

A Measurement Model Of Organizational Citizenship Behavior Practices Among Secondary Teachers: Validity And Reliability

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Abstract. The purpose of this paper is to examine the reliability and validity of organizational citizenship behavior practice among secondary school teachers and develop a measurement model of teachers' organizational citizenship behavior. This study uses a cross-section survey study design using quantitative methods. The total population for this study was 12 890 and the selected sample was 422 respondents. Organizational citizenship behavior was measured using an educational organization citizenship behavior questionnaire instrument modified from Eran Vigoda-Gadot et. all. Data and details collected were analyzed using Statistical Package for the Social Sciences (SPSS) Version 23 and Structural Equation Modeling (SEM AMOS) Version 23. This study revealed that Cronbach's Alpha values for all constructs were high. All items representing all three constructs were accepted and a model for organizational citizenship behavior could be developed.

Keywords. Organizational citizenship behavior, Secondary teachers' Validity and Reliability

1.0 Introduction

Organizational citizenship behavior or willingness to work beyond a formal schedule is very important in all organizations. Educational organizations are very special and different from other formal organizations. Educational organization involves relationships between student teachers and across time, energy and, material boundaries. According to some literature studies, organizational citizenship behavior among employees can lead to various outcomes such as good relations among employees, work environment, work performance, and so on [1]

The concept of organizational citizenship behavior was first studied in the 70s and was led by the father of citizenship behavior [2]. Organizational citizenship behavior is a field of study that examines the effects of behaviors produced by individuals, groups and, structures in organizations that aim to use specific knowledge to ensure the progress and efficiency of an organization [3]. The study also explains that organizational citizenship behaviors can maximize the efficiency and productivity of employees and organizations and in turn contribute to the functional effectiveness of an organization [4].

Based on the preliminary studies found, studies on organizational citizenship behavioral variables are often conducted in western countries and have not yet been expanded

in the context of education in Malaysia [5]. This study is very important because the researcher found that the behavioral variables of organizational citizenship among teachers are only obtained from abroad [6]-[9]. The study of organizational citizenship behavior in Malaysia also involves more other sectors such as medicine, hospitality, industry, tourism than the education sector [10]-[13].

To review the direct impact of organizational citizenship behavior practices on an organization, then this element should be an important element that needs to be studied and expanded in the organization. Researchers have found that organizational citizenship behaviors are important for solving organizational internal complexities and problems in the public sector [14]. Thus, the existence of citizenship behavior in the organization can solve organizational problems such as remuneration and salary adjustment, work stress, stress, burnout, performance appraisal and incentives, employee ethics and integrity, employee justice, and loyalty (avoid intention to leave the organization among employees).

Preliminary studies on organizational citizenship behavior were initiated by Smith, Organ, and Near in 1983 with two main dimensions being helpful behavior and general compliance, etc. Organ divides the variable dimensions into five behavioral problems, loyalty, team spirit, values compassion, and civic values. In the early 90s, Willian & Anderson broke back this construct of organizational citizenship behavior into two demonstrating individual citizenship behavior (OCBI) and organizational citizenship behavior (OCBO). Further models of citizenship behavior were further elaborated [15-18]. Previous studies have also looked at only two main constructs namely individual organizational citizenship behavior and in-organization citizenship behavior [19-21]. Thus, the study also includes a third construct which is role performance in the organization [22].

Previous studies have shown that most academic institutions such as universities do not place organizational citizenship behavior practice criteria as an important element for promotion [23]. The direct effect of this behavioral practice indicates that the organizational citizenship behavior practice model should be made among the important criteria in performance appraisal, incentive provision, and promotion. The willingness of an educator to serve regardless of any reward is a very difficult but inherent quality and many shapes the climatic characteristics of an organization. Therefore, a model of organizational citizenship behavior in schools that is appropriate to eastern culture needs to be constructed for use in studies related to this variable in Southeast Asian countries such as Malaysia.

Citizenship behavior among teachers is also an important element to improve teacher performance and ensure the continuity of efforts to produce excellent students. Even the element of citizenship behavior is needed at a time of change in the teaching and learning process in schools as a result of the COVID 19 pandemic. This element is very important to strengthen school and community relations and at the same time provide a win-win space for all parties, especially students, teachers. and stakeholder. Studies conducted previously, show that the level of citizenship behavior practice among teachers is still moderate in Malaysia [5].

