



Effect of Gender on Teachers' Transformational Leadership Perception: A Meta-Analysis

Levent Eraslan¹ Tufan Aytaç²

Abstract: The purpose of this study is to determine the varying effect sizes of teachers' perception and opinions about transformational leadership in accordance with gender. 20 studies deemed meeting the inclusion criteria from YOK National Thesis Archive dealing with teachers' approach to transformational leadership in Turkey and 9 studies on this subject were chosen to be used in this study. Total number of samples in this study is 10693; 5490 of which are female teachers whereas 5203 of which are male teachers. In addition, several variables such as publication type, publication year, the region where the research has been made, scale type, educational level, and researcher's sex that could not be included in the evaluation as a moderator in primary researches were analyzed. In accordance with the results of this study, an effect size with statistical significance at an insignificant level was determined on the part of female teachers according to fixed effect model ($d= 0,086$) and random effect model ($d=0,041$). In the consequence of the moderator analysis conducted, the region in which the research was conducted ($p=0,029$), educational level ($p=0,005$), the researcher's sex ($p=0,000$), scale type ($p=0,000$), and publication type ($p=0,000$) were determined to be moderators. Moreover, effect sizes obtained from the studies showed that gender difference has a tendency to decrease by year. As a result, gender may not be recommended to be used as a significant variable in those future studies dealing with teachers' opinions about transformational leadership.

Keywords: Transformational leadership; meta-analysis; gender; teacher.

¹ Doç. Dr. Kırıkkale Üniversitesi Eğitim Fakültesi, Eğitim Bilimleri Bölümü, leraslan@yahoo.com

² Yrd. Doç. Dr. Bozok Üniversitesi Eğitim Fakültesi, İlköğretim Bölümü, tufana60@gmail.com

Öğretmenlerin Dönüşümcü Liderlik Algısında Cinsiyetin Etkisi: Bir Meta-Analiz

Öz: Bu araştırmanın amacı; öğretmenlerin cinsiyetlerine göre dönüşümcü liderliğe ilişkin algılarının ve görüşlerinin etki büyüklüklerini belirlemektir. Türkiye’de öğretmenlerin dönüşümcü liderlik yaklaşımına ilişkin görüşlerini konu alan YÖK Ulusal Tez Arşivinde yer alan dâhil edilme kriterlerine uygun 20 çalışma ile bu konuda yapılan 9 makale araştırma kapsamına alınmıştır. Çalışmalar kapsamındaki toplam örneklem sayısı olup 10693 olup bunun 5490’u kadın ve 5203’ü erkek öğretmenden oluşmaktadır. Ayrıca, birincil araştırmalarda değerlendirmeye dahil edilemeyen moderatör olarak yayın türü, yayın yılı, araştırmanın yapıldığı bölge, ölçek türü, öğretim kademesi ve araştırmacının cinsiyeti değişkenleri analiz edilmiştir. Araştırma sonucunda kadın öğretmenler lehine sabit etkiler ($d=0,086$) ve rastgele etkiler ($d=0,041$) modeline göre istatistiksel olarak anlamlı önemsiz düzeyde bir etki büyüklüğü belirlenmiştir. Yapılan moderatör analizi sonucunda araştırmanın yapıldığı bölgenin ($p=0,029$), öğretim kademesinin ($p=0,005$), araştırmacının cinsiyetinin ($p=0,000$), ölçek türünün ($p=0,000$) ve yayın türünün ($p=0,000$) birer moderatör olduğu saptanmıştır. Ayrıca araştırmalara ait etki büyüklükleri yıllar itibariyle cinsiyet farklılığında bir azalma eğilimi olduğunu göstermiştir. Sonuç olarak öğretmenlerin dönüşümcü liderliğe ilişkin görüşlerini ele alan çalışmalarda cinsiyetin önemli bir bağımsız değişken olarak kullanılmaması önerilebilir.

Anahtar Kelimeler: Dönüşümcü liderlik, meta analiz; cinsiyet; öğretmen

Introduction

Along with the rapid increase in knowledge, fast development and communication, transformation phenomenon now has an immense influence on the life cultures of all social systems. Globalization, pace of technological production and changes in the meaning of knowledge are determining dynamics of this process. This process of transformation requires all leaders (managers) working for both private sector and public sector to adapt to these changes, to improve their skills and to determine a vision and new strategies for their organization and its employees. In short, it requires the existence of leaders who are attentive to new changes in the existing understanding. This requirement also leads to a necessity for a leadership role and behaviors appropriate for the dynamics and advancements of the age. This leadership behavior becomes meaningful in the concept of “transformational leadership”. This understanding of leadership which focuses on change and transformation

and is modeled despite the challenges of change has been frequently mentioned in international literature on leadership.

