

## **Leveraging Tacit Knowledge Sharing behaviour in NGOs-Run Elementary Schools in Punjab, Pakistan: Investigating the role of Ethical Climate and Organizational Commitment**

Muhammad Adnan Sial<sup>\*</sup>, Kashif Rathore<sup>\*\*</sup> and Mukaram Ali Khan<sup>\*</sup>

---

### **Abstract**

The study is conducted to understand the possible relationship of two dimensions of ethical climate vis-a-vis benevolent ethical climate and principle ethical climate with tacit knowledge sharing behavior of the employees working in elementary school system run by NGOs. In addition, role of organizational commitment as a mediator is also studied. Utilizing a cross sectional, data was randomly collected from 314 teachers employed in 40 NGO-run schools from 37 districts across Punjab. For testing the proposed model, primary data was collected through questionnaires -developed by scales adopted from different studies. For validity and reliability of the scales, confirmatory factor analysis was run by using AMOS. Whereas, hypotheses were tested through SEM by using AMOS. The study confirmed the mediating role of organizational commitment for principle ethical climate and benevolence ethical climate with tacit knowledge sharing behaviour.

**Keywords:** NGO, ethical climate, organizational commitment, tacit knowledge, knowledge sharing bahviour

---

<sup>\*</sup>Ph. D. Scholar, Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan.

Email: muhammad\_adnansial@yahoo.com

<sup>\*\*</sup> Assistant Professor and Director, Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan. Email: kashif.ias@pu.edu.pk

<sup>\*\*\*</sup> Ph. D. Scholar, Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan.

Email: mukaramali@ias.edu.pk

## **Introduction**

Resource in the hand of an organization always gained tremendous importance and reason to exist (Suppiah & Sandhu, 2011). Organizations are the combination of resources and among all, knowledge is considered as the most vital resource (Suppiah & Sandhu, 2011). Nonaka (2007) studied that the role of Organizational Commitment (OC) is important to share tacit knowledge, which is vital source to perform in the dynamic and changing nature of economies. This appears more true in present day, when there is continuous change in customer's demands, ever increasing competitors and obsoleting technology and old methods of production (Nonaka, 2007). People behave differently when they work as part of the organization and seek the answer of "What in it for me" (Nonaka & Takeuchi, 2011 p. 2). Ethics is about what should be adopted or avoided and what is acceptable or allowed comparing to what should be avoided or not allowed in a specific social arena (Oncer & Yildiz, 2012). On the contrary, Ethical Climate (EC) is about the shared values, standards and perceptions about the work place (Cullen, Parboteeah, & Victor, 2003; Victor & Cullen, 1988).

## **Motivation and Rationale**

Knowledge sharing can increase the employee performance (Rahman, Mannan, Hossain, Zaman, & Hassan, 2018) and improve the organizational effectiveness, manifolds (Lekhawipat, Wei, & Lin, 2018). It is well known fact that larger portion of the knowledge is of tacit nature and in same backdrop, numerous studies recommended the creation of the environment facilitating the Tacit Knowledge Sharing Behaviour (TKSB) of employees (Suppiah & Sandhu, 2011). It was in this context that Sadegh et al., (2018) recommended a study which could help to understand the relationship of organizational culture with knowledge sharing behaviour in the presence of some other variables as moderator/mediating. Aforementioned in view, OC is studied as mediating between different facets of EC and TKSB.

Organizational culture plays a pivotal role to ensure the knowledge sharing behaviour of the employees of an organization, thus, different organizational cultures leads to divergent behaviours (Sadegh et al., 2018). In addition, EC is also an important factor which considerably affects the performance of an organization, making it successful or unsuccessful (Ma'amor, Ann, Munir, & Hashim, 2012; Newman, Round, Bhattacharya, & Roy, 2017). Thus, measurement of EC at individual level and studying its relationship with behaviour is always of a great importance (Newman et al., 2017).

