Examining the Effect of Collective Teacher Efficacy on Organizational Commitment

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Abstract: This study examined the relationship between collective teacher efficacy and organizational commitment. The research was carried out following the correlational research design. The study group of the research consists of 320 teachers working in public schools in Bursa central districts. Demographic information form, collective teacher self-efficacy scale, and organizational commitment scale were used as data collection tools. Pearson correlation coefficient was calculated to examine the relationship between collective teacher efficacy and organizational component. Teaching is low and positively correlated with the affective continuance and normative commitment. Discipline is low and moderately positively correlated with affective, continuance, and normative commitment. Structural equation model analysis was conducted to examine the predictive effect of collective teacher efficacy on organizational commitment. Collective teacher efficacy affects organizational commitment positively. Collective efficacy has a remarkable impact on teachers' organizational commitment. It has been observed that when teachers' belief in collective efficacy develops, their emotional, attendance, and normative commitment to the schools and institutions they work for may increase. It is considered necessary that school administrators make plans to increase collective teacher efficacy.

Keywords: Collective teacher efficacy, Organizational commitment, Structural equation model

Introduction

One of the cornerstones of the education system is teachers. Teachers' feeling comfortable in the working environment, being free, contributing to the decisions taken, and improving themselves can increase the quality of the education they will provide. One factor that shows that teachers are satisfied with the environment in which they work is their organizational commitment. Teachers with high organizational commitment do not think of changing the institution they work. They feel emotionally attached to their institution. They feel like a part of the family in the institution they work for (Allen & Meyer, 1990). In this respect, increasing organizational commitment may enable teachers to contribute more to the achievement of the goals of their schools and institutions. Such commitment can encourage teachers to use constructive teaching methods such as student-centered learning, gaming, peer learning, group work activities (Badali et al., 2022; Banihashem et al.,

2022; Latifi et al., 2020, 2021a, 2021b, 2021c; Noroozi, 2018, 2022; Noroozi et al., 2012, 2016, 2016, 2021; Taghizadeh et al., 2022) in their classrooms. In order to make effective decisions that will increase teachers' organizational commitment, it is necessary to know the factors affecting organizational commitment. This study aimed to investigate the relationship between collective teacher efficacy and organizational commitment. The results will allow an understanding of how effective teachers' shared competencies in teaching and discipline are on their organizational commitment.

Organizational Commitment

Commitment is accepted as an essential driving force for the continuation of personal and social life. An individual may show attachment to different people, institutions, ideas, or ideologies throughout life. Commitment is one of the intense emotions experienced by the individual. The individual's commitment to an institution, person, or idea brings some responsibilities. There may be obligations that an individual must fulfill towards the person or institution to which he or she is affiliated. It is usual for individuals to develop different types of commitment, such as forced, self-interested, moralistic, and emotional commitment, both in their private and social lives (Ergün & Çelik, 2019).

Organizational commitment explains the bond between the employee and the organization he is a member of. Employees with organizational commitment can ensure that their institutions work more effectively and efficiently. As organizational commitment increases, employees' intention to leave decreases. These individuals are less likely to display negative behaviors such as being late for work and absenteeism. The increased organizational commitment of employees may facilitate their adoption of the organization's goals and make more efforts to achieve them. Accordingly, the competitiveness of the organization may increase. Ensuring the employees' active participation in the workplace processes, making the employees feel valued, creating a career plan, and providing support to meet some crucial needs can increase organizational commitment. In the literature, there are studies examining organizational commitment in three dimensions (Allen & Meyer, 1990; Turner & Chelladurai, 2005). These dimensions are listed as continuance commitment, normative commitment, and affective commitment. Continuance commitment refers to awareness of the possible cost that may arise when leaving the organization (Chen & Francesco, 2003). This commitment can also be expressed as "rational commitment" or "perceived cost." This type of commitment, which is financially dominant, is based on the earnings of the employee or stakeholder. If the employee's earnings are high, the continuance commitment to the organization is expected to be high. Employees may be aware that when they leave the organization, they will be deprived of the opportunities the organization has given them. In addition, the fear that the accumulated knowledge will be lost and the thought that its reputation will be damaged are among the factors that ensure the employees' continued commitment to the organization.

Normative commitment is the employee's feeling of responsibility to stay in the organization he or she works for. This commitment means that employees believe it is right for them to stay in that organization conscientiously. The underlying commitment of the employees to the organization is mostly a sense of debt and

gratitude to that organization. Employees believe that their contribution to the institution they work for makes them committed to the organization (Allen & Meyer, 1990).