2.0 Research method

This study uses a cross-section survey study design using quantitative methods. The researcher chose to use a cross-section survey study design because of its ability to collect a lot of data from a large number of respondents in a shorter time compared to other types of study designs [24].

2.1 Sampling

The study is based on a survey conducted in the East of Peninsular Malaysia, namely secondary school in Kelantan. The total population of secondary school teachers in Kelantan is 12 890 people. Before the actual study, a pilot study was conducted on 120 teachers. The questionnaire was sent online to 31 schools and was answered by 467 teachers. From 467 respondents, only 422 were analyzed. 45 data were excluded after the normalization process was performed. The number of samples has been obtained based on the total population by Cochran [25]. Figure 1 shows the profile of Study Respondents Based on Distribution of Demographic Characteristics

Table 1. The Profile of Study Respondents Based on Distribution of Demographic Characteristics (n = 422)

	Demographic	Frequenc y	Percent
1. Gender	Male	106	25.1
	Female	316	74.9
2. Age	30-35 years	12	2.8
	36-40 years	41	9.7
	41-45 years	70	16.6
	46-50 years	105	24.9
	Over 50 year	194	46.0
3. Teaching experience	1-10 year	18	4.3
	11-20 year	133	31.5
	21-30 year	236	55.9
	Over 30 year	35	8.3

Data collection method using an online questionnaire. Before the analysis was performed, normality tests for all constructs were performed to ensure clean data from outliers. Figures 1 and 2 show the distribution and boxplot of the graph after the normality process was made.

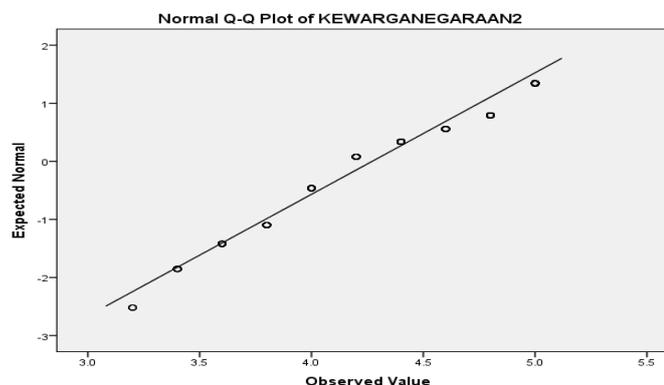


Figure 1. Distribution of organizational citizenship behavior variables

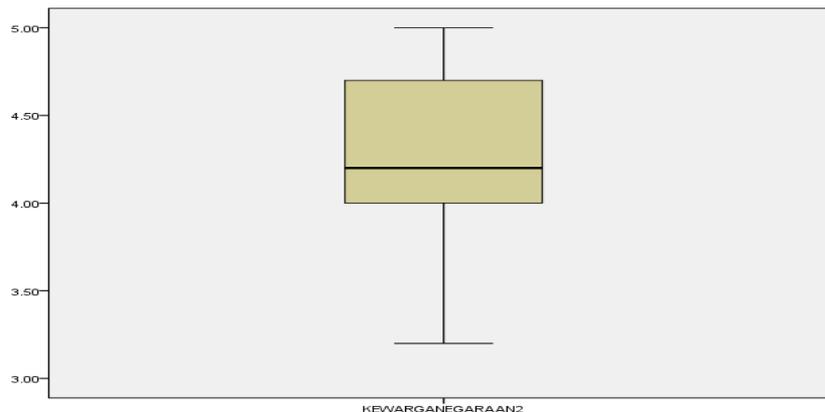


Figure 2. Boxplot Graph Line of Organizational Citizenship Behavior Variables

2.2 Instrument

Organizational citizenship behavior practices practiced by teachers were measured using an educational organization citizenship behavior questionnaire instrument (Group -Level Organizational Citizenship Behavior in the Education System: A Scale Reconstruction and Validation modified from Eran Vigoda-Gadot [22]).

Before the actual study was implemented, a pilot study was conducted on 120 respondents. The actual items for each dimension are 10 items for dimension OCB towards individuals, 9 items for the dimension of OCB towards an organization, and 6 items for the third dimension level in-role performance. However, item TKD8 (Teachers' attendance at work is above the norm) from the first dimension was deleted.

For the second dimension, item TKO13 (The teachers here spend a great deal of time on personal phone conversations and issues irrelevant to work), item TKO14 (The teachers here complain about insignificant things at work), item TKO17 (the teachers here make innovative suggestions to improve school life), item TKO18 (The teachers here coast toward the end of the day) was deleted.