Whereas, Egoistic Ethical Climate (EEC) as one of the ethical climates was not included in the studied model. The decision to exclude EEC is due to its characteristics. For instance, egoism is about maximization of self-interest without considering the needs and interests of others (Cullen et al., 2003). In EEC, organization related norms facilitate to achieve the level of satisfaction which relate to self-interest and do not consider the losses to others (Cullen et al., 2003; Martin & Cullen, 2006). Contrary to this, NGOs are working primarily due to differentiated nature of tasks, roles and targets. NGOs work to share the load of the government and work for the betterment of the general public (Turner & Hulme, 1997). Therefore, employees focus on providing selfless services facilitating masses. For instance different studies (Bell & Aggleton, 2013; Matschke, Moskaliuk, & Cress, 2012; Mukhtar, Sial, Imran, & Jilani, 2012) defined NGOs as organizations which operate with the focus of benefiting the people at large rather than achieving personal goals at the cost of losses of others. Whereas, in conventional business entities, organizational climate prevails, thus, individuals are self-centred, give priority to personal interests and work for personal goals not taking in view of losses and gains of others (Cullen et al., 2003; Martin & Cullen, 2006; Victor & Cullen, 1988). Therefore, rightly so, most research on EEC has been carried out in business sector. In this backdrop, exclusion of EEC from the model is justified in case of NGOs related organizations.

Hence, different studies (Lekhawipat et al., 2018; Newman et al., 2017; Sadegh et al., 2018; Suppiah & Sandhu, 2011) motivated to study the relationship of the Principle Ethical Climate and Benevolence Ethical Climate as two types of EC with TKSB of the employees working in NGOs-run schools in province Punjab of Pakistan. In addition to the theoretical support the current circumstances of the country are also important especially, when country has challenges associated to low literacy rate and inability of the education sector to provide elementary education to every citizen. The limited resources at the end of the government are hindering the coverage of the education sector and this load is being shared by the NGOs and civil sector to ensure that those who are deprived off or having less opportunities can be benefited. Thus, this research will lead to understand how different variables are related to each other due to different natures and characteristics, which will be a helping understanding for the practitioners, professionals and policy makers.

### **Tacit Knowledge Sharing Behaviour**

Knowledge is a “*justified true belief*” (Nonaka, 1994 p. 15). The knowledge is of two types, i.e. explicit and tacit (Goodman, 2003; Nonaka, 1994; Polanyi, 1958). While, Tacit knowledge is inarticulable and is part of the intuition and cognition (Suppiah & Sandhu, 2011), difficult to codify (Borges, 2013). On the other hand, explicit knowledge is codifiable and easy to transfer (Nonaka et al., 1994; Polanyi, 1958).

Knowledge sharing behavior is attribute of an employee in which employee of an organization shares whatever he /she has learnt with other employees of the organization (Lekhawip at et al., 2018; Sadegh et al., 2018). In knowledge sharing behavior, one evaluate as to how much he/she shares the knowledge with others (Lekhawipat et al., 2018). Knowledge sharing becomes difficult in absence of organizational culture which is essential to support such activities (Sadegh et al., 2018). In any growing concern, therefore, two ways knowledge sharing behaviour ensure smooth flow of knowledge among employees of the organization besides increase the performance of the employees, should they practice the TKS (Rahman et al., 2018). Suppiah and Sandhu (2011) studied that TKS has four facets to include, organizational communication, personal interactions, mentoring / tutoring and free willingness to share knowledge. Thus, keeping in view the understanding developed about TK and KSB, TKS can be defined as the degree to which an individual can evaluate him/her self as to how much he/she can share his/her tacit knowledge with others.

### **Ethical Climate**

According to Stamenkovic, Njegovan and Vukadinovic (2018), Ethical Climate (EC) of an organization can't be formally communicated or documented but is manifested through the transparent efforts of the management. This, then lead to formulate an atmosphere for employees in which they follow superior standards associated with top down accountability. EC provides the guidance which is essential for decision making and solving business related issues (Stamenkovic et al., 2018). Employees often hesitate in sharing what they know (Lekhawip at et al., 2018). Sometime they fear of losing the privileged position they hold due to being unique and on other occasion, rewards awarded are considered, insufficient (Lekhawipat et al., 2018).

EC of an organization promote and enhances the positive work behavior of the employees and facilitate in non-productive or destructive work behavior (Newman et al., 2017; Pagliaro, Presti, Barattucci, Giannella, & Barreto, 2018). According to the literature, context and climate are to be taken differently. In Context, shared perceptions and knowledge leads to obtain a desired behaviors (Lekhawip at et al., 2018). While, climate, includes, the shared perceptions of the people of a group or social arena

(Cullen et al., 2003; Victor & Cullen, 1988). Thus, keeping in view the different studies (e.g. Cullen et al., 2003; Lawter, Rua, & Guo, 2014; Lekhawipat et al., 2018; Newman, Round, Bhattacharya, & Roy, 2017; Victor & Cullen, 1988) EC of any organization can be the possible driver to get the TKS of the employees.

