Organizational Culture and Knowledge Sharing Behavior: Moderated Mediation Model

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Organizational Culture and Knowledge Sharing Behavior: Moderated Mediation Model

Cultura organizacional y comportamiento de intercambio de conocimientos: modelo de mediación moderado

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Abstract:
The study aims to examine the indirect relationship of clan organizational culture (COC) and knowledge sharing behavior (KSB) through knowledge sharing opportunity (KSO) and explain the differences in the COC-KSB relationship through KSOs that emerge from a moderating role of informal knowledge governance mechanisms (IFKGM). Data from 279 university professors from public and private sector universities in Pakistan were collected by grouping the population into strata and drawing convenience samples from it. A moderate mediation model was tested using Process. The results supported the mediating role of KSO between COC and KSB.

Keywords: Clan Organizational Culture (COC), Informal Knowledge Governance Mechanisms, Knowledge Sharing Behavior (IFKGM), Knowledge Sharing Opportunity (KSO), knowledge sharing behavior (KSB).

Resumen:
El estudio tiene como objetivo examinar la relación indirecta de la cultura organizacional del clan (COC) y el comportamiento de intercambio de conocimientos (CIC) a través de la oportunidad de intercambio de conocimientos (OIC) y explicar las diferencias en la relación COC-CIC a través de OIC que surgen de un papel moderador de los mecanismos de gobernanza del conocimiento informal (MIGC). Se recopilaron datos de 279 profesores universitarios de universidades del sector público y privado en Pakistán agrupando la población en estratos y extrayendo muestras de conveniencia de ella. Se probó un modelo de mediación moderada utilizando Process. Los resultados apoyaron el papel mediador de OIC entre COC y CIC.

Palabras clave: Comportamiento de intercambio de conocimientos (CIC), Cultura organizacional del clan (COC), mecanismos informales de gobernanza del conocimiento (MIGC), oportunidad de intercambio de conocimientos (OIC).
INTRODUCTION

Transfer of knowledge has become a critical challenge in today's dynamic business and economic environment. According to Kang and Kim (2017), firms' survival is dependent upon knowledge transfer efficiency. It is also considered a core competency for an organization to achieve a competitive advantage and an indicator to attain a recognizable position in the market (Zhao et al.: 2017; Sukier et al.: 2020). Intezari et al. (2017) examined that there are three main organizational factors that contribute to knowledge management, i.e., technology, structure and organizational culture. Hence, the type of organizational culture adopted in relation to transferring knowledge has a strong impact on subsequent outcomes (Dávila et al.: 2019, pp.857-886). $31.5 billion are lost by Fortune 500 companies annually due to lack of appropriate knowledge sharing.

Knowledge sharing is a key component of the knowledge management process. According to social exchange theory, knowledge sharing has a fundamental role in knowledge management. An organizational culture that supports knowledge sharing norms and values would ensure the unhampered information flow from holder to receiver. Conversely, scarcity of knowledge sharing opportunities in an organization and the control mechanisms adopted for efficient knowledge governance (Huang et al.: 2013, pp.677 – 694) serves as a barrier to sharing knowledge. In this vein, the impact of organizational culture on knowledge sharing behaviour can be examined via the context of knowledge sharing mechanism adopted and the knowledge-sharing opportunities provided by an organization.

Despite a plethora of research exploring independent effects of organizational culture on knowledge sharing, no empirical study has been carried out to examine the effect of organizational culture on knowledge sharing behaviour and the underlying processes that specify or limit the effectiveness of culture on knowledge sharing. Moreover, there is a dearth of empirical studies on knowledge sharing in developing countries like Pakistan in both the public and private sector.

Knowledge sharing has been examined in relation to organizational culture, but little is done to study the mediating mechanisms that impact knowledge sharing behaviour in an indirect fashion. Different terms are used inconsistently to describe a particular knowledge process that leads to confusion among researchers and practitioners about the use of these terms. It makes the identification of crucial factors that contribute to improved knowledge transfer in any organization.

The debate on the influence of various dimensions of knowledge governance mechanisms on knowledge sharing exists since Foss (2007; 2010) introduced the concept of knowledge sharing mechanisms. Since then, studies are exploring the mutual effects, but much is left to be explored. Empirical findings are inconsistent despite the fact that literature has attempted to established relationships among knowledge-sharing opportunity, knowledge governance aspects and knowledge transfer. More specifically, no study has examined the effect of multiple mediating variables on the relationship between clan organizational culture and knowledge sharing behaviour. This study has significant contribution in establishing that the organizational culture that is often considered a barrier to share knowledge would, in fact, facilitate knowledge transfer when specific processes are employed. Hence, this premise is built on social exchange theory that establishes the reciprocal exchange relationship between organizational culture, knowledge sharing behaviour and the intervening variables.

