



Leadership and Organizational Commitment in Educational Context: A Meta Analytic Review

Metin KAYA¹, Abdullah SELVİTOPU²

¹ Dr, Profilo İmam Hatip Ortaokulu, metinkaya439@gmail.com

² Dr, Atatürk Anadolu Lisesi, a_selvi20@hotmail.com

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ABSTRACT

The purpose of this meta-analytic review is to examine the magnitude of the relation between principals' leadership styles and teacher commitment with moderator variables and to evaluate that relation in Turkish context. A meta-analysis technique was used to synthesize the results of eight independent studies. In this meta-analysis, we only had eight studies to analyze and found that the relation between leadership styles of principal and teacher commitment is positive but weak. It is generally known that there is a positive relation between these two variables. That is the case for educational context. An important point we observed in the process of literature review is that while the magnitude of the relation is weak or moderate in educational context, it is strong in business organizations. According to our moderator variables, as in most studies, transformational and instructional leadership have a stronger relation with teacher commitment than the other styles. This finding is supported by most of the studies. In third level school districts, the relation between leadership and teacher commitment is weaker than the other levels. The last point is that individual behavior levels affect the relation between leadership and teacher commitment more than organizational behavior levels.

Keywords: Leadership styles, principal, teacher commitment, meta-analysis

Eğitim Kurumları Bağlamında Liderlik ve Örgütsel Bağlılık: Meta Analitik Bir Değerlendirme

ÖZ

Bu meta-analitik değerlendirme çalışmasının amacı, okul müdürlerinin liderlik stilleri ve öğretmen bağlılığı arasındaki ilişkinin gücünü Türkiye bağlamında belirlemek ve bu ilişkiyi etkileyen değişkenlere ilişkin değerlendirmelerde bulunmaktır. Veri setinde bulunan sekiz adet çalışmanın sonuçlarından bir senteze ulaşmak için meta analiz yöntemi kullanılmıştır. Bu meta-analiz değerlendirmesinde analizler, liderlik ve öğretmen bağlılığı arasındaki ilişkiyi inceleyen ve Türkiye'de 2007-2012 yılları arasında yapılmış 8 bağımsız çalışma üzerinden yürütülmüştür. Sonuç olarak, okul müdürlerinin liderlik stilleri ve öğretmen bağlılığı arasındaki ilişkinin zayıf düzeyde anlamlı olduğu ortaya çıkmıştır. Genel anlamda, bu iki değişken arasında pozitif yönde bir ilişki olduğu bilinmektedir. Bu ilişki eğitim kurumlarında da söz konusudur. Bu noktada literatür tarama sürecindeki gözlemlerimizden, eğitim kurumlarında liderlik ve bağlılık arasındaki ilişkinin gücünün zayıf ya da orta düzeyde iken, işletme örgütlerinde genellikle liderin davranış tarzı ile üyelerin örgütsel bağlılık düzeyleri arasında yüksek düzeyde ilişki olduğu gözlenmiştir. Bu konu derinlemesine araştırılabilir. Moderatör değişkenlere göre ise her ne kadar istatistiksel yönden anlamlı farklar çıkmasa da etki büyüklükleri incelendiğinde, çoğu çalışmada olduğu gibi dönüşümcü ve öğretimsel liderlik stili ile bağlılık arasında diğer stillere göre daha yüksek bir ilişki olduğundan söz edilebilir. Üçüncü düzey sosyo ekonomiye sahip eğitim bölgelerinde liderlik ve öğretmen bağlılığı arasındaki ilişki diğer düzeylere göre daha düşüktür. Son olarak, bireysel davranış düzeyleri liderlik ve öğretmen bağlılığı arasındaki ilişkiyi örgütsel davranış düzeylerine göre daha fazla etkilemektedir.