According to different studies (Borges, 2013; Suppiah & Sandhu, 2011), just like factors related to individuals, factors associated to organizations do also affect the TKS of the individuals. As TKS belongs to individuals, it is the responsibility of the organization to ensure such practices or policies exist which promote and contribute towards acquisition of TKS (Hameed et al., 2019). The success of an organization largely depends upon its ethical climate. Therefore, organizations always endeavor to take such measures which contribute to develop a specific ethical climate promoting specific behaviour whereby employees' commitment / loyalty toward the organization is ensured (Stamenkovic et al., 2018). According to Kaur (2017), ethical values associated to an organization help in creation of EC.

The organizations are a mix match of various forms of the EC. The available variance mainly depends upon the varying ideology related to the ethical values which exist in that organization (Kaur, 2017). There are three types of EC named, benevolent, egoistic and principle (Cullen et al., 2003; Victor & Cullen, 1988). According to Lekhawipat et al. (2018), factors related to an organization can be the barrier to the behavior to TKS. Therefore, it is pertinent to understand the relationship of ethical climate with TKS. This in view, the relationship of varying characteristics of different types of ethical climate i.e. benevolent, principle and egoistic is studied in succeeding paragraphs.

### **Benevolence Ethical Climate**

Benevolence is about taking care of others (Cullen et al., 2003). The individuals practicing BEC take decisions bearing this in mind that these decisions will be of greater benefit of employees at large (Cullen et al., 2003). Moreover, under BEC employees feel organization as caring and supportive to them (Cullen et al., 2003). As a result, they respond with their positive behaviour and commitment toward organization (Cullen et al., 2003). Trevino, Butterfield and McCabe (1998) studied that in case of BEC, the OC of the employees will increase. Therefore, BEC has a positive relationship with OC. Consequent to above, following hypothesis is generated.

H<sub>1</sub>: Benevolent ethical climate has a positive relationship with tacit knowledge sharing behaviour of the employees working in elementary schools run by NGOs.

### **Principle Ethical Climate**

Principle Ethical Climate (PEC) is the type of climate where norms related to an organization are supportive to follow abstract principle irrespective of any situation or outcome (Cullen et al., 2003). PEC has positive relationship with OC, in case of professional employees but no relationship is supported for non-professional employees (Cullen et al., 2003). Trevino et al. (1998) studied that PEC leads to rise in OC of the employees. Considering employees of NGOs run elementary schools as most important and professional, the relationship may be supported by the data. Thus, ensuing to above, following hypothesis is formulated: -

H<sub>2</sub>: Principle Ethical Climate has positive relationship with tacit knowledge sharing behaviour of the employees working in elementary schools run by NGOs.

### **Organizational Commitment**

Mowday, Steers and Porter (1979) characterized commitment as i) higher level of acceptance and belief in the goals and values of an organization; ii) willingness of an individual to put maximum effort as a representative of the organization; and iii) having higher level of desire to continue with the organization. Organizational Commitment (OC) has three facets, i.e. affective, continuous and normative (Allen & Meyer, 1990). While, affective commitment is related to emotional attachment, continuous commitment means benefits obtained from employers and / or limited substitute opportunities and normative commitment means sense of obligation at the end of the employee which restrain it to leave the employer (Allen & Meyer, 1990). According to the past literature from 2006 to 2016, EC can have significant relationship with OC of the employees and OC can be the mediator between EC and work behaviour / ethical work behaviour (in this study TKSB) (Newman et al., 2017). EC has positive and substantial relationship with OC of the employees of an organization (Ma'amor et al., 2012). OC has positive relationship with the positive or work related behaviour e.g. organizational citizenship behaviour (Arora & Nuseir, 2012; Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). Moreover, OC has strong relationship with different types of EC (Kaur, 2017). Thus, the following hypothesis emerges;

H<sub>3</sub>: Organizational commitment has positive relationship with tacit knowledge sharing behaviour.

H<sub>4</sub>: Organizational commitment play a mediating role for the relationship of principle ethical climate and benevolence ethical climate with tacit knowledge sharing behavior.

## **Material and Methods**

### **Population**

Employees working in elementary school system run and controlled by NGOs in province Punjab of Pakistan were targeted.

### **Sample Size and Strategy**

The sample size consisted of 400 employees working in different schools run by NGOs. Most of the NGOs are working in health sector whereas very few are working in education sector and the law and order situation in some areas of the country led to limit to province Punjab, while, data was only collected from the permanent cadre employees as these organizations had outsourced sanitary, security and pick / drop related facilities.