Transformational leadership (TL) is regarded as one of the leading contemporary approaches to the new leadership paradigm. TL understanding is an understanding to which great importance has been attached and that attracted great attention among contemporary theories of and researches on management (Keçecioglu, 1998:27). Particularly in recent years, a variety of studies have been conducted on TL in many fields of science (Sorenson, 1992). Over two decades, attention paid to transformational leadership has increased at both local and international levels. Problems faced during the re-structuring important organizations led to a search for an efficient leadership (Allix, 2000:7). This search became meaningful in transformational leadership.

Transformational Leadership

The term “transformational leadership” was first defined in Dawston’s “Rebel Leadership”. The concept of “transformational leadership” defined in this sociological thesis was later systemized by *James McGregor Burns* in 1978. For him, leader is the one who creates high levels of morale, motivation and performance among those in his/her team. According to Burns, only transformational leaders have the ability to create new areas in modern organizations because he/she is the master of change. He/she designs a better future; he is prudent; he creates a vision, makes everybody adopt this vision and builds up passion for making this vision real. Transformational leaders are those who can change their environment. These leaders do not react to environmental changes; instead they create an environment (Avolio and Bass, 1994:3; Bass, 1998; Kirby and Paradise, 1992:303).

Transformational leader motivates his employees through inspiration; causes intellectual stimulation and creates energy among them. Leader increases the attention paid by the employees to the organization’s goals through creating a vision and mission conscious. Individuals give priority to group’s interests rather than their own concerns and interests. A transformational leader notices an audience’s or a potential audience’s existent tendency, need or desire and uses this need to motivate the audience; he makes him act through appealing his needs and desires. TL includes behaviors such as idealized effect,

motivation through suggestion and providing intellectual motivation and individual support beyond organization's daily operations (Karip,1997: 446; MacKenzie, Podsakoff,&Rich, 2001). A transformational leader is capable of creating a change culture, designing a vision and sharing it, interacting with his audience and ensuring their personal development; he has a flexible understanding of management and a democratic participative nature. Eren (2000:421) define transformational leader as:

“The one who initiates reform and novelty in the organization through motivating his audience or subordinates to get more than expected from them under normal circumstances by means of revealing all their skills and abilities; increasing their self-confidence; raising consciousness among the members of the organization about their duties and thus leading to change”.

TL, which is accepted as leadership concept of change age and as having the above-mentioned characteristics of the new age, is a leadership appealing to and emphasizing the organizational power, equality and understanding. This definition reveals the significance of the organizational power resulting from the interaction between a transformational leader and its audience.

Dimensions of Transformational Leadership

A transformational leader generates this power as a result of a process including creating a vision efficiently; sharing this vision with his audience; transferring new values by means of idealized effect; and affecting his audience and making them loyal to the organization through his charismatic influence. Within this context, dimensions of transformational leadership are as follows (İnci, 2001: 46):

Table 1. Dimensions of transformational leadership

Idealized Effect
He creates a shared mission and a sense of ownership among individuals.
He imposes the goal on individuals.
He considers individuals' desires and wishes
He detects crisis emerged at high level.
He balances the tension of the group in critical conditions.

Table 1 Continued. Dimensions of transformational leadership

Motivation Through Suggestion
He persuades individuals that they can achieve the determined performance levels.
He provides examples to enable them operate in practice.
He increases individuals' expectations through eliminating some unfavorable situations.
He enables individuals to benefit from unexpected opportunities through long-term thinking

Intellectual Motivation
He gives courage to review their ideas.
He applies past examples to today's problems.
He creates platforms for discussion within the organization.
He encourages individuals to review problems.
He encourages individuals to think fast.
He encourages individuals to problems through certain points of view.
He listens to ideas presented even if they are not logical.

Individualized Interest
He determines individuals' superiorities and weaknesses.
He is interested in individuals' happiness and welfare.
He determines projects depending on individuals' skills and needs.
He gives individuals freedom in proportion to their skills and needs.
He encourages individuals for exchange of ideas.
He creates opportunities to improve Professional formations.
He supports personal development.