From the third dimension, item GP23 (The teachers here neglect aspects of the job they are obligated to perform), item GP24 (The teachers here engage in activities that will directly affect their performance evaluation), and item GP25 (The teachers here perform essential duties successfully) were removed due to the low loading factor. Finally, there were 17 items received after 8 items were deleted. These findings are as shown in table 2.

Table 2
(Pilot Study) : Value of FL, CR, AVE dan \sqrt{AVE} for Organizational Citizenship Behavior

Dimension	Item	FL	C.R	AVE	\sqrt{AVE}
OCB toward individuals	TKD1	0.67			
	TKD2	0.64			
	TKD3	0.64	0.89	0.47	0.69
	TKD4	0.76			
	TKD5	0.74			
	TKD6	0.76			
	TKD7	0.73			
	TKD8	0.45			
	TKD9	(delete)	0.86	0.56	0.75
	TKD10	0.53 0.69			
OCB toward organizations	TKO11		0.93	0.81	0.90
	TKO12	0.67			
	TKO13	0.72			
	TKO14	0.42			
	TKO15	(delete)			
	TKO16	0.43			
	TKO17	(delete)			
	TKO18	0.75			
	TKO19	0.80			
Level in role performance	GP20	0.42 (delete)			
	GP21	0.44			
	GP22	(delete)			
	GP23	0.79			
	GP24				
	GP25	0.89			
		0.93			
		0.88			
		0.42			
		(delete)			
		0.45			
		(delete)			
		0.41			
	(delete)				

Table 3 shows all items received.

Table 3

Item Received: Dimension and item for Organizational citizenship behavior Model

Dimension	No. Items	Items
OCB toward individuals	TKD1	The teachers here help others who have been absent
	TKD2	The teachers here help teachers who have heavy workloads
	TKD3	The teachers here assist the principal with his or her work (when not asked).
	TKD4	The teachers here take time to listen to other teachers' problems and worries.
	TKD5	The teachers here go out of their way to help new teachers
	TKD6	The teachers here take a personal interest in other employees.
	TKD7	Teachers here pass along information to other co-workers
	TKD8	The teachers here help other teachers and parents who have no formal interactions with them.
	TKD9	The teachers here cover for co-workers.
OCB toward organizations	TKO10	The teachers here give advance notice when unable to come to work.
	TKO11	The teachers here arrive at work on time and do not return late after work breaks.
	TKO12	The teachers here conserve and protect organizational property.
	TKO13	The teachers here have a strong volunteer orientation.
	TKO14	The teachers here complete assigned duties adequately.
Level in role performance	GP15	The teachers here fulfill responsibilities specified in their job description
	GP16	The teachers here fulfill the supervisor's expectations
	GP17	The teachers here meet the formal performance requirements of the job

2.3 Data analysis

All data and details collected were analyzed using Statistical Package for the Social Sciences (SPSS) Version 23 and SEM AMOS 23. Data analysis was conducted using Descriptive Mean Test and SEM AMOS 23.

3.0 Results and discussion

Researchers used the Cronbach’s Alpha method to test the reliability and internal consistency of the study instruments as proposed [26]. The Cronbach’s Alpha coefficient is a reliability coefficient that states how the items in the instrument are positively related to each other [27].

3.1.Cronbach’s Alpha Method

To test the reliability and consistency of the instrument, the researcher conducted a study on 422 respondents among secondary school teachers in Kelantan. Findings show that organizational citizenship behavior constructs show high Cronbach’s Alpha values. Findings show the OCB toward individuals (TKD) dimension has the highest Cronbach’s Alpha value (0.924), followed by the level in-role performance (GP) (0.913) and the lowest OCB toward organizations (TKO) with Cronbach’s Alpha value (0.871). These findings are as shown in table 4.

Table 4. Instrument Reliability Value

Variables	Dimensions	Number of Items	Alpha Value (α)
Organizational Citizenship Behavior	OCB toward individuals (TKD)	9	0.924
	OCB toward organizations (TKO)	5	0.871
	Level in-role performance (GP)	3	0.913

3.2. The Regression Weight

The value of the critical ratio (C.R) and the significance of Chi-Square are use to confirm the factor. The C.R value must be greater than 1.96 for the proposed factor to be accepted [28]. Table 3. shows that all the C.R value of the organizational citizenship behavior exceeds 1.96. This finding indicates OCB toward organizations (TKO) C.R = 12.043; p = .000, level in role performance C.R = 13.695; p = .000. Thus, all the constructs are contributing significantly to the proposed factors. As a result, it was shown in table 5. All three constructs strongly measured organizational citizenship behavior.