### **Research Design**

Being cross-sectional study, data was collected once in approximately 75 days. The data was collected from the field setting with no change to normal routine. Printout of the questionnaire was provided to the targeted employees. The study is ex-post facto and hypotheses of the study were tested by using AMOS application.

### **Instrumentation**

Questionnaire was used as an instrument to collect the primary data. The questionnaire was attached with covering letter containing information related to purpose, scope and nature of the study. It also guaranteed the anonymity of the respondents. The questionnaire comprised of five sections. First section related to demographic factors in which information related to gender, educational qualification, marital status and experience was collected. Second section was related to BEC, third section was related to PEC, fourth section measured OC and fifth section covered TKS. For second, third, fourth and fifth section the responses were measured on five points Likert scale philosophy where 1,2,3,4 and 5 depicted, Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree, respectively. The scale used for two types of EC i.e. PEC and BEC was developed by Cullen, Victor and Bronson (1993). The OC was measured through eight items used and developed by Porter, et al. (1974). Whereas, TKS was measured through 21 items scale based on different studies, i.e. Yi (2009); Roman-Velazquez, (2005); and Davenport and Prusak (1998).

Keeping in view the study conducted by Suppiah and Sandhu (2011), TKS is considered as four dimensional vis-à-vis, organizational communications, personal interactions, mentoring / tutoring and willingness to share knowledge freely. The organizational communications (8 items) and personal interactions (5 items) were

measured by items adopted from Yi (2009), while mentoring / tutoring (4 items) were measured by items taken from Roman-Velazquez (2005). Moreover, willingness to share knowledge freely (4 items) was measured through items taken from Davenport and Prusak (1998). The reliability and validity of the used scales for the current research is reported in Table 3.

### Data Collection

The data was collected through nominated resource persons, who's formal permission was sorted from the respective heads of the organizations, prior to the collection of data. These resource persons were fully appraised of all research related ethics to ensure that all ethical standards are met. They were made fully aware of purpose, etc. to make them confident to respond to any query arising during the data collection procedure. 400 questionnaires were distributed among the target employees. Multistage random sampling technique was used to approach and collect the data from the teachers of NGO run elementary schools. Facilitation letter from Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan was drawn in the name of the Secretary, Punjab Local Government and Community Development department, who graciously coordinated and facilitated the researchers in district governments' departments for data collection.

Table 1

#### *Description of Sample Selection*

Sampling Stages	North Punjab	Central Punjab	Southern Punjab	Total
Total Districts	6	22	9	37
Districts Selected	3	12	5	20
Schools Selected (2 per district)	6	24	10	40
Teachers Selected (10 per school)	60	240	100	400

Table 1 shows the total number of districts in Province Punjab are 37 out of which 6 are in Northern Punjab, 22 in Central Punjab and 9 in Southern Punjab. Out of a total 37 districts, 20 districts were randomly and proportionately selected from Northern, Central and Southern regions of Punjab. Afterwards, 40 schools (two from each of the districts selected in the previous stage) were selected, i.e.6 schools from Northern Punjab, 24 from Central Punjab and 10 from Southern Punjab. The schools in each district were randomly selected from the list of registered NGO-run schools available from Community Development Department of each district. The teachers were selected in a random way i.e. the school management was requested through District Education Authority to distribute questionnaires to 10 randomly selected teachers in each of the school selected by researchers. 314 responses were eventually received after 6 weeks. None of the questionnaire was rejected because of unusable data or missing values. Thus, the response rate remained 78.5%.

Table 2  
*Frequency Distribution of the Respondents Based on Demographic Factors*

		Frequency	Percent	Cumulative Percent
Educational Qualification	Bachelor	49	15.6	15.6
	Master	198	63.1	78.7
	MS / MPhil	54	17.2	95.9
	Ph. D.	13	4.1	100
Gender	Male	175	55.7	55.7
	Female	139	44.3	100
Marital Status	Bachelor	166	52.9	52.9
	Married	144	45.9	98.7
	Divorced	4	1.3	100
Age	Below 20 Years	3	1	1
	20 – 29 Years	165	52.5	53.5
	30-39 Years	118	37.6	91.1
	40-49 Years	25	8	99
	50-60 Years	3	1	100

From Table 2, it is concluded that majority of the respondents were Master level degree holders with male ratio of 55.7% showing no major difference of contribution of male /female respondents. Similarly, no variation was seen between bachelor and married. However, majority of the respondents, i.e. 165 were from age group 20-29 years. Afore mentioned, it can be concluded that sample was true representation of the population having balance contribution of all dimensions related to population.

