>
<td>1.44</td>
<td>.48</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top managers encourage knowledge sharing</td>
<td>5.91</td>
<td>1.38</td>
<td>.53</td>
</tr>
<tr>
<td>I enjoy knowledge sharing with others</td>
<td>5.89</td>
<td>1.34</td>
<td>.63</td>
</tr>
<tr>
<td>I enjoy helping others by sharing my knowledge</td>
<td>6.05</td>
<td>1.22</td>
<td>.89</td>
</tr>
</tbody>
</table>
### Table 2
Means, standard deviation, and factor loadings of the items (continued)

<table>
<thead>
<tr>
<th>Scale/Item</th>
<th>Mean</th>
<th>SD</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service innovation performance (SIP)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At work, I seek new techniques and methods</td>
<td>5.87</td>
<td>1.29</td>
<td>.62</td>
</tr>
<tr>
<td>At work, I sometimes come up with creative and innovative notions</td>
<td>5.82</td>
<td>1.31</td>
<td>.94</td>
</tr>
<tr>
<td>At work, I sometimes propose my creative ideas and try to convince others</td>
<td>5.52</td>
<td>1.35</td>
<td>.85</td>
</tr>
</tbody>
</table>

Note: Scales ranged from 1 to 7, from strongly disagree to strongly agree on each variable.

#### 3.4.1 Confirmatory factor analysis

Confirmatory Factor Analysis CFA is considered as “a second-generation method for approaching construct validity” (Bagozzi et al., 1991, p.429). It provides quantitative measures of the reliability and validity of the constructs. The results for the CFA analysis shows that all standardised factor loadings are > 0.5. Theoretically speaking, when specified indicators have relatively high standardised loadings on one factor, then it is an evidence for convergent validity.

### Table 3
CFA results for the latent constructs

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Items</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>P</th>
<th>CFI</th>
<th>NNFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge</td>
<td>6 items</td>
<td>3.55</td>
<td>5</td>
<td>.61</td>
<td>1</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>3 items</td>
<td>5.10</td>
<td>2</td>
<td>.07</td>
<td>.97</td>
<td>.95</td>
<td>.09</td>
</tr>
<tr>
<td>Service innovation</td>
<td>3 items</td>
<td>4.14</td>
<td>2</td>
<td>.12</td>
<td>.99</td>
<td>.98</td>
<td>.08</td>
</tr>
</tbody>
</table>

To accept the model, the fit criterion for the Chi-square index should be less than 0.05 or the Chi-square/DoF < 3. Tacit knowledge in Table 2 achieves $\chi^2 > .05$, and $\chi^2$/df > 3 but the construct has other good fit-indices, so it will be used in further analysis. Furthermore, tacit knowledge construct has CFI, NNFI > .90, and RMSEA is perfect fit. As to the other two constructs, their results are acceptable.

As for discriminancy, estimated correlations between factors should not exceed .85 (Kline, 1998) and p value for $\chi^2$/df should not exceed .05. Table 4 indicates that our data passed discriminant validity test.

### Table 4
Results for discriminant validity

<table>
<thead>
<tr>
<th>Tests</th>
<th>$\chi^2$/df</th>
<th>P</th>
<th>Correlation</th>
<th>Covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge with Knowledge sharing</td>
<td>1</td>
<td>.02</td>
<td>.12</td>
<td>.01</td>
</tr>
<tr>
<td>Tacit knowledge with service innovation performance</td>
<td>2</td>
<td>.005</td>
<td>.719</td>
<td>.025</td>
</tr>
<tr>
<td>Knowledge sharing with service innovation performance</td>
<td>4</td>
<td>.053</td>
<td>.558</td>
<td>.034</td>
</tr>
</tbody>
</table>

#### 3.5 Structural model and hypotheses testing

In testing the hypothesis between tacit knowledge and service innovation, the CFA results reveal acceptable model fit with $\chi^2 = 20.1$; $\chi^2$/df = 15; P=.16; CFI and NNFI > .90.
and a good fit result to RMSEA = 0.013. The first statistical result shows that tacit knowledge construct is positively linked to innovation, this means that H1 is supported.

The results for the hypothesis between knowledge sharing and innovation performance (H2) reveal an acceptable model fit too with $\chi^2 = 4.2; \chi^2/df = 3; CFI = .99; NNFI = .97; \text{ and } \text{RMSEA} = .058$. These results indicate that knowledge sharing construct is positively linked to service innovation, and H2 is supported.

In testing for mediation between tacit knowledge and innovation, (H3), the authors of the current study decide to use bootstrapping method which is an increasingly accepted method for testing the direct and indirect effects (Bollen and Stine, 1990; Short and Bolger, 2002). The result of the direct path between tacit and service innovation is significant ($p = .01$). Also, the direct effect path between knowledge sharing and service innovation is significant ($p = .001$). As to the result of the indirect effect, it is significant too ($<.05$). This implies that knowledge sharing mediates the relationship between tacit knowledge and service innovation.