Anahtar Kelimeler: Liderlik stilleri, okul müdürü, öğretmen bağlılığı, meta-analiz

1. INTRODUCTION

There is a growing body of research in leadership and organizational commitment literature. The number of studies found a relationship between leadership and organizational commitment is getting higher day by day (Lo, Ramayah, Min & Songan, 2010; Dale, & Fox, 2008; Avolio, Zhu, Koh & Bhatia, 2004; Lee, 2004; Rowden, 2000; Lok & Crawford, 1999; Podsakoff, MacKenzie & Bommer, 1996).

A major reason for that increase in the number of studies is perhaps the strong links between leadership and organizational commitment. As Chen (1995) stated organizational commitment is deeply influenced by the leadership style of managers. That is the case for educational organizations, too. In schools as a leader, the principal influences the teachers. Independent studies conducted in educational organizations found relations between leadership styles of principals and organizational commitment of teachers (Huang 2011; Cokluk & Yilmaz, 2010; Leithwood & Jantzi, 2006; Nguni, Slegers & Denessen, 2006; Koh, Steers, & Terborg, 1995; Ross & Gray, 2006; Yu, Leithwood & Jantzi, 2002; Yu, 2000). These quantitative studies have conceptualized the relationship between leadership styles and teacher commitment. Another finding from these studies is about the stronger relation between transformational leadership and teacher commitment. For example, Koh, Steers, & Terborg, (1995) examined transformational leadership theory in 89 schools in Singapore. They demonstrated that commitment to the organization and related organizational citizenship behavior and job satisfaction were significantly greater when the principals were described by the teachers as more transformational on the scales of the Multifactor Leadership Questionnaire (MLQ). A typical conclusion may be drawn by all these researches that there is a relation between leadership and teacher commitment.

1.1. Leadership

Leadership studies initially focused on questions such as “Who is a leader? and “What makes a person leader?.” These studies were done to find a valid definition for “leader.” But as Stogdill (1974) stated “There are as many different definitions as there are persons who have attempted to define leader or leadership.” Still the number of leadership definitions goes up and up. Many approaches and theories have been developed on leadership and all of them view it in a different point. While the trait approach focuses on a person’s special traits that make him or her a great leader, the skills approach puts an emphasis on the competencies of leaders. The style approach, much known as behavioral approach in the literature, focuses especially on the behaviors of the leader (Northouse, 2010). Another approach is called as situational approach. It is about the leadership styles in different situations. In this approach, leaders are supposed to use various leadership styles for various situations. Theories, such as path-goal, leader-member exchange, contingency, instructional and more, were also developed. As these approaches and theories were being developed, a paradigm change in the leadership studies was in question. The new paradigm focused more on human relations and Burns (1978) was the forerunner of this paradigm with his transformational and transactional leadership types. Then Bass (1985) followed Burns study and extended his work by giving more attention to followers’ rather than leaders’ needs and also developed a transformational leadership model which is the most popular model in leadership studies now (Northouse, 2010). Transformational leadership focuses on using followers fullest potential (Avolio, 1999) and transactional leadership emphasizes the transaction or exchange that takes place among leaders and followers (Bass & Riggio, 2006). Several revisions and expansions have taken place in transformational leadership theory (Avolio, 2003; Hatter & Bass, 1998; Bass & Avolio, 1994; Avolio & Bass, 1991).

In their study about improving organizational effectiveness through transformational leadership, Bass & Avolio (1994) developed the full range of leadership model. That model consists of seven factors. These factors are a) idealized influence, b) inspirational motivation, c) intellectual stimulation, d) individualized consideration, e) contingent reward, f) management by exception and g) laissez-faire. Each of these factors can be measured with the Multifactor Leadership Questionnaire (MLQ) (Bass & Riggio, 2006). With this new paradigm there appeared some other leadership styles such as; instructional, educational or distributed leadership etc. In this meta-analysis, the researches in the dataset studied transformational, transactional, laissez-faire, instructional styles and leadership behaviors.