### **Data Analysis**

For data analysis AMOS software application was used. First of all measurement model is tested for which Confirmatory Factor Analysis (CFA) is performed and items with loading less than .5 were deleted. Through CFA convergent and discriminant validity were tested. Then composite reliability and internal reliability analysis is performed. After ensuring the validity and reliability of the data Structural Equation Modeling (SEM) is performed and hypotheses are tested.

**Confirmatory Factor Analysis**

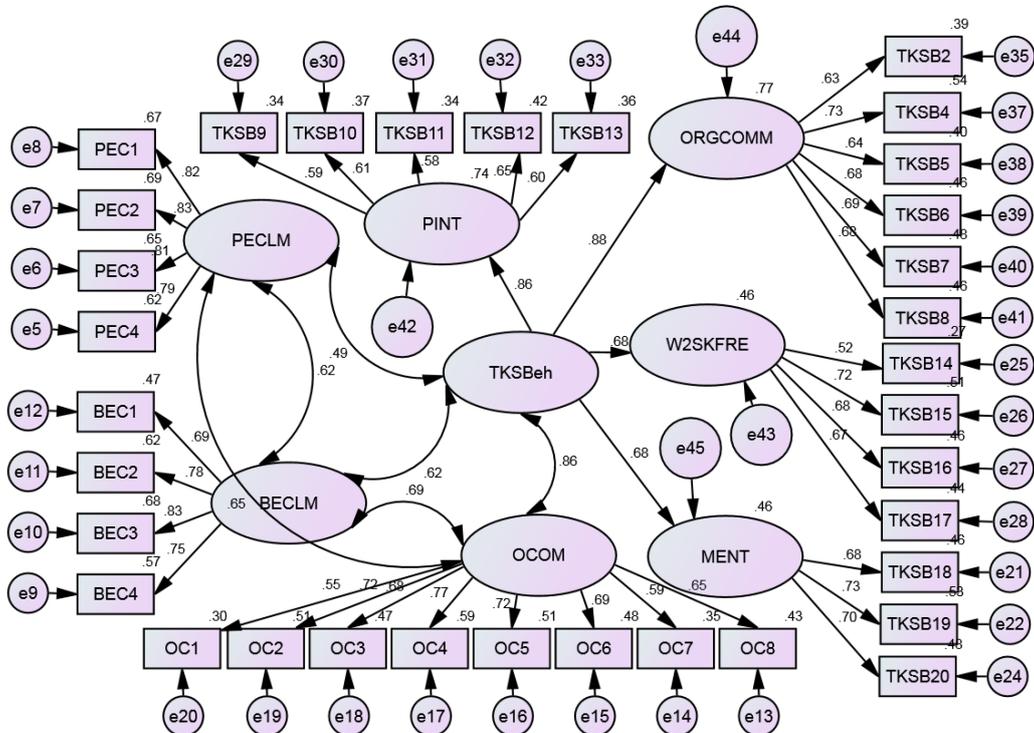


Figure 1. Measurement Model

From measurement model three items i.e. TKS1, TKS2 and TKS21 measuring TKS were deleted due to power loading i.e. less than .5 and items with loading more than .5 were retained. The measurement model shown in Figure 1 reflects the modified measurement model with values  $CMIN/DF = 2.03$ ,  $RMR = .036$ ,  $IFI = .902$ ,  $TLI = .900$ ,  $CFI = .901$ ,  $PRATIO = .919$  and  $RMSEA = .056$

The values for all of the indicators, i.e.  $CMIN/DF$ ,  $RMR$ ,  $IFI$ ,  $TLI$ ,  $CFI$ ,  $PRATION$ ,  $RMSEA$  and  $PCLOSE$  are according to the guidelines given by different studies (e.g. Awang, 2015; Hair et al., 2017; Hu & Bentler, 1999; McDonald & Ho, 2002), thus, the modified model is considered fit for SEM.

Table 3

*Descriptive Statistics, Validity and Reliability Analysis of the Variables*

Construct	AVE	CR	MSV	ASV	Convergent Validity CR > AVE	Discriminant Validity MSV < AVE ASV < AVE	Mean	SD	No of Items	Cronbach's Alpha
BEC	.58	.85	.37	.32	YES	YES	3.77	.65	4	.838
PEC	.66	.89	.34	.27	YES	YES	4.09	.70	4	.882
OC	.46	.87	.42	.38	YES	YES	3.91	.54	8	.867
TKSB	.43	.93	.42	.30	YES	YES	3.81	.44	18	.886

\*Calculated from original model.