This study aims to fill this gap by examining the mediating effects of knowledge sharing opportunity and informal knowledge governance mechanism on the relationship between organizational culture and knowledge sharing behaviour. Therefore, the need to examine the processes operating in a specific organizational culture that foster KSB. To this backdrop, this study aims at (a) investigating the impact of clan organizational culture on knowledge sharing behaviour. (b) Investigating moderating role (IFKGM) between clan organizational culture and knowledge sharing opportunity. (c) Investigating the impact of
introducing individual level intervening variable (KSO) between clan organizational culture and knowledge sharing behaviour.

LITERATURE REVIEW

Clan Organizational culture and knowledge sharing behavior

Organizational culture has been attracting more attention in the last few decades due to its potential role productivity, growth, and performance of the organization (Villalobos et al.: 2018; Hernández et al.: 2019; Ramírez et al.: 2019; Bendak et al.: 2020). Durmusoglu et al. (2014) examined that organizational culture has a strong positive influence on knowledge sharing behavior. However, different types of cultures have varying effects on outcomes. Culture of an organization shapes the behavior of its employees as a result of values that are incorporated through the chain of attitude, intention, and behavior, recent studies have examined that clan organizational culture is a strong predictor of knowledge sharing behavior (Abbasi & Dastgeer: 2018, pp.32-50). Social exchange theory explains the role of social norms and values in directing the behavior of individuals.

(Aquilani et al.: 2017, pp.447-459) are among recent studies that have established that organizational culture is positively associate with knowledge sharing. People are willing to share knowledge in an environment of mutual trust and confidence, whereas in a competitive environment where people might be jealous and competing may hoard their knowledge to gain and retain knowledge power. An advantage of clan culture is that it enables the free flow of knowledge, develops confidence and trust among organizational members, connects and affiliates people, and refrains from anti-social norms. These features of clan culture encourage people at the workplace and in any other social setup to willingly share knowledge and experience and understanding their knowledge sharing behavior (Asurakkody & Hee: 2020). Hence, it is hypothesized that

H1: Clan organizational culture has a positive impact on knowledge sharing behavior

Mediating Role of knowledge sharing opportunity on clan organizational culture and knowledge sharing behavior

People will be inclined to transfer knowledge when an organization adopts a supportive knowledge culture (Aquilani et al.: 2017, pp.447-459). However, the effectiveness of transferred knowledge depends upon other factors as well. People seek satisfaction from an exchange process when they achieve some value through it.

A knowledgeable, supportive organizational culture encourages people to share their knowledge. How effectively the knowledge is transferred depends upon other organizational factors. Social exchange theory posits that people are more satisfied when they obtain something of value as a result of the exchange process. Individual differences in recognizing and utilizing organizational opportunities can have an influential role in accrediting opportunity loss as significant.

Those who tend to seek opportunities have the ability to do so in many ways. They build mutual trust and confidence that develop into a strong social relationship. Social interactions provide an opportunity for the valuable exchange for taking place. If knowledge conducive culture is there to support this exchange process, the benefits of the exchange process may have a multiplicative effect, and individuals are less inclined to hold their knowledge.

Seeking opportunity is as much important as utilizing it in cost-effective way. Social exchange involving the transfer of knowledge would be more efficient when maximum output is achieved by utilizing minimal resources. Therefore, it is hypothesized that

H2: Knowledge sharing opportunity (KSO) mediates the effect of clan organizational culture on knowledge sharing behavior (KSB)

The moderating role of IFKGM on clan organizational culture and KSB through KSO
Recent studies have shown that informal knowledge governance mechanisms strengthen the relationship between organizational culture and knowledge sharing behavior. Opportunities for informal social interactions like coffee and lunch breaks, water coolers, and social gatherings develop trust among individuals by bringing people together. Organizations can be differentiated who adapt and those who do not adapt informal knowledge governance mechanisms by the quality and quantity of opportunities they provide. Clan organizational culture aligns well with the informal mechanisms, and thus, people are given ample informal opportunities to interact and develop social ties in return.