Table 5. Regression coefficient result

			Estimate	S.E	C.R	P	Result
TKD	<---	CITIZENSHIP	1.000				
TKO	<---	CITIZENSHIP	1.013	.084	12.043	***	Significant
GP	<---	CITIZENSHIP	1.133	.083	13.695	***	Significant

3.3 The Discriminant Validity

Table 6 shows the result of discriminant validity for all the constructs. Discriminant validity is achieved when the square root of the AVE's values is greater than the correlation value between the constructs [29]. Role performance in the group showed the highest square root value of the AVE 'S of 0.886 followed by Individual organizational citizenship behavior 0.760 and subsequently 0.759 for organization citizenship behavior. As a result, the suggested constructs in this model were deemed to fulfill the discriminant validity criteria in table 6.

Table 6. Discriminant validity: Inter-Construct Correlation ($\sqrt{\text{AVE}}$ shows in diagonal)

	TKD	TKO	GP
TKD	0.760		
TKO	0.904	0.759	
GP	0.797	0.909	0.886

3.4 The Confirmatory Factor Analysis

To verify the construct of organizational citizenship behavior among teachers Confirmatory Factor Analysis(CFA) was performed. The model's items, constructs, and variables will be accepted if the regression weight for every factor loading (FL) is 0.708 or higher, the composite reliability (CR) is 0.708 or higher, the Average Variance Extracted (AVE) is 0.5 or higher, and the square root AVE ($\sqrt{\text{AVE}}$) for discriminant validity is greater than the value of correlation between an item and a construct [30]-[33]. Any item that does not fit the measurement model due to low factor loading should be removed from the model [31]. However, according to [29], an external load value of 0.4 is acceptable if the AVE value exceeds the suggested value of >0.5. Table 7. shows the values of FL, C.R, AVE and, $\sqrt{\text{AVE}}$ for Organizational Citizenship Behavior

Table 7. The FL, C.R, AVE and, $\sqrt{\text{AVE}}$ values for Organizational Citizenship Behavior

Constructs	FL	C.R	AVE	$\sqrt{\text{AVE}}$	Remarks
OCB toward individuals	0.69 – 0.86	0.925	0.578	0.760	-
OCB toward organizations	0.66 – 0.84	0.871	0.576	0.759	-
Level in role performance	0.86 – 0.91	0.916	0.785	0.886	-

Figure 3. shows the measurement model of organizational citizenship behavior. Referring the model, CFA analysis was performed. Table 7, shows the values of FL, C.R, AVE and, $\sqrt{\text{AVE}}$ obtained for individual organizational citizenship behavior, organizational citizenship behavior and role performance in groups. The values of FL, C.R, AVE and, $\sqrt{\text{AVE}}$ obtained for OCB toward individuals (TKD) are FL = 0.69 - 0.86, C.R = 0.925, AVE = 0.578, $\sqrt{\text{AVE}}$ = 0.760. the Inclusive OCB toward organizations (TKO) are FL = 0.66 - 0.84, CR = 0.871, AVE = 0.576, $\sqrt{\text{AVE}}$ = 0.759, the Level in role performance (GP) FL = 0.86 - 0.91, CR = 0.916, AVE = 0.785, $\sqrt{\text{AVE}}$ = 0.886 . All items showing FL, C.R, AVE and $\sqrt{\text{AVE}}$ are fit.