Affective commitment is employees' psychological attachment to their organizations, workplaces, and institutions. This commitment includes the knowledge, judgment, and feelings that individuals develop cognitively and effectively about the organization, such as loyalty, effort, and feeling of belonging, and the desire to be a part of the value system (Lambert, Hogan, Jiang, 2008). Employees with high emotional commitment tend to exert more effort to achieve the organization's common goals.

Collective Efficacy

There are essential differences between collective efficacy and individual efficacy. Collective competence encompasses interactive, coordinated, and synergetic social dynamics. Collective efficacy perception refers to the collective efficacy perception created by the group rather than the sum of individual efficacy perceptions. Teaching is not a stand-alone profession. Teachers carry out the education process together and with support from each other. In this context, collective efficacy refers to the perception that the efforts of all teaching staff in a school will positively affect student achievement (Goddard, Hoy, and Woolfolk-Hoy, 2000).

Bandura (1995) stated that, as in every profession, the teaching profession is carried out in an interactive social system. Teachers often perform their duties alone in classrooms, but this does not mean that teachers are unaffected by the school context. People working in a group structure do not function in a wholly isolated or socially isolated manner from the influences of other individuals. The resources, barriers, and opportunities a particular system provides determine how influential individuals can be. People working together develop a sense of shared competence over time. When teachers working in the same school develop a sense of collective efficacy, the quality of education at school may increase (Tschannen-Moran and Barr, 2004). When the perception of collective efficacy increases, the effort required to teach students is also more likely to increase (Goddard, 2002). Collective efficacy is a vital school characteristic. Studies have shown that collective efficacy is an important feature that increases school success (Goddard et al., 2000).

The development of collective efficacy perception can increase the collective influence of teachers on school success. It can enable teachers to develop a sense of belonging to the institution where they work. This situation may affect teachers' organizational commitment positively. This study aimed to investigate the effect of collective teacher efficacy on organizational commitment. It has been predicted that collective teacher efficacy will positively affect teachers' organizational commitment.

Method

This research was conducted following the correlational research design. Correlational research is a research

method in which the relationship between two or more variables is examined without any intervention, effect, or manipulation. Based on the relationships obtained with this research method, there is an opportunity to predict some results (Büyüköztürk et al., 2008).

Study Group

The study group of the research consists of 320 teachers working in public schools in Bursa central districts. 43.8% (n=140) of the teachers are female and 56.3% (n=180) are male. of teachers; 5.3% (n=17) were pre-school, 30.6% (n=98) primary school, 36.3% (n=116) secondary school, and 27.8% (n=89) works at the high school level. While the rate of teachers with undergraduate education is 76.9% (n=246), the rate of teachers with postgraduate education is 23.1% (n=74). The average age of the teachers was 39.70 (Sd=7.69), and the average professional seniority was 15.64 years (Sd=7.70). 86.3% (n=276) of the teachers stated that they were married.

Measurement Tools

Demographic information form: In line with the purpose of the research, a personal information form was developed and used to obtain information about the demographic characteristics of the teachers participating in the research. In the demographic information form, Multiple-choice statements about gender, teaching level, seniority, age, and marital status variables are included.

The collective teacher self-efficacy scale: The scale was developed by Tschannen-Moran and Barr (2004) and adapted into Turkish by Erdoğan and Dönmez (2015). The scale measures collective teacher efficacy in two sub-dimensions. There are six items in the dimension of student discipline, which is the first dimension, and six items in the dimension of teaching strategies, which is the second dimension. The scale is a five-point Likert type. In this study, the Cronbach Alpha internal consistency coefficients calculated for discipline and instructional strategies were 0.75 and 0.77, respectively.

The organizational commitment scale was developed by Allen and Mayer (1997). The validity and reliability study of the Turkish form of the scale was carried out by Erdoğmuş (2006). The scale, which consists of 18 items in total, has three sub-dimensions: affective commitment, continuance commitment, and normative commitment. The scale is a five-point Likert type. In this study, the Cronbach Alpha internal consistency coefficients calculated for the dimensions of affective commitment, continuance commitment, and normative commitment were 0.72, respectively; It was found to be 0.75 and 0.78.

Data Analysis

Structural equation model analysis was conducted to examine the effect of collective teacher efficacy on organizational commitment. The fact that the Mardia kurtosis coefficient is less than 8 indicates that the multivariate normal distribution assumption is met (Yılmaz & Varol, 2015). In this study, the Mardia kurtosis

coefficient calculated with AMOS was 7.13. This value showed that the multivariate normal distribution assumption was met. Pearson correlation coefficients were calculated to calculate the relationships between the variables. Analyzes were performed using AMOS 24.0 and SPSS 25.0.