The Table 3 encompasses the values for Average Variance Extracted (AVE), which should be greater than 0.5, whereas Composite Reliability (CR) should be greater than 0.6. Maximum Shared Variance (MSV) and Average Shared Variance (ASV) are calculated manually in line with the guidelines provided by Hair, Black, Babin and Anderson (2017). The CR value for each construct is greater than AVE, which confirms the convergent validity and value of MSV and ASV lesser than AVE indicates the discriminant validity of the construct.

From Table 3, it is also concluded that data for all of the variables is reliable at Cronbach's  $\alpha > .7$ . Thus, keeping in view the understanding of the Nunnally and Bernsein (1994), the data is considered reliable and can be used for further data analysis. The values of mean and standard deviation (SD) indicates that majority of the respondents, i.e. 68.25% were either agree or strongly agree with the statements measuring PEC, BEC, OC and TKSB.

Table 4

*Discriminant Validity*

	BEC	PEC	OC	TKSB
BEC	.76			
PEC	.54	.81		
OC	.61	.58	.68	
TKSB	.54	.44	.65	.66

Withstanding with the guidelines provided by Straub, Boudreau and Gefen (2004), discriminant validity does exist, if value for square root of AVE is greater than the correlation of the latent constructs with others of the same model. The correlation among latent variables is  $\leq .85$ , which is the indicator of discriminant validity and is in accordance with the guidelines given by Awang (2014).



Thus, relationship of PEC and BEC with OC was found significant at  $p < 0.05$  and relationship of OC with TKS<sub>B</sub> is also found significant at  $p < .05$ , therefore, hypothesis 3 and 4 duly supported by the data were accepted, accordingly. Where accepting hypothesis 4 means PEC and BEC have significant relationship with TKS<sub>B</sub> through OC. Whereas, hypotheses 1 and 2, indicating the direct relationship of PEC and BEC with TKS<sub>B</sub>, were not supported by the data.

## **Discussion**

It is the responsibility of the organization to analyze; what ethical climate or culture ought to be and then establish the ethical climate suitable to achieve the strategic targets set by the organization (Chun, 2019; Kangas et al., 2018). Moreover, Kangas et al. (2018) studied that organizations should establish such a climate where factors leading to unethical behaviors are snubbed or reprimanded and ethical are rewarded.

The relationship of BEC with TKS<sub>B</sub> through a mediating variable OC is found significant and finding correctly correlates with the findings of different studies and supported by different studies (Cullen et al., 2003; Laratta, 2009, 2010; Martin & Cullen, 2006; Matschke et al., 2012). It is well established that BEC is about taking care of others and facilitating them to achieve their goals. Keeping in view the past literature and understanding about the BEC, i.e. the climate is about taking care of others rather putting oneself first, its relationship with TKS<sub>B</sub> through OC is significant due to the nature of tasks, roles and targets of the NGOs. The study also found the substantial relationship of PEC, which is in accordance with the different studies (Cullen et al., 2003; Martin & Cullen, 2006; Victor & Cullen, 1988). The study further clarifies that such type of EC i.e. PEC is based on the understanding that rules and regulations of an organization support the individuals to achieve their goals.

The role of OC as mediating variable is also supported by the data and this can be verified based on the previous studies. For instance, Allen and Meyer (1990) and Mowday et al. (1979) characterized OC as an indicator of higher degree of the belief in goals and values of the organization and readiness to exert maximum effort as a representative to achieve pre-decided goals. It may also lead to situations where individual sex habit the desire to remain in-contact with the organization (Allen & Meyer, 1990; Mowday et al., 1979).

## Conclusions

Notwithstanding, the research has been conducted in NGOs run elementary schools, its findings can also be implemented in the elementary schools run by public sector organizations, where, focus of the government remains primarily on welfare of the people rather than making profits (Laratta, 2009, 2010). It is well established that Principle Ethical Climate (PEC) and Benevolent Ethical Climate (BEC) are having significant relationship with Tacit Knowledge Sharing Behaviour (TKSB) through mediating variable i.e. Organizational Commitment (OC). Therefore, it supports the TKSB which further may lead to the achievement of the organizational goals in more befitting manner. Moreover, characteristics of PEC and BEC lend further support to TKSB and OC of the employees. It may be concluded that PEC and BEC should receive adequate attention in leadership strategy and practice. This is expected to increase the level of OC besides ensuring the TKSB of the employees working in NGOs. Thus, giving adequate attention to PEC and BEC is in line with the study conducted by Kangas et al. (2018), which emphasis organizations to establish such arrangements which promote positive work behavior.