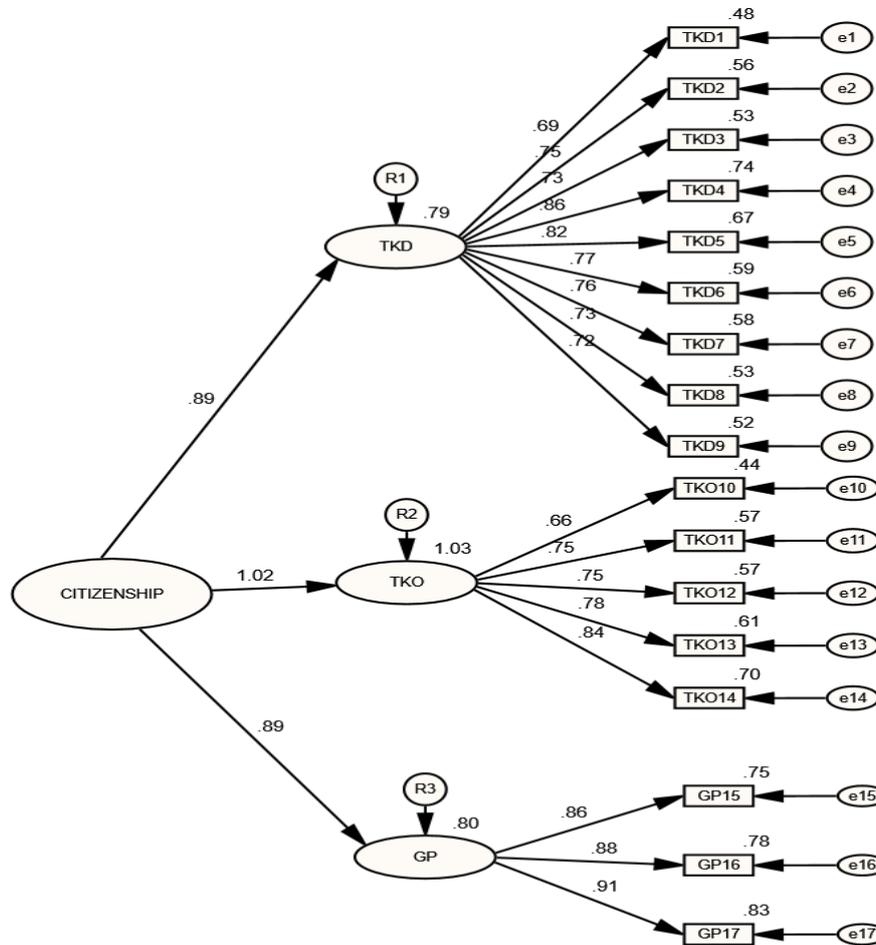


Figure 3. The measurement model of organizational citizenship behavior
Table 8 shows that all constructs were accepted.

Table 8. The accepted indicators or organizational citizenship behaviors

Constructs	Suggested indicators	Accepted indicators
OCB toward individuals (TKD)	9	9
OCB toward organizations (TKO)	5	5
Level in role Performance (GP)	3	3
Total	17	17

3.5 The Final Measurement Model of Organizational Citizenship Behaviour

Finally, this study successfully developed the measurement model of Organizational Citizenship Behavior. Figure 4 shows the model of Organizational Citizenship Behavior. This final measurement model of consists 17 behavior. Moreover, improving the fit of the model is

usually done when testing the measurement model [34]. The recent recommendation which suggests the use of five fit indices example χ^2 , RMSEA, Tucker-Lewis index (TLI), CFI, and standardized root mean square residual (SRMR), seems appropriate to also include TLI and SRMR into the list [35]. To fit the model of this study, several fit indices such as Chi-Square (CMIN), CFI, RMSEA, PNFI, and PCFI were tested. The model considered when the significant values of Chi-Square (CMIN) exceeded 0.05. The hypothesis model is also considered fit when the CFI is exceeding 0.90, but values between 0.80 and 0.89 are still within the acceptable margin. The RMSEA acceptable value is lower than 0.08, but it is still acceptable if less than 0.00 [36]-[38]. The PCFI and PNFI index values must exceed 0.5 for the fit of the model [32]. Table 9 shows the fitness indexes for the model of organizational citizenship behavior among the teacher.