According to Paro and Gerolamo (2017), organizational culture provides contextual clues that let people recognize opportunity available in the environment. Despite that, sometimes people do not make use of those opportunities. Informal mechanisms then serve as a bridge between clues provided and the opportunities utilized by individuals (Henttonen et al.: 2016, pp.857-886).

Informal mechanisms are thus a good source of opportunities in any organization. Social and active members will convert these interactions into useful opportunities, and those who do not recognize these informal mechanisms may not be able to drive the benefits from the opportunities present in the environment. More informal social interactions bring people closer, and informal sessions help discuss numerous matters, including opportunities to share and transfer knowledge. Hence, it is hypothesized that H3: IFKGM moderates the mediated relationship between clan organizational culture and KSB through KSO in the way that mediated relationship is stronger when IFKGM is high.

Figure 1. Research model

METHODS

Sampling Technique and Data Collection

Data was collected from public and private sector universities and HEI’s in Pakistan. A list of HEC recognized universities was used as a sampling frame. 20% of university teachers are in the private sector and 80% in the public sector. Universities from strata were randomly selected using disproportionate sampling according to the population in both strata. University teachers were contacted through personal contacts on the basis of convenience. A total of almost 500 questionnaires were distributed. A sample size of 200 to 300 is considered good. In total, 279 completed questionnaires were received, and the response rate was 56%. 30% of responses were from the private sector, and roughly 70% of the public sector. As respondents were at least master’s degree holders, there was no need to translate the questionnaire. The sample consisted of 67% male falling between the age group of 36-45 years, at least 42% were lecturers, 68% had MS/Mphil degree with 5-10 years of teaching experience.

Instruments

Using a 5 points or 7 point scale makes no difference in data analysis and results. The study used 7 points Likert scale to measure the responses with 1 for strongly disagree to 7 for strongly agree. All variables were not originally established as a 7 point scale. To achieve standardization in data interpretation, all latent constructs were measured using 7 point scale.

COC
COC was assessed using the CVF 6 item scale by Cameron and Quinn (1999; 2006). Items included “My organization is like an extended family. People seem to share a lot of themselves”.

**IFKGM**

3 item scale adopted by Bjorkman et al. (2004) was used to measure IFKGM. Items included were “There are leisure activities in my organization for colleagues to make friendship.”

**KSO**

KSO was measured using 3 item scale of Ryan and Connell (1989). Items included were “There is a time and place when we exchange best practices.”

**KSB**

KSB was measured using 7 item scale by Bock et al. (2005). Items included were “We share know-how from work experiences with each other.”

**The procedure of speed test**

To assess this physical quality, 30 meters as a distance was used to assess the muscle speed of the lower limbs. The athlete had three times to try the distance, and the best result was taken into account. Three minutes of rest between each test was granted. These tests took place in the outdoor playground. The athletes were all wearing sport shoes adapted. All athletes took the tests in the same order, namely the test of 30 meters in a straight line.

**Procedure vertical jump**

Two types of jumps were evaluated: - the squat jump (SJ) with a start flexed at 90° and hands on the hips. - the counter-movement jump (CMJ) with starting knees extended, bending up to 90°, extension knees followed by jumping, all with hands-on hips. Three to four attempts for each type of jump were made by asking the athlete to jump as high as possible. The best essay at the SJ and then at the CMJ was selected. The athlete had a minute of rest between each trial.

**RESULTS**

Table 1 gives the values of the means, standard deviations, and correlations of the constructs. Chronbach alpha values are given in parentheses. Reliabilities are above the threshold of 0.7, and correlations are as expected. There is a positive association between COC and KSB (r=0.58, p<0.01), IFKGM and KSB (r=0.58, p<0.01), KSO and KSB (r=0.59, p<0.01). Similarly, COC and IFKGM are positively associated (r=0.54, p<0.01), and COC and KSO have a positive association as expected (r=0.79, p<0.01).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>4.82</td>
<td>1.48</td>
<td>(0.94)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFKGM</td>
<td>4.40</td>
<td>1.85</td>
<td>0.54”</td>
<td>(0.90)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KSO</td>
<td>4.88</td>
<td>1.51</td>
<td>0.79”</td>
<td>0.64”</td>
<td>(0.90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KSB</td>
<td>4.86</td>
<td>1.26</td>
<td>0.58”</td>
<td>0.58”</td>
<td>0.59”</td>
<td>(0.92)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1. Means, Standard Deviations and Correlations**

According to Podsakoff, Mackenzie & Podsakoff (2012), single-source data may introduce common method variance in the data. Harman, one factor test, was used to detect common method variance in the data. The total variance explained was less than 50% that confirms that there was no issue of common method variance due to single-source data.