## Limitations and Suggestions

The study is conducted based on the data collected from NGOs and a comparative study based on different sectors and professions is recommended which may be a useful contribution to the body of knowledge. Moreover, similar study may be conducted in private sector run elementary school system which will be helpful to understand the effects of ethical climate on positive work behaviour of the employees working in the private sector.

## References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Arora, N., & Nuseir, M. T. (2012). Study-based moderators influencing the relationship between organizational climate and employee's organization commitment: A meta-analysis. *EuroMed Journal of Business*, 7(2), 201–220.
- Awang, Z. (2015). Validating the measurement model: CFA. In *A Handbook on SEM* (2nd ed., pp. 54–73).

- Bell, S., & Aggleton, P. (2013). Social influences on young people's sexual health in Uganda. *Health Education, 113*(2), 102–114. <https://doi.org/10.1108/09654281311298795>
- Borges, R. (2013). Tacit knowledge sharing between IT workers: The role of organizational culture, personality, and social environment. *Management Research Review, 36*(1), 89–108. <https://doi.org/10.1108/01409171311284602>
- Chun, R. (2019). How virtuous global firms say they are: A content analysis of ethical values. *Journal of Business Ethics, 155*(1), 57–73. <https://doi.org/10.1007/s10551-017-3525-3>
- Cullen, J. B., Parboteeah, K. P., & Victor, B. (2003). The effects of ethical climates on organizational commitment: A two-study analysis. *Journal of Business Ethics, 46*(2), 127–141.
- Cullen, J. B., Victor, B., & Bronson, J. W. (1993). Ethical climate questionnaire: An assessment of its development and validity. *Psychological Reports, 73*, 667–674.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Boston: Harvard Business School Press. <https://doi.org/10.1109/EMR.2003.1267012>
- Goodman, C. P. (2003). The tacit dimension. *Polanyiana, 1*(2), 133–157. [https://doi.org/10.1016/0021-9924\(68\)90018-X](https://doi.org/10.1016/0021-9924(68)90018-X)
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2017). *Multivariate Data Analysis* (7th ed.).
- Hameed, Z., Khan, I. U., Sheikh, Z., Islam, T., Rasheed, M. I., & Naeem, R. M. (2019). Organizational justice and knowledge sharing behavior: The role of psychological ownership and perceived organizational support. *Personnel Review, 48*(3), 748–773. <https://doi.org/10.1108/PR-07-2017-0217>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55.
- Kangas, M., Kaptein, M., Huhtala, M., La, A., Pihlajasaari, P., & Feldt, T. (2018). Why do managers leave their organization? Investigating the role of ethical organizational culture in managerial turnover. *Journal of Business Ethics, 153*(3), 707–723. <https://doi.org/10.1007/s10551-016-3363-8>

- Kaur, J. (2017). Exploring relationship among ethical climate types and organizational commitment: A case of Indian banking sector. *Journal of Indian Business Research*, 9(1), 20–40.
- Laratta, R. (2009). Ethical climate in nonprofit organizations: A comparative study. *International Journal of Sociology and Social Policy*, 29(7/8), 358–371. <https://doi.org/10.1108/01443330910975678>
- Laratta, R. (2010). Ethical climate in nonprofit and government sectors: The case of Japan. *Social Enterprise Journal*, 6(3), 225–249. <https://doi.org/10.1108/17508611011088823>
- Lawter, L., Rua, T., & Guo, C. (2014). The interaction between learning styles, ethics education, and ethical climate. *Journal of Management Development*, 33(6), 580–593. <https://doi.org/10.1108/JMD-04-2014-0030>
- Lekhawipat, W., Wei, Y., & Lin, C. (2018). How internal attributions affect knowledge sharing behavior. *Journal of Knowledge Management*, 22(4), 867–886. <https://doi.org/10.1108/JKM-02-2017-0081>
- Ma'amor, H., Ann, H. J., Munir, R. I. S., & Hashim, N. (2012). The relationship between ethical climates and organizational commitment in manufacturing companies. *International Proceedings of Economics Development and Research*, 56(27), 134–138. <https://doi.org/10.7763/IPEDR>.
- Martin, K. D., & Cullen, J. B. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, 69(2), 175–194. <https://doi.org/10.1007/s10551-006-9084-7>
- Matschke, C., Moskaliuk, J., & Cress, U. (2012). Knowledge exchange using Web 2.0 technologies in NGOs. *Journal of Knowledge Management*, 16(1), 159–176. <https://doi.org/10.1108/13673271211199007>
- McDonald, R. P., & Ho, M. R. (2002). Principles and practice in reporting structural equation analysis. *Psychological Methods*, 7(1), 64–82. <https://doi.org/10.1037/1082-989X.7.1.64>
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment and professional commitment. *The Journal of Vocational Behavior*, 14(2), 265–267. <https://doi.org/10.1080/00224545.1996.9714004>