1.2. Organizational Commitment

Organizational commitment has emerged as a central concept in the literature of organizational behavior (Chow, 1994; Meyer & Allen, 1991; Penley & Gould, 1988). Generally defined as a psychological link between the employee and his or her organization (Allen & Meyer, 1996), organizational commitment is regarded as a

psychological contract that attaches the individual's identification to the organization (Wallace, 1995). There are some different classifications of organizational commitment (O'Reilly & Chatman, 1986; Mowday, Steers & Porter, 1979; Wiener, 1982; Allen & Meyer, 1990). Most of the studies in this meta-analysis took the classification of O'Reilly and Chatman (1986) and Allen and Meyer (1990) into account.

O'Reilly and Chatman (1986) classified organizational commitment into three dimensions by predicating the Kelman's (1958) study results. The first dimension is compliance and it occurs when attitudes and behaviors are adopted to gain specific rewards. Identification is about an affiliation desire and internalization is on congruence between individual and organizational values (O'Reilly & Chatman, 1986). According to Allen and Meyer's (1990) classification, organizational commitment has been divided into three dimensions as affective, continuance, and normative commitment. Affective commitment is described as the identification of employee with his or her organization with sympathy and continuance commitment is about the perceived costs of leaving organization for the individual. Normative commitment is about an employee's feelings and sense of obligation to stay and remain within the organization (Allen & Meyer, 1990).

1.3. Teacher Commitment

As this study is in educational context, we have focused on the teacher commitment. Teacher commitment has been the subject of some researches (Firestone & Pennell, 1993; Rosenholtz & Simpson, 1990). Mowday et al., (1979) defined the teacher commitment as the teacher's commitment to his or her school. Teachers with high commitment may have stronger psychological ties to their school, their students, or their subject areas than their peers (Firestone & Pennell, 1993). In their study, Rosenholtz and Simpson (1990) found that the degree of teachers' commitment is related directly to six social organizational factors: the extent of their performance efficacy, psychic rewards, task autonomy and discretion, learning opportunities, school-coordinated management of students' behavior, and principal buffering. The first four factors have to do with the interplay between the organization and the individual teacher as he or she performs core instructional tasks. The last two concern the organization's role in assisting teachers to maintain the boundaries around these core tasks.

Committed teachers have lots of positive contributions to their schools. They help students, willing to do more for students and willing to work extra hours (Firestone & Rosenblum, 1988). They also work hard to raise school performance and so on. The results of some studies show that effective schools and their characteristics are closely related to organizational commitment and the teachers with high level of commitment make their schools more effective (Web, Metha & Jordan, 1992). On the other hand, if teachers commitment levels are low, then the problems are expected to rise. Various studies conducted on leadership style (Huang, 2011; Cokluk & Yilmaz, 2010; Saqer, 2009) claimed that there is a strong positive relationship between leadership and organizational commitment. In sum, the present meta-analytic review was designed to examine the magnitude of the relation between principals' leadership styles and teacher commitment with moderators and to evaluate that relation in Turkish context. This meta-analysis consists of 8 independent studies conducted in Turkey between 2006 and 2012. The study addresses several research questions:

Research Question 1: What is the magnitude of the relation between leadership styles and teacher commitment?

Research Question 2: What is the magnitude of the relation between leadership styles and teacher commitment in accordance with leadership styles and socio-economic status of school districts?

Research Question 3: What is the magnitude of the relation between leadership styles and teacher commitment in organizational behavior context?

2. METHOD

Beginning in the 1970s, meta-analysis is the method that combines effect sizes from different studies researching the same question to get better estimates of the population effect sizes (Field, 2009). Meta-analysis

is frequently applied as a means of understanding the trend in substantive findings across studies (Glass & Smith, 1977). It requires systematic treatment of relevant studies and produces a measure of overall impact or the relation of the construct of interest (Robinson, Lloyd & Rowe, 2008). In this study, we used meta-analysis method to synthesize the results of independent studies about the relation between leadership styles of principals and teacher commitment.