**Confirmatory factor analysis**
Confirmatory factor analysis revealed an excellent fit (CMIN/DF = 1.95, IFI = 0.95, TLI = 0.96, CFI = 0.97, RMSEA = 0.06) for the proposed model.

Table 2. Direct, Indirect, Conditional Indirect and Moderated Mediation Effects

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>SE</th>
<th>t</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct, Indirect and Total effects of KSO between COC and KSB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>.4995***</td>
<td>.0451</td>
<td>11.0706</td>
<td>.4107</td>
<td>.5883</td>
</tr>
<tr>
<td>Indirect</td>
<td>.0387***</td>
<td>.0215</td>
<td></td>
<td>.0004</td>
<td>.0864</td>
</tr>
<tr>
<td>Total</td>
<td>.5382***</td>
<td>.0420</td>
<td>12.7997</td>
<td>.4554</td>
<td>.6210</td>
</tr>
<tr>
<td>Conditional indirect effects of COC on KSB at values of the IFKGM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1.6598</td>
<td>-.1172</td>
<td>.0363</td>
<td></td>
<td>.0506</td>
<td>.1952</td>
</tr>
<tr>
<td>0.0000</td>
<td>.15439</td>
<td>.0359</td>
<td></td>
<td>.0908</td>
<td>.2297</td>
</tr>
<tr>
<td>1.6598</td>
<td>.1913</td>
<td>.0493</td>
<td></td>
<td>.1030</td>
<td>.2960</td>
</tr>
<tr>
<td>Moderated Mediation Effects</td>
<td>.0223</td>
<td>.0145</td>
<td>1.017</td>
<td>.0107</td>
<td>.0573</td>
</tr>
</tbody>
</table>

Note. * p < 0.05, ** p < 0.01, *** p < 0.001, n = 279, Bootstrapped Samples = 5,000, CI = 95%

Table 2 gives the values of direct, indirect, conditional indirect, and moderated mediation effects. The regression coefficient of COC and KSB has a value of β=0.5978 at p<0.001, and that of KSO and KSB is 0.2057 at p<0.001. The regression coefficient of interaction term, which is a product of COC and KSO, is 0.0865 at p<0.05. The direct effect of the independent variable, moderating variable, and the interaction effect, all are significant. The lower and upper confidence interval does not include zero. The results in the table indicate that moderating variable KSO has a significant effect on the relationship between COC and KSB. Thus, the conditional effect occurs in this case. This confirms the hypothesis H1.

The direct effects of COC on KSB are significant after the introduction of the mediating variable in the model, as indicated by the regression coefficient β=0.4995 at p<0.001. It shows that COC has a significant effect on outcome KSB, after the introduction of mediator IFKGM, though the effect has been significantly reduced from 0.5978 to 0.4995. The conditional or moderating effects of KSO are given at three levels of the moderator, low, average, and high. The effects are significant as estimates do not contain zero. The moderated mediated effects are the most important ones as they show the index of moderated mediation. The index is small, though, .0223, but it is significant as lower and upper bound do not include zero. Hence, it is concluded that the moderated mediation takes place in this particular case between COC and KSB where KSO is the mediator, and IFKGM is the moderator. Hence, it supports the hypothesis H2 and H3. The conditional effects are graphed in Figure 2.
DISCUSSION

Research in the area of knowledge management and its processes, including knowledge sharing revolves around the theory of planned behaviour (TPB), proposed by Ajzen (1985), which describes how intentions and attitudes lead to a certain desired or intended behaviour. This study extends the scope by contributing to the theoretical paradigm of social exchange theory and its application rather than focusing on TPB. This study started by examining the mediating role of KSO between COC and KSB. In the extant literature, the direct impact of both of them has been examined. This study goes beyond in examining not only the direct but indirect effects of KSO and introducing and examining the conditional indirect effects of IFKGM on the relationship between COC and KSB through KSO.

This study examined how the clan organizational culture enhances the knowledge sharing behaviours of faculty members (teachers). COC provides various opportunities to socialize. According to SET, the socialization efforts help build a strong bond between the members working in an organization. Even the time and space available to share knowledge are the form of opportunities in an informal arrangement like lunch, celebrations, and other get together at social festivals that bring together the employees of an organization from different levels. Thus, the organizational context is important in providing knowledge sharing opportunities. COC supports the IFKGM, as shown by the results of the hypothesis. IFKGM has a conditional effect on the relationship between COC and the criterion variables. The relationship between COC and KSB would be stronger and more pronounced in the presence of informal knowledge governance mechanisms in organisations through KSO and would be weaker if informal mechanisms are not recognized in an organization. Thus, the KSB of faculty members is contingent upon the level of IFKGM present in HEIs.