- Mukhtar, A., Sial, M. A., Imran, A., & Jilani, S. M. A. (2012). Impact of HR practices on organizational citizenship behavior and mediating effect of organizational commitment in NGOs of Pakistan. *World Applied Sciences Journal*, 18(7), 901–908. <https://doi.org/10.5829/idosi.wasj.2012.18.07.376>
- Newman, A., Round, H., Bhattacharya, S., & Roy, A. (2017). Ethical climates in organizations: A review and research agenda. *Business Ethics Quarterly*, 27(4), 475–512. <https://doi.org/10.1017/beq.2017.23>
- Nonaka, I. (1994). A dynamic theory of organization knowledge creation. *Organization Science*. <https://doi.org/10.1287/orsc.5.1.14>
- Nonaka, I. (2007). The knowledge-creating company. *Harvard Business Review*, (July-August), 3–19. [https://doi.org/10.1016/S0969-4765\(04\)00066-9](https://doi.org/10.1016/S0969-4765(04)00066-9)
- Nonaka, I., Byosiere, P., Borucki, C. C., & Konno, N. (1994). Organizational knowledge creation theory: A first comprehensive test. *International Business Review*, 3(4), 337–351. [https://doi.org/10.1016/0969-5931\(94\)90027-2](https://doi.org/10.1016/0969-5931(94)90027-2)
- Nonaka, I., & Takeuchi, H. (2011). The big idea: The wise leader. *Harvard Business Review*, (May), 1–8.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York: McGraw-Hill.
- Oncer, A. Z., & Yildiz, M. L. (2012). The impact of ethical climate on relationship between corporate reputation and organizational identification. In *8th International Strategic Management Conference* (Vol. 58, pp. 714–723). Elsevier Ltd. <https://doi.org/10.1016/j.sbspro.2012.09.1049>
- Pagliaro, S., Presti, A. Lo, Barattucci, M., Giannella, V. A., & Barreto, M. (2018). On the effects of ethical climate(s) on employees' behavior: A social identity approach. *Frontiers in Psychology*, 9, 1–10. <https://doi.org/10.3389/fpsyg.2018.00960>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Polanyi, M. (1958). *Personal Knowledge Towards A Post-Critical Philosophy*. London, UK: Routledge Taylor & Francis Group. <https://doi.org/10.1136/bmj.332.7534.129>

- Rahman, M. S., Mannan, M., Hossain, M. A., Zaman, M. H., & Hassan, H. (2018). Tacit knowledge sharing behaviour among the academic staff: Trust, self-efficacy, motivation and Big Five personality traits embedded model. *International Journal of Educational Management*, 32(5), 761–782.
- Sadegh, T., Khani, R. M., & Modaresi, F. (2018). Introducing a model of relationship between knowledge sharing behavior and organizational citizenship behavior and positively orientated organizational behavior: A two-wave study. *International Journal of Knowledge Management*, 14(3), 21–36. <https://doi.org/10.4018/IJKM.2018070102>
- Stamenkovic, S., Njegovan, B. R., & Vukadinovic, M. S. (2018). Intra-national diversity: Perception of organizational justice and ethical climate in organizations in Serbia. *Cross Cultural & Strategic Management*, 25(3), 425–442. <https://doi.org/10.1108/CCSM-05-2017-0061>
- Straub, D., Boudreau, M.-C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communication of the Association for Information Systems*, 13(1), 380–427. <https://doi.org/10.17705/1CAIS.01324>
- Suppiah, V., & Sandhu, M. S. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of Knowledge Management*, 15(3), 462–477. <https://doi.org/10.1108/13673271111137439>
- Turner, M. M., & Hulme, D. (1997). *Governance, administration, and development: Making the state work*. USA: Kumarian Press.
- Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1), 101–125.
- Yi, J. (2009). A measure of knowledge sharing behavior: Scale development and validation. *Knowledge Management Research & Practice*, 7(1), 65–81. <https://doi.org/10.1057/kmrp.2008.36>