

The Influence of School Ethical Climate on Teachers' Organizational Citizenship Behavior: The Mediating Effect of Work Ethic

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Abstract: In this study, 673 middle and high school teachers were investigated by questionnaire in order to explore the relationship between school ethical climate (SEC) and teachers' organizational citizenship behavior (TOCB) and the mediating effect of teachers' work ethic (TWE) between them. The results show that SEC not only positively predicts TWE, but also TWE positively predicts TOCB. Work meaning dimension, behavior quality dimension and objective seeking dimension respectively play a part of mediating role between caring-oriented ethical climate and TOCB, and they respectively play a complete mediating role between rule-oriented ethical climate and TOCB. Conclusion: TWE play a part of mediating role between caring-oriented ethical climate and TOCB, and plays a complete mediating role between rule-oriented ethical climate and TOCB. In a word, TWE plays a mediating role between SEC and TOCB.

1. Introduction

Since Organ (1988) proposed the concept of "Organizational Citizenship Behavior" (OCB), the research on it has been going on for 30 years. The research field mainly involves management, behavioral science and psychology, and these work have been expanded into interdisciplinary research in areas such as health care, education, public organizations and service industries (Rose, 2016). In order to improve the organizational effectiveness of schools, teachers' organizational citizenship behavior (TOCB) has always been an important indicator (Guo, Fang, 2006). DiPaola and Tschannen-Moran first introduced OCB to school organizations in 2001, arguing that TOCB has an independent impact on school performance, and high organizational citizenship behavior can encourage teachers to engage in more effective teaching support activities, and make schools more efficient (DiPaola, Hoy, 2005). As far as China is concerned, research on TOCB has begun to receive attention in recent years, but the degree of attention is far from enough (Zhang, 2016).

In addition to task performance, job performance also includes contextual performance such as OCB and counterproductive work behavior (CWB) (Zhang, Liu, 2008). Work-related attitudes and beliefs are more likely to have a direct impact on contextual performance, and future research should examine the relationship between work ethic and contextual performance (Miller, Woehr, Hudspeth, 2002). Current research at home and abroad shows that individual work ethics can affect OCB (eg, Ryan, 2002; Zhang, 2012). As individual work values (Ryan, 2002), work ethic is an important determinant of individual work behavior (Miller, Woehr, Hudspeth, 2002). In this study, teacher work ethic (TWE) is defined as a kind of moral work value, which is a positive work orientation of moral virtues held by teachers in teaching practice activities (Wei, 2013).

OCB is a typical ethical behavior in the organization (Baker, Hunt, Andrews, 2006), and the ethical environment of the organization is the key factor affecting the ethical behavior of employees, and the organizational ethical climate (OEC) is the embodiment of the organizational ethical environment (Trevino, Youngblood, 1990). Not only has the influence of organizational climate on OCB been supported by many studies, but the impact of OEC on OCB has also been verified by other studies (eg, Huang, You, Tsai, 2012; Leung, 2008; Zhang, Li, 2013). Although the research on profit organizations in the study of OEC from the West still dominates, and the recent media has

exposed some ethical issues of non-profit organizations, the public has begun to turn their attention to non-profit organizations (Wu, 2005). For example, Çavuş and Develi (2017) studied its impact on OCB of primary and secondary school teachers from the perspective of OEC.

Foreign studies believe that OCB is the result of organizational climate (Farooqui, 2012), but the study of Chinese scholars Pan, Qin and Tan (2006) does not verify the relationship between school climate and TOCB, which may be related to the connotation of the school climate they measured. The study only measured the management climate, teaching climate, interpersonal climate and learning climate, but did not involve the SEC. According to the "Facet-specific Climate" theory, the ethical climate in the organizational climate may have an impact on the TOCB, because it only makes sense to deconstruct the climate in a specific climate (Zheng, Ge, 2009). Therefore, we should further strengthen research in this area to expand the scope of research on OEC and explore the impact of SEC on TOCB based on China's background.

This study believes that the study of the TOCB should not only pay attention to the impact of individual variables on it, but also to the impact of organizational variables on it. Therefore, in this study, the SEC is selected as the organizational variable, and the TWE is used as the individual variable to analyze the influence of SEC and TWE on TOCB, and the mediating effect of TWE between SEC and TOCB. The relationship between the variables in this study is shown in Figure 1.

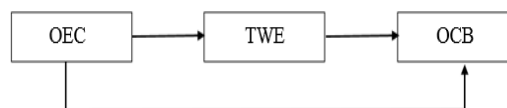


Figure 1: The relationship between variables

2. Method

2.1 Subjects

In this study, teachers from 8 middle schools and 8 high schools were selected for questionnaire survey by means of convenient sampling method. 750 questionnaires were distributed and 673 valid questionnaires were collected, with an effective rate of 89.7%, including 310 middle school teachers (46.06%) and 363 high school teachers (53.94%).