2.1. Criteria to be included of relevant studies

The criteria set for the study are as follows:

1. Reported between 2007 and 2012.
2. Conducted in pre-primary, primary or secondary schools in Turkey.
3. Principals' leadership should be assessed.
4. Teachers' commitment and leadership perceptions should be assessed.
5. Reported with sufficient statistical data to calculate the correlations between leadership and teacher commitment.

2.2. Searching Strategies

In order to retrieve all available studies that meet the above criteria, several strategies were used. First, keyword searches of computerized databases were conducted. In the databases of national thesis centre and ULAKBIM (database for articles indexed by TUBITAK-ULAKBIM), some combinations of words were searched. Preliminary searches revealed that using the following combinations yielded the most helpful results: "leader, leadership, principal, commitment, teacher commitment, organizational commitment". We retrieved 148 studies, 92 in ULAKBIM and 56 in national thesis centre database. 27 of them, which have high potential to be related with our criteria, were chosen and studied in detail. 14 of 27 did not have the statistical data needed, 5 of them were conducted in different organizations. So our dataset in this meta-analysis consisted of 8 studies that met our criteria.

2.2. Analytic Strategies

The effect size (ES) used in this meta-analysis was Person's correlation coefficient r . That means ($r = ES$). All the studies reported their results as a correlation, so that correlation was used as the ES measure. As the distribution of correlation coefficients were skewed, we converted the correlations into Fisher z (Fz) score. Then, all the statistical procedures (such as publication bias and analysis of variance etc.) were conducted with Fz scores. In the findings, we converted the Fz scores to (r) because of the common usage of correlation coefficients.

There are two models used in meta-analysis; fixed effects model and random effects model (Shelby & Vaske, 2008). In this study, we used random effects model for between group comparisons. Moderator variables are as follows; a) leadership types, b) socio-economic status (SES) of the educational area (for SES, data were obtained from Turkish Statistical Institute as level 1, level 2, level 3). To reach the general information between leadership and organizational commitment, we chose the subgroup correlations of independent studies (e.g. transactional leadership and organizational commitment) as the unit of analysis. We also chose independent correlation coefficients related to subgroups as the alternative unit of analysis to reach more specific information about individual and organizational behavior levels of organizational commitment. For sensitivity analysis, we used two different methods. In the first method, we compared the values of fixed and random effects models and discussed the sensitivity levels of effect sizes. With the second method, we discussed the sensitivity levels of moderator analysis results (Higgins & Green, 2011). Heterogeneity between groups and also between independent studies was controlled by "Kendall's tau" indexes. With Kendall's tau, I^2 test was also conducted for heterogeneity while calculating the effect sizes (Borenstein, Hedges, Higgins & Rothstein, 2009). The same process followed for testing the significance of moderating factors. Regression

analysis was performed only for the “year” moderation analysis. Bias tests have some strengths and weaknesses over each other. So, we studied the publication bias with two different tests. One is Egger’s regression coefficient and the other is Begg, Mazumdar rank correlation coefficient.

3. FINDINGS AND RESULTS

There are eight independent sample studies from 148 studies published journal articles and unpublished thesis and dissertations. Four studies (k=4) are unpublished thesis and the others (k=4) are published journal articles. We searched for the studies between 2004 and 2012, but found no studies between 2004 and 2006 that met our criteria. So the studies between 2007 and 2012 years were included in this meta-analysis. We also saw that the number of studies about leadership and commitment has gone up recently because half of the studies were conducted between 2011 and 2012. Studies include the data of 2862 individual teachers totally. Sample sizes range from 180 to 720, with a mean of 357 and a standard deviation of 204. Table 1 contains information about the general characteristics of independent studies.