Transformational Leadership and Gender Factor

Effect of gender on leadership roles and behaviors is a frequently discussed issue in discussions on leadership. The question "Is gender important for leadership?" has always been and continue to be of interest in a variety of researches. Particularly in this discussion which starts with "Big Man" leadership theory, all efficient leaders should be chosen, strong, effective, healthy and male. In addition, positive attitudes towards masculine power and critical attitudes towards feminine power have long been included in the process of definition and conceptualization (Cook and Rootwell, 2004). However, lately, as women's visibility and effect on particularly social life (in political and civil activities; in economy and business life etc.) have increased, this theory has gradually become debatable. Decreased validity of power-based policies after World War II and increased emphasis on feminine characteristics, (such as affection, attentiveness to others' needs and personal interest) becoming especially obvious after 1968, increased discussions on femininity effect within the scope of management and gender theories. The relationship between leadership and gender took on a different dimension with Bem's study (1974). Accordingly, as leadership and gender roles masculinity (masculine) includes an outgoing, independent, objective, logical,

reasonable, analytical and decisive nature whereas femininity (feminine) includes an emotional, attentive, telling, cooperative, intuitive, sympathetic and considerate nature. Androgynous leadership behaviors which have both masculine and feminine characters are also discussed (Park, 1996: 13; Trinidad and Normore, 2005). Within this context, when nature and characteristics of transformational leadership are examined, which one or ones of masculine, feminine and androgynous natures is/are more dominant and successful? The answer could be seen in meta-analyses conducted in this field. The first comprehensive meta-analysis in this field was made by Eagly and Johnson. The results of their study titled *Leadership and Gender: A Meta-Analysis* (1990) provides a number of findings significant in terms of the above-mentioned discussions. In accordance with the results of this meta-analysis with 162 working samples, female leaders come to the foreground through a relationship-oriented leadership style while male leaders come to the foreground through a duty-oriented leadership style. A more relationship-oriented characteristic study on transformational leadership may show that women could be more successful in this leadership type. *Transformational, Interactive and Laissez-Faire Leadership Styles: A Meta-Analysis* covering 45 leadership studies of Eagly, Johannesen-Schmidt and Van Engen (2003), showed that women exhibit more TL characteristics since TL covers behaviors which are consistent with feminine gender roles such as supportive and considerate behaviors while men have the typical characteristics of interactive leadership. In *Gender and Perceptions of Leadership Effectiveness: A Meta-Analysis of Contextual Moderators*, Paustian, Samantha, Walker, & Woehr (2014) conclude that women are relatively more effective than men in all leadership types. In accordance with the results of the study conducted by Arslan (2014), gender roles of those students who are in the last grade of Faculty of Medicine affect their transformational leadership perceptions. Dimension of exhibiting personal interest for those students of medicine with high feminine characteristics is high while dimension of providing vision-taking appropriate role model for those students of medicine with high masculine characteristics is higher.

Studies of Chin (2007) and Daughtry and Finch (1997) suggest that transformational leadership increases school's success. Meta-analysis of Chin (2007) TL understanding is suggested to affect teacher's job satisfaction, his school effectiveness perception and student's success in a positive way. Carless (1998), Maher (1997), Mandell & Pherwani (2003), in their

studies, more deal with whether gender of school leaders leads to a significant difference in terms of TL behaviors. However, studies revealing the effect of gender on teacher's perception of school leaders' transformational leadership are observed to lack meta-analyses. Carless's (1998) study shows that there is not a significant difference in transformational leadership perception in terms of the audience's gender. In contrast, Klenke's meta-analysis (1994) suggests that the audience's gender causes a difference in leadership perception. In literature, various studies comparing teachers' TL perception in terms of gender have different results. Some researches in literature (Başaran, 2006; Çelik, 2013; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Eagly and Karau, 1991; Karadağ, Başaran, & Korkmaz, 2012; Klenke, 1994) reveal that teachers' opinions and perceptions about TL are affected by gender. In other studies, on the contrary, gender is observed not to have any significant effect on male and female teachers' TL perceptions and no difference between them is found.