2.2 Research tool

2.2.1 Measurement of SEC

Two dimensions of the caring-oriented climate and the rule-oriented climate from *Organizational Ethics Climate Questionnaire* (Liu, Jing, 2010) were selected, among which, the former has 5 items, and the latter 4. The questionnaire was scored using the Likert 5-point scale, from “completely disagree” to “completely agree”, the higher the score, the higher the ethical climate. In this study, the coefficient of internal consistency of the caring-oriented climate was 0.805, and the rule-oriented climate was 0.785.

2.2.2 Measurement of TWE

Teacher Work Ethic Questionnaire compiled by Wei and Ma (Wei, 2013) was used, including three dimensions of work meaning dimension (4 items), behavior quality dimension (5 items) and objective seeking dimension (7 items). The questionnaire was scored using the Likert 5-point scale, from “completely disagree” to “completely agree”, the higher the score, the higher the TWE. In this study, the coefficient of internal consistency of the work meaning dimension was 0.850, the behavior quality dimension was 0.916 and the objective seeking dimension was 0.906.

2.2.3 Measurement of OCB

Teachers' Organizational Citizenship Behavior Scale (Guo, Fang, 2005) was used, including 9 items. The scale is scored using the Likert 5-point scale, from “complete non-conformity” to “complete conformity”. The higher the score, the higher the organizational citizenship behavior. In

this study, the coefficient of internal consistency of the questionnaire was 0.787.

2.3 Statistical approach

The data was analyzed by SPSS 20.0 and AMOS 20.0 statistical software.

3. Results

3.1 Test of common method bias and multi-collinearity

The Harman single factor method was used to test the common method bias. Exploratory factor analysis was conducted on all items of SEC, TWE and OCB. The un-rotated factor analysis showed that the common factor with eigenvalue greater than 1 had 6 principal components, and the first principal component explained 30.89% of the total variance variation, less than the threshold of 40%. This result indicates that there is no serious common method problem in this study.

The variance inflation factor (VIF) is used to test the possible multi-collinearity problem between SEC (caring orientation, rule orientation) and TWE (work meaning, behavior quality, objective seeking). The results show that the VIF values of these related variables are between 1.477 and 2.188, all less than the threshold of 10, which indicates that the multi-collinearity effect is within an acceptable range.

3.2 Descriptive statistical analysis

Descriptive statistical analysis was carried out on research variables such as SEC, TWE and TOCB. The mean and standard deviations of each variable are shown in the second and third columns of Table 1, and the product difference correlation coefficients between the variables are shown in the fourth to eighth columns of Table 1.

Table 1: The correlation matrix of each study variable

	\bar{x}	SD	1	2	3	4	5
1	3.708	0.744	1				
2	4.008	0.727	0.619**	1			
3	3.908	0.849	0.329**	0.341**	1		
4	4.567	0.648	0.294**	0.318**	0.416**	1	
5	4.332	0.663	0.400**	0.375**	0.543**	0.657**	1
6	3.441	0.796	0.258**	0.168**	0.425**	0.401**	0.441**

Note: * $P < 0.05$, ** $P < 0.01$, similarly hereinafter; 1=Caring-oriented climate, 2=Rule-oriented climate, 3=Work meaning, 4=Behavior quality, 5=Objective seeking, 6 =TOCB

3.3 Test of mediating effect

Before analyzing the mediating effect, the research data are first centralized. Because the relevant research found that work ethics is a first-order three-factor variable, not a high-order factor (eg, Wang, Guo, Zhao, Ling, 2009; Wei, 2013), the three dimensions of work ethic cannot be simply synthesized into a total score of work ethic. Therefore, in this study, the three dimensions of work ethic were used as mediating variables for analysis.

Firstly, the path analysis was carried out with the work meaning dimension as the mediating variable. The saturation model showed that the rule-oriented climate has no significant path coefficient to the TOCB ($\beta = -0.074$, $P > 0.05$). After deleting the insignificant path, the Model 1 was retested. The result is shown in Figure 2.

The fitting index of Model 1 is shown in Table 2, indicating that the model 1 fits well. Figure 2 shows the results of the path analysis: Work meaning dimension plays a part of mediating role between caring-oriented ethical climate and TOCB, with the ratio of mediating effect to total effect of 35.61%, and it plays a complete mediating role between rule-oriented ethical climate and TOCB.