This study enriches the SET in another way by conforming to the conditional indirect role of IFKGM in developing KSO. Studies have measured the direct effects of IFKGM on KSO, but there would rarely be any study that examined the conditional indirect effect of IFKGM on KSB through KSO in a developing country like Pakistan.

This study has combined the individual and organizational factors to examine their impact on KSB. It provides a significant contribution by demonstrating that both individual and organizational factors are important for improving positive behaviours among teachers of HEIs who are the knowledge holders and providers in today’s dynamic world.

**Theoretical Implications**
This study contributes to the literature in the following ways. First, this study enhances the understanding of the role of organizational culture in enhancing KSB through developing a moderated mediation model involving IFKGM as a moderator. Different predictors of KSB have been examined in past studies like organizational climate, motivation (Huang et al.: 2013, pp.677–694), leadership style, but it has rarely been discussed thoroughly in the context of developing countries. Second, there are many studies that have investigated the outcomes of culture and the predictors of KSB. But, little is examined about the intervening role KSO can play or the boundary conditions that translate into a certain behavior under special circumstances. Third, past studies have focused on either the individual factors shaping KSB or the organizational factors that affect KSB. This study is a response to the call for investigating the impact of both the micro and macro-level factors on KSB. KSO influences the KSB; thus, COC presumably enhances the opportunities for sharing knowledge. Findings suggest the crucial role of IFKGM as a condition which reinforces the KSB when an organization has informal mechanisms and supportive work climate. Thus, in the presence of informal means the effect of culture would be more pronounced when opportunities are provided by an organization, and it will be less recognizable in the absence of informal means of mechanisms to share knowledge. Finally, the study provides considerable insight into the simultaneous examination of positive workplace behaviors and their boundary conditions by developing and testing a moderated mediation model.

Practical Implications

In practice, KSB is a behavior that facilitates the flow of knowledge and improves organizational performance and sustainability. This study suggests ways to improve KSB. The first factor in this regard is COC. This culture makes two-way communication easier, focuses on decentralization and empowerment easier as it is not rigid as a hierarchical culture. Organizations should have a set of incorporated values that focus on the family-like structures where people can easily collaborate and share their experiences, skills, and knowledge. Second, KSO provided by certain organizational culture would help in improving KSB. Third, the effect of culture on KSB through KSO would be more pronounced when informal mechanisms exist in an organization. Organizations should provide more opportunities for informal social interactions. It enhances the chances of communication and builds friendship among individuals working in an organization. Opportunities provided may not be fruitful if informal mechanisms and reciprocal exchange relationships are lacking in a certain organizational context.

Limitations and Future Research Directions

Despite the contributions, there are few limitations in this study. First, statistical tests revealed that there was no issue of common method variance, but as the data was a single source, the possibility of CMV cannot be completely ignored. In collective cultures like Pakistan, there is a possibility of responding positively that may lead to social desirability bias. In the future, studies may use time-lagged and multiple phases, multiple respondent data to avoid these biases. A longitudinal study may reduce these errors in the future.

Second, data were collected by carefully selecting the sample, but the study is limited to the higher education sector. It may reduce external validity. Third, the study used COC as a predictor to KSB, and future studies may use other cultural orientations from CVF as a predictor like hierarchy, adhocracy, or market culture. Fourth, other behavioral outcomes may be examined in the future, like citizenship behaviour and negative workplace behaviors, and how they are influenced by combining various dimensions of organizational culture and governance mechanisms. Last, KSO partially mediated the COC and KSB relationship. Future studies may examine other mediators like personality, psychological empowerment, or organizational identity.
CONCLUSION

Findings of the study and discussion suggest that KSO intervenes between COC and KSB by utilizing the SET perspective. The conditional role of IFKGM is confirmed on the mediated relationship of COC and KSB through KSO. Role of organizational culture and knowledge governance mechanisms can be investigated along with different social contexts in relation to outcomes. The study concludes that COC, IFKGM, and KSO significantly shape the behaviour of people at the workplace.

BIODATA

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BIBLIOGRAPHY