Table 1. General Characteristics of the Studies

Reference	n	Leadership Type	Organizational Commitment	r	LL	UL
Atar, G. (2009) Istanbul, Turkey.	193	Relationship Behaviors	Commitment to workgroup	0,15	0,01	0,29
			Commitment to school	0,52	0,41	0,62
			Commitment to training facilities	0,23	0,09	0,36
			Commitment to teaching occupation	0,24	0,1	0,37
		Task Behaviors	Commitment to workgroup	0,19	0,05	0,32
			Commitment to school	0,37	0,24	0,49
			Commitment to training facilities	0,36	0,23	0,48
			Commitment to teaching occupation	0,31	0,18	0,43
Cokluk, O. & Yilmaz, K. (2010) Ankara, Turkey.	200	Relationship Behaviors	Continuance commitment	0,29	-0,41	-0,16
			Affective Commitment	0,48	0,37	0,58
		Task Behaviors	Continuance commitment	0,26	-0,38	-0,13
			Affective Commitment	0,48	-0,58	-0,37
Cevahiroglu, E. (2012) Istanbul, Turkey.	300	Leadership Behaviors	Organizational commitment	0,33	0,22	0,42
Okcu, V. (2011) Siirt, Turkey.	720	Transformational	Compliance	0,43	0,37	0,49
			Identification	0,49	0,43	0,54
			Internalization	0,38	-0,44	-0,32
		Transactional	Compliance	0,23	0,16	0,3
			Identification	0,26	0,19	0,33
			Internalization	0,12	-0,19	-0,05
Buluc, B. (2009) Ankara, Turkey.	250	Transformational	Organizational commitment	0,6	0,56	0,63
		Transactional	Organizational commitment	0,24	0,17	0,3
		Laissez-Faire	Organizational commitment	0,43	-0,53	-0,32
Zeren, H. (2007) Sanliurfa, Turkey.	600	Transformational	Compliance	0,45	0,38	0,51
			Identification	0,45	0,38	0,51
			Internalization	0,42	-0,48	-0,35
Serin, K.M. & Buluc, B. (2012) Konya, Turkey.	419	Instructional	Organizational commitment	0,55	0,48	0,61
Sama E. & Kolamaz, C. (2011) Ankara, Turkey.	180	Instructional	Compliance	0,53	0,42	0,63
			Identification	0,63	0,53	0,71
			Internalization	0,3	-0,43	-0,17

Note: r = effect size; LL = Low Limit; UL = Up Limit.

As seen in Table 1, the effect sizes of each independent study are different. Combined effect sizes of studies range from -.48 to .63. (min= -.48; max= .63). The correlation between task behaviors and affective commitment is -.48, and the correlation between instructional leadership and identification dimension is .63. Because it is too difficult to evaluate these correlations one by one, we presented the mean effect sizes of related subgroups in Table 2.

Table 2. Mean effect sizes between leadership and teachers' organizational commitment

Effect size and 95% interval					Heterogeneity			
Model	k	ES (r)	LL	UL	Q	df	p	Tau
Fixed	12	0,31	0,29	0,34	367,1	11	.00	0,26
*Random effects	12	0,25	0,1	0,39				

According to Table 2, the magnitude of the relation between leadership and organizational commitment is weak (ES_{L-OC} : .25; $LL = .10$; $UL = .39$). With the two different statistical models (fixed and random effects), this power of relation is to be differentiated. On the other hand, heterogeneity between studies can't be ignored ($Tau \geq .13$; $Q_{(12)} = 367.1$, $p < .01$). After the publication bias tests, we found any statistically significant evidence of publication bias (Egger's regression coefficient test = $df = 10$, $t = 1,68$, $p > .05$; Begg and Mazumdar rank correlation coefficient = Kendall's $\tau = .01$, $z = .05$, $p > .05$). In Table 3, we presented the moderator analysis of effect sizes.