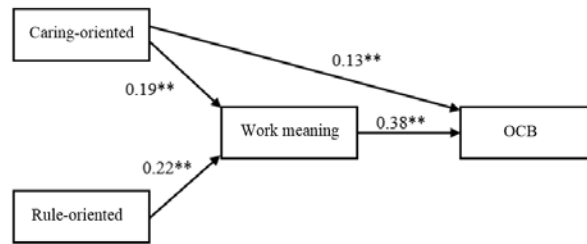


Figure 2: Mediating role of work meaning (Model 1)

Table 2: Fitting index of path analysis

	CMIN/D F	RMR	RMSEA	GFI	AGFI	TLI	CFI
Model 1	2.747	0.008	0.051	0.998	0.980	0.982	0.997
Model 2	2.241	0.007	0.043	0.998	0.983	0.986	0.998
Model 3	2.612	0.008	0.049	0.998	0.981	0.984	0.997

Then, the same steps were used to analyze the mediating role of behavior quality and objective seeking in turn, and the results are shown in Figure 3 (Model 2) and Figure 4 (Model 3), respectively.

Model 2 shows that the rule-oriented ethical climate has no significant path coefficient to the TOCB ($\beta = -0.068$, $P > 0.05$). Figure 3 shows the results of the path analysis: behavior quality plays a part of mediating role between caring-oriented ethical climate and TOCB, with the ratio of mediating effect to total effect of 26.79%, and it plays a complete mediating role between rule-oriented ethical climate and TOCB.

Model 3 shows that the rule-oriented ethical climate has no significant path coefficient to the TOCB ($\beta = -0.072$, $P > 0.05$). Figure 4 shows the results of the path analysis: objective seeking plays a part of mediating role between caring-oriented ethical climate and TOCB, with the ratio of mediating effect to total effect of 51.92%, and it plays a complete mediating role between rule-oriented ethical climate and TOCB.

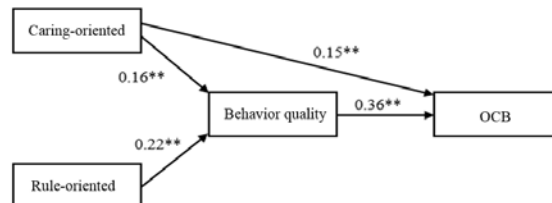


Figure 3: Mediating role of behavior quality (Model 2)

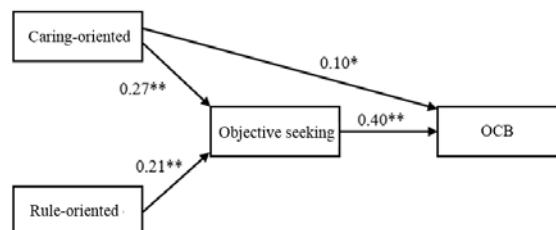


Figure 4: Mediating role of objective seeking (Model 3)

4. Discussion

4.1 Relationship between SEC and TOCB

This study analyzed the influence of SEC on TOCB. The results showed that the caring-oriented climate had a significant positive predictive effect on TOCB, while the rule-oriented climate had no effect on it, which is consistent and inconsistent with the existing research results. In regard to the caring-oriented climate, the results of this study were consistent with the studies of Huang, You and

Tsai (2012), Leung (2008) and Zhang and Li (2013), that is, caring-oriented climate has a significant positive predictive effect on TOCB. In terms of the rule-oriented climate, the results of this study were consistent with Leung's (2008) study, that is, the rule-oriented climate cannot predict OCB, but inconsistent with those of Huang, You, and Tsai (2012) and Zhang and Li (2013). Their findings showed that the rule-oriented climate could positively predict OCB.

In this study, the direct impact of rule-oriented climate on OCB was not found, probably because the ethical climate questionnaire used in this study directly draws on the corporate organizational ethical climate questionnaire developed by Liu and Jing (2010). In the future, it is necessary to develop an OEC scale for primary and secondary schools. In addition, it may also be because TOCB has different structure or mechanisms. The ethical climate that focuses on rules does not directly affect TOCB, but needs to indirectly influence it through work ethic.

Although studies have verified that corporate organizational ethic has a certain predictive effect on employees' OCB (eg, Huang, You, Tsai, 2012; Leung, 2008), such research results also show that different types of ethical climate have different predictive effects on OCB. In the future, it is necessary to further study the relationship between SEC and TOCB.