4 Discussion

The results of the current research reveal that both knowledge sharing and tacit knowledge have a significant effect on service innovation and that knowledge sharing mediates the relationship between tacit knowledge and service innovation. Other studies have presented knowledge management as a moderator between self-direct learning (Ho, 2009) and organisational performance, and between human resource management and organisational learning (Lin and Kuo, 2007). Our study is congruent to that of Kuo et al. (2014) who examined the mediator role of knowledge sharing in knowledge innovation. While several studies in knowledge management have linked knowledge to enhanced organisational performance (e.g. Choi et al., 2008; Hu et al., 2009; Perez-Arostegui et al., 2012), none has recently reinforced accumulated evidence that knowledge sharing could link tacit knowledge to service innovation performance in firms. The current research adds value by investigating the role of knowledge sharing as a mediator among the mentioned constructs. Thus, this paper can contribute to the strategies of organisations and propose that encouraging the knowledge sharing process is a managerial imperative. Another interesting theoretical implication in this study is revealing the positive impact of knowledge sharing on innovation in organisations (Bank and Millward, 2000; Chi and Holsapple, 2005; Hu et al., 2009).

Furthermore, this research demonstrates positive results for the hypothesis linking tacit knowledge with service innovation. This relationship has rarely been examined by researchers, such as Wagner and Sternberg (1986), Sternberg et al. (1993, 1995, 2000), and Insch et al. (2008). Sternberg et al. suggest in their research of practical intelligence conducting a set of interviews with some experts trying to understand the way in which they arrange issues in their jobs. The results emerging from these interviews are some amount of tacit knowledge expressed in accordance to their views. These tests are familiar in psychological literature; however, their rationality is still questionable.

This leads the authors of this study to postulate that validating the knowledge model in a service industry is one of the main theoretical contributions in this paper. At time where the literature of knowledge reveals that there is a constant call to measure tacit knowledge (Insch et al., 2008) we are content that this research could measure and validate this construct. Thus, considering this step as an important advancement in the
service industry. Moreover, this study is an attempt to bridge the gap in the literature on the multidimensionality of tacit knowledge where the latter exists in the academic as well as the service industry as well.

5 Conclusion, implications and limitations

This research has tackled the important role of knowledge in the service industry in general and in Lebanon in particular. In line with this conclusion, this study reveals a significant relationship between tacit knowledge, knowledge sharing and service innovation performance.

The contribution of our study is a preliminary step in exploring the multidimensionality of tacit knowledge and the potential capability of knowledge sharing. It is vital to test our model in other contexts to develop other factors and to encourage further innovation in the service industry.

The positive result of mediation in this paper indicates that knowledge sharing is a catalyst to the relationship between tacit knowledge and service innovation performance. It is recommended that managers should not only employ knowledge sharing in their strategies, but also encourage these practices in an open-minded organisational culture. Furthermore, it is recommended that managers should develop support groups, workshops, and seminars to encourage sharing tacit knowledge within their organisations. As a result; knowledge sharing can be considered as a bridge between knowledge and innovation in organisations. Thus, managers are called to motivate their employees to share their knowledge since knowledgeable workforce results in open-minded organisational culture that stimulates innovation.

As to methodological limitations, first, this study deals with a small sample size. We cannot generalise or offer any assurances pertaining to the results of this paper with respect to other contexts or firms. The current study deals with 162 respondents as earlier mentioned (see section 3.1). To find a solution to the small sample size, it is wise to test the model in another milieu and with a bigger sample size. Second limitation is within the characteristics of the sample. Our model is tested in a service industry, and thus, it does not represent the whole population. Finally, the company chosen for our study represents the Lebanese context and not all communities.

This study’s aim was to find a link between tacit knowledge, knowledge sharing, and service innovation performance; however, there are many questions that could be addressed in forthcoming studies.

References


Sharing of tacit knowledge and service innovation performance


IPSOS Lebanon (2016) Methodology people meter over a sample of 2500 individual, National representative of 600 household.


Appendix: Knowledge, Innovation Survey

There is no right or wrong answer below. Please check the box that reflects your opinion.

For each question, please indicate your level of agreement by clicking the box that best reflects your opinion.

1: Strongly disagree.  2: Disagree.  3: Slightly disagree.  4: Neutral.  
5: Slightly agree.  6: Agree.  7: Strongly agree.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think that I can demonstrate self-control in work</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. I have the willingness to be trained</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. I have my work done on time</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>1. I set a time-line for completing a job</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. I ask questions during meetings</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. I seek technical support from the manager</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Knowledge Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Top managers encourage knowledge sharing</td>
</tr>
<tr>
<td>2. I enjoy knowledge sharing with others</td>
</tr>
<tr>
<td>3. I enjoy helping others by sharing my knowledge</td>
</tr>
</tbody>
</table>
3. Innovation

1. At work, I seek new service techniques and methods

2. At work, I sometimes come up with innovative and creative notions

3. At work, I sometimes propose my creative ideas and try to convince others

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>99</td>
</tr>
<tr>
<td>Female</td>
<td>63</td>
</tr>
</tbody>
</table>

7.1 What is your gender?

7.2 How old are you?

7.3 What is your highest level of education?

7.4 How long is your work experience?

7.5 How long have you worked with this company?

7.6 What is the type of work in your company?

7.7 How long have you worked with your manager?
<table>
<thead>
<tr>
<th>Duration</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>22</td>
<td>13.6</td>
</tr>
<tr>
<td>1–2 years</td>
<td>16</td>
<td>9.9</td>
</tr>
<tr>
<td>2–3 years</td>
<td>19</td>
<td>11.7</td>
</tr>
<tr>
<td>3–5 years</td>
<td>24</td>
<td>14.8</td>
</tr>
<tr>
<td>Over 5 years</td>
<td>76</td>
<td>46.9</td>
</tr>
</tbody>
</table>