Table 3. Moderator analysis of the relations between leadership styles and organizational commitment

Effect size and 95% interval						Heterogeneity			
		k	ES (r)	LL	UL	Tau	Q	df	p
Leadership	Relationship Behaviour	2	0,2	0,1	0,3	0,11			
	Task Behaviour	2	-0,04	-0,14	0,06	0,49			
	Instructional	2	0,49	0,43	0,55	0,18			
	Transformational	3	0,4	0,37	0,44	0,31			
	Transactional	2	0,18	0,13	0,23	0,07			
	k	11					4,13	5	0,52
SES	1.Level	3	0,31	0,24	0,38	0			
	2.Level	6	0,41	0,38	0,44	0,35			
	3.Level	3	0,16	0,12	0,21	0			
	k	12					0,54	2	0,76

As seen in Table 3, the mean of the relations between leadership and teacher commitment is not statistically different in accordance with the moderator variables ($Q_{L(4-11)} = 4.3$; $Q_{TL(2-12)} = 0.9$; $Q_{SES(2-12)} = .54$). Comparisons show that the magnitude of the relations between instructional, transformational leadership and teachers' organizational commitment are stronger than the other leadership styles ($ES_{IL-OC} = .49$; $LL = .43$, $UL = .55$; $ES_{TL-OC} = .40$; $LL = .37$, $UL = .44$).

The magnitude of the relation between leadership and organizational commitment is weaker in third level school districts than the other levels. It is also possible to say that the effect sizes among the second level studies are heterogeneous. As an organizational behavior form, organizational commitment is defined with individual and organizational behaviors of teachers. By shrinking the unit of meta-analysis study, we can reach clearer evidence. For that reason, the below analysis presented in Table 4 was conducted with the sub correlations of independent studies ($k=18$).

Table 4. The relation between leadership and organizational commitment in organizational behavior context

Effect size and 95% interval					Heterogeneity
Behavior Levels	k	ES (r)	LL	UL	Tau
Individual	6	0,37	0,33	0,40	0,13
Organizational	12	0,12	0,09	0,14	0,42

There is no statistically significant evidence of publication bias in the subset of meta-analysis of leadership behaviors and organizational commitment levels (Egger's regression coefficient test: $df = 16$, $t = .88$, $p > .39$; Begg and Mazumdar rank correlation coefficient: Kendall's $\tau = .04$, $z = .22$, $p > .82$). According to the Table 4, with behavior levels, the mean of relation between leadership and organizational commitment is not statistically different from each other ($Q_{(1-18)} = .17$, $p > .58$). But it is also possible to claim that individual level behaviors affect or to be affected by that relation more than organizational one.

4. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to examine the magnitude of the relation between leadership and teacher commitment in Turkish context with moderator variables. Before discussing our analysis results, it is better to deal with the limitations of this study. First of all, unfortunately the number of available studies that met our criteria to be included in this meta-analysis is very small. That disturbed us at the beginning of the analysis. But in the process of literature review, we found some meta-analysis which were studied with a smaller dataset than ours, so we decided to go on analyzing. Actually the number of studies about leadership and organizational commitment is high in Turkey. We retrieved 148 studies totally. But only 8 of them were included in the dataset because most of them did not have the statistical data needed for the analysis. Moreover, the relationship between leadership styles and teacher commitment has been studied in educational context in Turkey recently.

In our dataset, leadership styles were studied in five dimensions. These dimensions were transformational, transactional, laissez-faire, instructional styles and leadership behaviors (task or relationship). Organizational commitment has also some dimensions such as internalization, identification, compliance, affective and continuance commitment. Firstly, we took leadership and teacher commitment generally and found that the relation between leadership styles and teachers' organizational commitment is positive but weak. This finding contrasts with various studies (Khasawneh, Omari & Abu-Tineh, 2012; Huang, 2011; Cokluk & Yilmaz, 2010; Saqer, 2009) that claimed moderate and positive relationship between leadership styles and teacher commitment.