Number of qualitative and quantitative researches on TL in the field of education in Turkey is increasing day by day (Başaran, 2006; Oğuz, 2011; Akkas, 2013). In general, in qualitative and quantitative researches on TL various scales and different independent variables (gender, branch, marital status, education level, faculty from which teachers educated, seniority etc.) have been used. In the consequence of these researches, both statistically significant and insignificant results varying in terms of the subgroups of independent variables have been obtained. Meta-analyses are needed to synthesize the results of all these studies and to pave the way for new researches on teachers' TL perception.

Lin, Ho, & Lin (2013), Eagly, Johannesen-Schmidt, & Van Engen, (2003), Maher (1997) and Klenke (1994) note that these results should be synthesized because researches on TL have different results. He also claimed that meta-analyses should be made in this respect. Increase in the studies on teachers' opinions about TL in schools witnessed recently led to a necessity to draw a common conclusion through considering the number of samples and synthesizing the results of these studies. Since no meta-analysis on teachers' opinions about TL has been found, this study would be an original one in both domestic and international sense and it would pave the way for new researches in this field in terms of different variables. Within this context, this study will examine the effect sizes of TL and whether

there is a difference between the effect sizes obtained through various variables ignored in primary researches.

Purpose

Purpose of this study is to determine the effect sizes of teachers' perception and opinions about transformational leadership based on their gender.

Method

Research Model

The research model of this study is meta-analysis method which is one of the methods used for synthesizing the research results. The process including analysis, synthesis and interpretation of quantitative findings obtained from independent studies through advanced statistical techniques is called meta-analysis. The aim of meta-analysis is to combine the findings of various studies conducted at different times in different places on the same subject so as to reveal the facts about this subject and to achieve the most reliable fact in quantitative terms through increasing the number of samples (Cumming, 2012: 205; Ellis, 2012: 5; Hartung, 2008; Kış, 2013; Yıldırım, 2014). In this study, CMA ver. 2.2.064 [Comprehensive Meta-Analysis], Statistical Package Software for Meta-Analysis was used for measurement of the effect sizes, variances and comparisons of the groups included in each study. SPSS ver. 20.0 package software was used for the rater reliability test.

Data Collection

MA theses and PhD dissertations on teachers' perception and opinions about transformational leadership in Turkey are the basic data sources of this study. The keywords "transformational leadership" and "transformational leader" were used to find the related material and researches in the National Thesis Archive of the Council of Higher Education. Following the browsing process, 20 of 50 studies on the subject of this study were found convenient for inclusion criteria. In addition, 9 studies meeting the inclusion criteria that were chosen from Proquest, National Library, Tubitak-Ulakbim databases were included in

the study. In choosing the studies to be included in this study, the following criteria were used:

(i) Criterion 1: Published or unpublished references: MA and PhD theses.

(ii) Criterion 2: Convenience of the research method of the study: the requirement for being an empirical study and use of tenure of office as an independent variable to obtain the effect size during the meta-analysis.

(iii) Criterion 3: Existence of sufficient numeric data: Sample size, mean, standard deviation, F value, t value, X² value, Kruskal Wallis value, Mann Whitney U data and p value were considered for male and female teacher groups to determine the effect sizes necessary for a meta-analysis.

21 studies were not included in the study on the grounds that they used different variables (managers, academic members) and they lacked the data necessary for a meta-analysis. The sample of this study is limited to 29 studies and MA theses and PhD dissertations on this subject written in Turkey between the years 2003 and 2013.

Research Reliability: A coding protocol which includes the name, content and data of this study has been created. A secondary researcher who has an in-depth knowledge on the "Study Content" section of the Rating Protocol and on what to do has rated using an inter-rater reliability form in order to ensure the inter-rater reliability. The first rater is the first researcher himself. Cohen's Kappa statistics was used to ensure the inter-rater reliability and it was found to be 0,91. This result indicated almost a perfect compliance between the raters.

Research validity: During this study, it was determined that the validity of data collection means had been ensured in all of 29 studies included in the meta-analysis.

Data Analysis

During this study, the effect sizes, variances and comparisons of the groups included in each study was measured through CMA ver. 2.2.064 [Comprehensive Meta-Analysis], Statistical Package Software for Meta-Analysis (Borenstein et al., 2005). This study includes female teachers as sample group and male teachers as control group. Thus, positive status of

the effect size is interpreted as being in favor of female teachers while its negative status is interpreted as being in favor of male teachers. SPSS ver. 20.0 package software was used for rater reliability test. Since the significance level was taken as 0,05 in the studies included in this study, the significance level of statistical analyses to be used in this study was determined as 0,05.