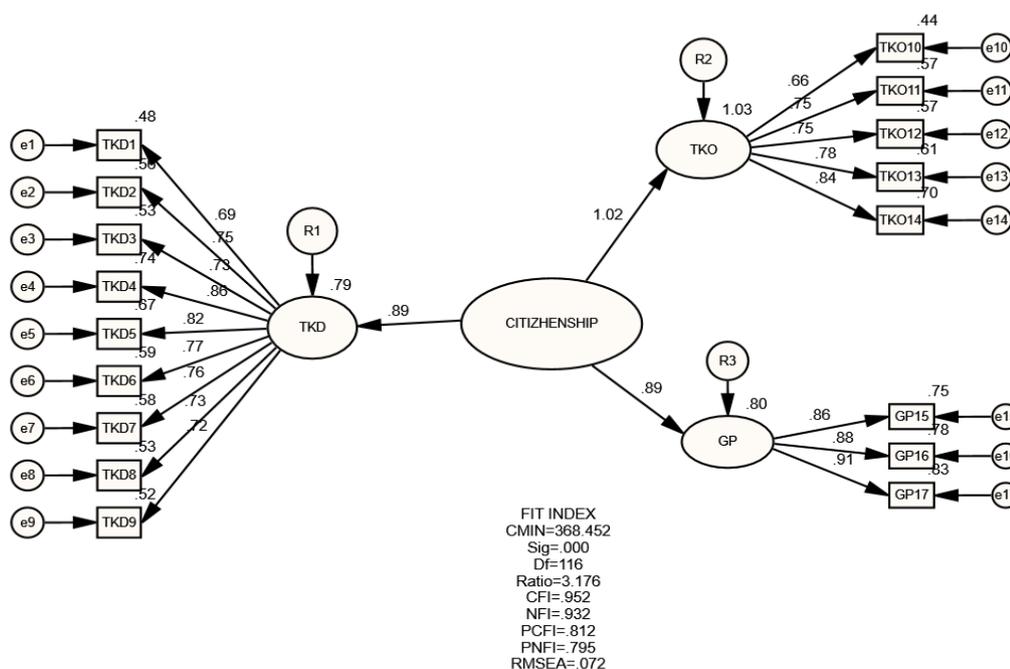


Figure 4.
Final measurement model of organizational citizenship behavior

Table 9. The fitness indexes for the Organizational Citizenship Behaviour Among The Teacher

Categories	Indexes	Level of acceptance	Value	Result
Absolute	Ratio	<5.00	3.176	The required level is achieved
	RMSEA	<0.08	0.072	The required level is achieved
Relative	CFI	>0.90	0.952	The required level is achieved
	PCFI	>0.05	0.812	The required level is achieved
Parsimonious	PNFI	>0.50	0.795	The required level is achieved

Based on this study, it is found that there are three practices of organizational citizenship behavior practiced by secondary school teachers in Kelantan. The practice of organizational citizenship behavior is OCB toward individuals, OCB toward organizations, and level in-role performance. This practice is in line with an earlier study [39], that there are two dimensions practiced by employees namely individual citizenship behavior (OCBI) and organizational citizenship behavior (OCBO). This practice is also more in line with the practice outlined [18], organizational citizenship behavior is divided into three main dimensions namely interpersonal citizenship performance, organizational citizenship performance, and citizenship job performance. This study is in line with the study [40], which measured this variable using dimensions of employee citizenship behavior based on organizational citizenship behavior and individual citizenship behavior.

The study found that all 17 items from the three dimensions met the organizational citizenship behavior model. All items used can measure the level of practice of citizenship behavior among teachers. Previous studies have shown that all dimensions have been used to examine the relationship between citizenship behavior and organizational beliefs [40]-[41]. The study also looked at the relationship of citizenship organizational behavior with other variables such as teachers' self-efficacy, organizational trust, and organizational climate [42].

This study also shows that national secondary school teachers in the state of Kelantan practice organizational citizenship behavior at a high level. The level of organizational citizenship behavior for male teachers was higher than for female teachers. This finding is supported by the study [43] showed that the level of practice of citizenship behavior among teachers is high. However, the findings, among secondary school teachers in South Kinta District, Perak are the opposite because this study shows the level of organizational citizenship behavior among secondary school teachers is at a moderate level[5]. This study also showed that there was no difference in the mean score of the level of organizational citizenship behavior between the ages of the study respondents. However, [44] found that there is a significant relationship between age demographics and citizenship behavior of staff organizations in the Department of Education of Isfahan City involving 220 respondents.

This study is quite challenging because researchers found organizational citizenship behavior research in previous education is very limited and most previous researchers used the original variable of organizational citizenship behavior without including dimensions such as level in role performance as presented by Eran Vigoda -Gadot. The three dimensions developed in this model have similarities to the dimensions outlined by Coleman & Borman in 2000 [45].

4.0 Conclusion

The findings of the study show that there is a correspondence between the background of the study and the final results. The behaviors validated in this study can help school leaders and teachers practice organizational citizenship behaviors in schools. It is recommended that further research be conducted in a wider location so that the findings of the study can be generalized. Further research can be conducted to look at the level of practice of school leaders from other demographic factors such as 1) the highest level of education of the principal, 2) the type of school, 3) the position of the school, and 4) the enrollment of students in the school.

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