Results

Collective teacher efficacy has two components: instruction and discipline. Organizational commitment has three components: affective, continuance, and normative commitment. Pearson correlation coefficients were calculated to examine the relationships between collective teacher efficacy and organizational commitment. The coefficients obtained are shown in Table 1.

Table 1. Pearson Correlation Coefficients

Variables	1.	2.	3.	4.	5.
1. Teaching	1				
2. Discipline	.79**	1			
3. Affective commitment	.22**	.30**	1		
4. Continuance commitment	.13*	.12*	.29**	1	
5. Normative commitment	.23**	.21**	.36**	.60**	1

**$p<0.01$, *$p<0.05$, N=320

Teaching is low and positively correlated with affective commitment (r=.22, p<.01), continuance commitment (r=.13, p<.01), and normative commitment (r=.23, p<.01) scores. Discipline is low and moderately positively correlated with affective commitment (r=.30, p<.01), continuance commitment (r=.12, p<.01), and normative commitment (r=.21, p<.01) scores.

The effect of collective teacher efficacy on organizational commitment was examined with the structural equation model shown in Figure 1.
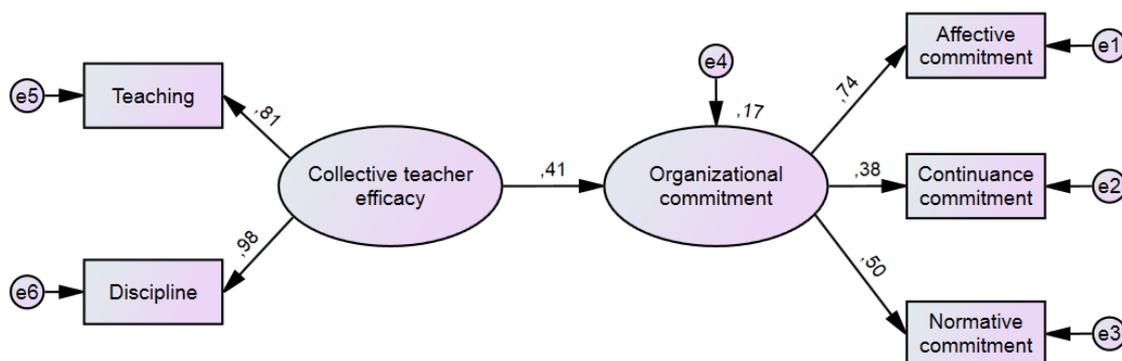

Figure 1. The Structural Equation Model

Collective teacher efficacy was included in the model as the independent variable, and organizational commitment was the dependent variable. The calculated fit values (χ^2/sd=1.86, p=.14, RMSEA=.05, SRMR= .03, CFI=1.00; TLI= .98, GFI=.99, AGFI=.96) indicated that the data and model fit perfectly (Bollen, 1989; Browne & Cudeck, 1993; Hu & Bentler, 1999; Tanaka & Huba, 1985).

Table 2. Regression Weights

			Estimate	Standardized Estimate	S.E.	C.R.	p
Collective teacher efficacy	--->	Organizational commitment	.51	.41	.09	5.44	***

***p<.001

The model in Figure 1 shows that collective teacher efficacy positively affects organizational commitment (β=0.41, p<.001). As collective teacher efficacy increased, organizational commitment also increased. Collective efficacy explains about 17% of the change in organizational commitment.

Discussion

This study conducted applied research on teachers working in Bursa, Turkey's preschool, primary, and high school levels. Within the scope of the research, the relationship between teachers' collective competencies and their organizational commitment was examined. It has been determined that teaching and discipline, which are components of collective efficacy, have positive relationships with affective, continuance, and normative commitment, which are components of organizational commitment. In addition, it was understood that collective efficacy predicted organizational commitment positively. The perception that the efforts of all teaching staff in a school will positively affect student achievement creates collective efficacy (Goddard et al., 2000). Teachers accomplish academic tasks together, contribute to student success, and realize the school's goals can support the formation of common synergy. It can make teachers feel they are an essential part of their institution. Depending on this situation, teachers' emotional and continuing commitment to their work institution may increase. The results obtained in this study showed that collective efficacy is a significant predictor of organizational commitment. The results are consistent with the results of the studies conducted in the literature (Aydoğmuş and Tükel, 2019; Cansoy, Parlar, and Polatcan, 2020; Ware and Kitsantas, 2007).

Some limitations of this study can be mentioned. The fact that the study group consists of teachers working in schools located in Bursa city center, primary and secondary school teachers are more numerous than preschool and high school teachers limits the generalizability of the results to teachers working throughout the country. It can be recommended that similar studies be conducted to cover teachers working in different provinces and districts. Considering the branches of teachers, it can be suggested to examine the relationships between their organizational commitment and their collective competencies.

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