Findings

The related data covered in the studies included in this study were analyzed so as to find an answer to the question of the study. Findings concerning the publication bias, descriptive statistics, forest plot, fixed effect model findings, homogeneity test, random effect model findings and moderator analysis findings obtained from these analyses are given in this part.

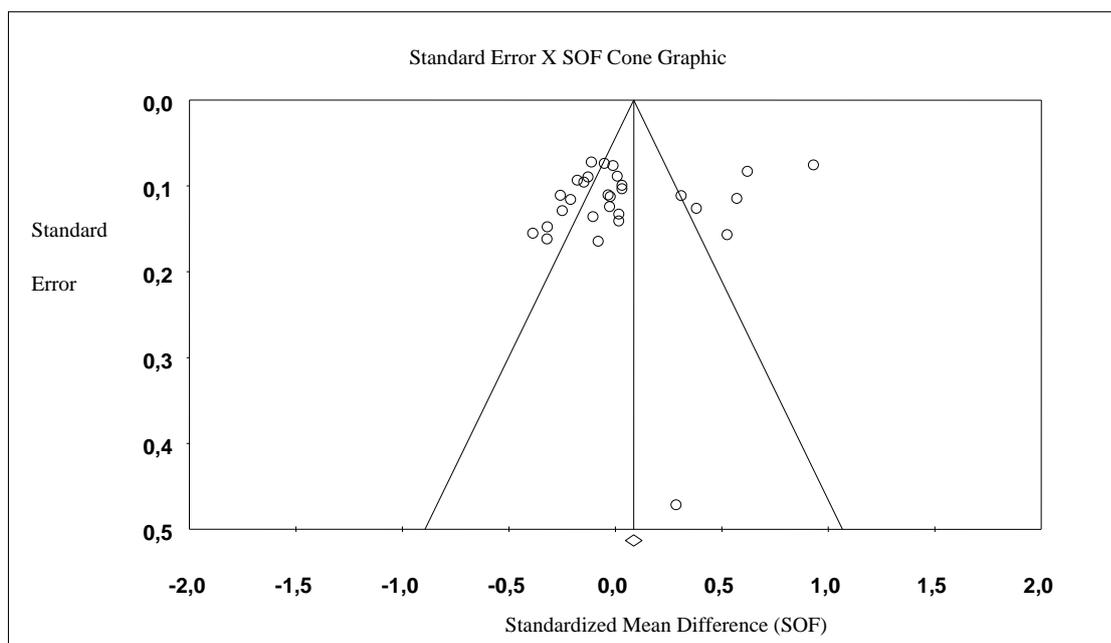


Figure 1. Cone Dispersion Graphic of the Studies with Effect Size Data on Differences among Teachers' Perceptions about Transformational Leadership in accordance with their Gender

As reflected in Figure 1, majority of 29 studies that were included in this study is located at upper side of the figure and very close to the conjoined effect size. In case there is no publication bias, studies are expected to expand symmetrically on both sides of vertical line showing the effect size (Borenstein et al, 2009: 284). If there was a publication bias in 29

studies that were included in this study, then, the majority of the studies will be located at the bottom of the figure or only at a single part of the vertical line (Borenstein et al, 2009: 284). In this sense, this cone graphic is one of the indicators of the absence of a publication bias in terms of the studies included in this study.

Orwin’s Fail-Safe N Evaluation was also conducted to test the publication bias. Orwin’s Fail-Safe N calculates the number of studies that are likely to be excluded from the meta-analysis (Borenstein et al, 2009: 285). In the consequence of this analysis, Orwin’s Fail-Safe N was found to be 247. The necessary number of study for the average effect size found as 0,086 in the consequence of the meta-analysis to reach 0,01 (trivial) level, in other words, almost to zero effect size is 247. However, 29 studies which were included in this study are the total number of studies which meet the inclusion criteria and which are available among all the studies conducted on this subject in Turkey (qualitative, quantitative, theoretical etc.). Impossibility to attain 247 other studies may be accepted as another indicator of the absence of publication bias in this meta-analysis.

Non-Conjoint Findings of Effect Size Analysis Based on Teachers’ Gender

The effect sizes of male and female teachers’ perception about transformational leadership, standard error and its upper and lower limits based on a reliability level of 95% are given in an order from positive to the negative values on Table 2.