While reviewing the literature about leadership and organizational commitment, we could not find any meta-analysis studies that dealt with the magnitude of the relation between these two variables. So we just discussed the results of independent studies. As pointed out above, independent studies found moderate or strong relations between leadership and organizational commitment (OC). One point is perhaps to be highlighted here; the relation between leadership and OC is moderate in educational organizations but strong in business ones. We reached that conclusion in our literature review process. There were lots of studies which found a strong relation between leadership and OC in business organizations. As a suggestion, this can be a research topic for further investigations.

We took leadership styles and socio-economic status of school districts as moderator variables. Comparisons of leadership styles showed that the relation between instructional, transformational leadership styles and teachers' organizational commitment is stronger than the other leadership styles. The reason is that transformational and instructional leadership are more focused on the humanitarian relationships between leaders and followers. Transformational leaders help followers grow and respond their individual needs by empowering them and by aligning the goals of the individual followers and the leader (Bass & Riggio, 2006). Instructional leadership is about positive school culture and the process of working together to improve the quality of teaching and learning (Hopkins, 2001).

Some studies support our finding. For example, in their meta-analysis about the nature and effects of transformational school leadership, Leithwood & Sun (2012) found that transformational school leadership practices had moderate effects on teacher internal states and behaviors. Among teacher internal states, transformational school leadership was especially strongly related to perception of leaders' effectiveness, job satisfaction and teacher commitment. In another meta-analysis about leadership, commitment and culture, Jackson, Meyer & Wang (2012) found a strong correlation between transformational/charismatic leadership and affective commitment and a moderate correlation between transformational/charismatic leadership and normative commitment. In our literature observations about transformational leadership and commitment, we saw that transformational leadership is the most studied subject in leadership literature. Commitment is also an important variable being studied with transformational leadership style. Studies about transformational leadership and teacher commitment generally show that the relation between these two variables is stronger than the other styles such as transactional or laissez-faire (Rehman, Shareef, Mahmood & Ishaque, 2012; Leithwood & Jantzi, 2006; Ross & Gray, 2006; Yu, Leithwood & Jantzi, 2002). As stated above,

transformational leadership is about helping the follower grow and responding his or her needs. Another important point is helping the follower and responding his or her needs also rise his or her commitment. So the stronger relation between transformational leadership and commitment may be explained like that. Thinking the same way, instructional leadership is about positive school culture and commitment is expected to rise in a positive school atmosphere.

As for the socio economic status of school districts, we found that the relation between leadership and teacher commitment is weaker in third level school districts than the other ones. That means in third level school districts, leadership styles of principals are less important in building teacher commitment or teachers give less importance to the leadership styles of their principals. That would be the case for principals too. Another possible explanation may be about the high expectations of teachers from their principals in third level school districts. It is also known that in third level school districts, principals are busy with other problems like financial, student behaviors, parents etc. Because of these problems they perhaps have less chance to build teacher commitment in their schools.

We tried to find out the magnitude of the relation between leadership styles and teacher commitment by categorizing the organizational behavior levels into two categories as individual and organizational levels. Our findings showed that in organizational behavior context, the mean of relation between leadership and teacher commitment is not statistically different from each other. On the other hand, according to the effect sizes, it is possible to claim that individual level behaviors is more effective on the relation between leadership styles and teacher commitment than organizational levels.

In sum, the number of studies about leadership and teacher commitment is going up day by day in Turkey. In this meta-analysis, we only had eight studies to analyze and found that the relation between leadership styles of principal and teacher commitment is positive but weak. It is generally known that there is a positive relation between these two variables. That is the case for educational context. An important point we observed in the process of literature review is that while the magnitude of the relation is weak or moderate in educational context, it is strong in business organizations. According to our moderator variables, as in most studies, transformational and instructional leadership have a stronger relation with teacher commitment than the other styles. This finding is supported by most of the studies. In third level school districts the relation between leadership and teacher commitment is weaker than the other levels. The last point is that individual behavior levels affect the relation between leadership and teacher commitment more than organizational levels.

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