4.2 Relationship between TWE and TOCB

This study examined the relationship between TWE and TOCB. The results show that the three kinds of TWE can significantly predict the TOCB positively, which is similar to the existing research results (eg, Zhang, 2012; Murtaza et al, 2016). For example, in the context of Chinese culture, Protestant work ethic (PWE) can positively influence OCB (Zhang, 2012); Islamic work ethic (IWE) is an important determinant of OCB in the workplace (Murtaza et al, 2016). Therefore, a large number of studies have shown that employees' work ethic has a positive impact on their OCB and these studies provide an important reference for a better understanding of the role of teacher work values in school management.

4.3 Relationship between SEC and TWE

Research on the influencing factors of work ethic found that the factors affecting work ethic are mainly concentrated at the individual level and organizational level, and at the organizational level, mainly in the nature of work and OEC (Wang, Guo, Ling, 2007). In this study, the influence of SEC on TWE is tested. The results show that the caring-oriented climate and the rule-oriented climate can positively predict three kinds of TWE, which is consistent with existing research (eg, He, 2010).

The results of this study show that caring-oriented and rule-oriented ethical climate can positively predict TWE, which has a certain guiding role in improving TWE in the future. It is possible to strengthen the recognition and internalization of employees' work ethic by cultivating a good OEC (Wang, Guo, Ling, 2007).

4.4 The mediating role of TWE

Although there are few research literatures on the mediating role of work ethics, for example, He (2010) studies the mediating role of work ethics between organizational climate and job engagement. However, a large number of studies have shown that work values play a mediating role in the impact of the environment on individual behavior. For example, work values play a mediating role in the influence of corporate culture on employee engagement (Huang, Xu, 2017). This study shows that the three kinds of teacher work ethic have a consistent mediating role in the SEC affecting the TOCB, that is, it plays a full mediating role in the influence of the rule-oriented climate on the TOCB, and plays a part of mediating role in the influence of the caring-oriented climate on the TOCB. This may indicate that the influence mechanism of different SEC on TOCB is different. The rule-oriented climate indirectly affects TOCB through work ethic. The caring-oriented climate can not only directly predict the TOCB, but also indirectly influence the TOCB through work ethic. Therefore, understanding the relationship between different kinds of ethical climate and ethical behavior helps managers to diagnose ethical climate and strengthen or improve OEC (Fan, Shi, 2006).

In short, in this study, the mechanisms affecting the TOCB were studied from the work values at

the individual level and the psychological climate at the organizational level, and the effects of external environmental variables on individual behavior through individual psychological variables were verified. Specifically, in this study, the mediating role of TWE in SEC and TOCB was examined. In particular, the caring-oriented ethical climate and the rule-oriented ethical climate influence the OCB through the internal work ethic of teachers, such as work meaning, objective seeking and behavior quality. Therefore, by constructing a positive SEC, TWE can be improved, which in turn helps to promote TOCB.

4.5 Research significance and future prospects

Examining the mediating role of TWE between SEC and TOCB, this study reveals the influence mechanism of SEC on TOCB. The result provides practical guidance for cultivating TOCB from the school organization level. Because organizations cannot rely solely on personal ethic to guide employees' behavior (Leung, 2008), employees are required to regulate their ethical behavior with a dominant ethical climate in organization (Ma, Du, Wei, 2014). Therefore, in order to improve the TOCB, it is necessary to refine and improve the internal ethical rules of the school organization, so that the ethical behaviors and ethical and moral concepts of the school and teachers tend to be consistent, and the teachers consciously follow the positive ethical norms of the school, which can improve the teachers' performance level and organizational effectiveness.

However, this study also has some shortcomings. First, the study used a cross-sectional design, which made us unable to make a reasonable causal inference of the conclusions, and limited interpretation of the direction of prediction between variables. Future research should adopt a longitudinal design to better reveal the formation process of TOCB from both individual and organizational levels. Secondly, the sample of this study mainly comes from the sample of middle and high school teachers and lacks the sample of primary school teachers, which has certain limitations on the comprehensive understanding of the formation mechanism of primary and secondary school TOCB. Third, the measurement of each variable in this study is based on self-reporting. In future research, multi-party reporting or objective data is needed to conduct research. In particular, the measurement of TOCB can be based on superior assessment, colleague assessment, self-report and other aspects of data. Because the evaluation of OCB by different evaluators is reasonably integrated, the evaluation reliability will increase significantly (Zhang, Qi, 2001). Therefore, the TOC should be comprehensively evaluated from many directions.

5. Conclusions

The following conclusions are drawn in this study: (1) SEC positively predicts TWE; (2) TWE positively predicts TOCB; (3) TWE plays a mediating role between SEC and TOCB. TWE plays a full mediating role between rule-oriented climate and TOCB, while it plays a part of mediating role between caring-oriented climate and TOCB.

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