Table 2. Effect Sizes of Teachers’ Opinions about TL Based on Their Gender

Model	Study Name	Effect size (d)	Standard Error	Variance	Lower limit	Upper limit	Z- Value	p- Value	Number of Male	Samples Female
	Başaran,2006	-0,460	0,156	0,024	-0,765	-0,154	-2,951	0,003	53	200
	Baysal,2013	-0,145	0,096	0,009	-0,334	0,044	-1,502	0,133	213	219
	Bilir,2007	0,012	0,089	0,008	-0,163	0,188	0,137	0,891	253	247
	Çelik,2013	0,774	0,084	0,007	0,610	0,938	9,247	0,000	357	268
	Çelik, Eryılmaz, 2006	-0,363	0,163	0,026	-0,682	-0,045	-2,234	0,025	66	92
	Çetiner,2008	-0,176	0,094	0,009	-0,360	0,009	-1,866	0,062	194	273
	Çiçek,2010	0,573	0,115	0,013	0,347	0,799	4,973	0,000	176	141
	Çifci,2009	-0,021	0,113	0,013	-0,243	0,201	-0,185	0,854	180	138
	Demirkesen,2013	-0,024	0,125	0,016	-0,268	0,221	-0,191	0,849	124	133
	Doğan,2010	-0,125	0,090	0,008	-0,302	0,052	-1,385	0,166	197	325
	Eraslan,2003	-0,207	0,117	0,014	-0,435	0,022	-1,774	0,076	132	168
	Gök,2010	1,077	0,076	0,006	0,928	1,227	14,127	0,000	530	309
	Gültekin,2012	0,429	0,131	0,017	0,173	0,685	3,288	0,001	150	100
	Karadağ, Başaran,Korkmaz,2012	-0,460	0,156	0,024	-0,765	-0,154	-2,951	0,003	53	200

Table 2 Continued. Effect Sizes of Teachers' Opinions about TL Based on Their Gender

Model	Study Name	Effect size (d)	Standard Error	Variance	Lower limit	Upper limit	Z-Value	p-Value	Number of Male	Samples Female
	Kazancı,2010	0,034	0,100	0,010	-0,162	0,230	0,345	0,730	237	173
	Kılınç,2013	-0,031	0,111	0,012	-0,249	0,187	-0,278	0,781	170	154
	Kiriş,2013	0,019	0,143	0,020	-0,261	0,299	0,134	0,893	129	79
	Koç,2013	-0,077	0,189	0,036	-0,449	0,294	-0,409	0,683	39	98
	Kurt,2009	-0,049	0,074	0,006	-0,195	0,097	-0,655	0,512	498	283
	Oğuz,2011	0,019	0,142	0,020	-0,259	0,296	0,134	0,894	105	95
	Sönmez,2010	0,342	0,119	0,014	0,108	0,577	2,866	0,004	135	150
	Şahin,2003	0,288	0,472	0,223	-0,638	1,214	0,610	0,542	5	45
	Tahaoğlu, Gedikoğlu,2009	-0,170	0,075	0,006	-0,316	-0,023	-2,271	0,023	344	375
	Taş,Çelik,Tomul,2007	-0,008	0,077	0,006	-0,159	0,143	-0,102	0,919	318	357
	Taş,Çetiner,2011	0,528	0,158	0,025	0,219	0,837	3,350	0,001	80	87
	Tok,Bacak, 2013	-0,255	0,112	0,012	-0,474	-0,036	-2,285	0,022	183	145
	Töremen,Yasan,2010	-0,246	0,130	0,017	-0,500	0,008	-1,899	0,058	99	152
	Ulutaş,2010	0,034	0,104	0,011	-0,170	0,238	0,330	0,742	274	139
	Yılmaz,2010	-0,117	0,150	0,022	-0,410	0,176	-0,784	0,433	196	58
Fixed		0,086	0,020	0,000	0,047	0,126	4,305	0,000	5490	5203
Random		0,041	0,075	0,006	-0,106	0,188	0,547	0,585	5490	5203

In accordance with Table 1, the standardized mean difference (SMD=SOE) based on gender in these 29 studies, varies from -0,460 in favor of male teachers to 0,774 in favor of female teachers. A statistically significant difference ($p < 0,05$) was found in 12 studies while no significant difference was determined in 17 studies. The confidence interval of 29 studies was also found to vary from -0,765 to 1,227.

Forest Plot of the Studies Including Data on Gender

The forest plot of 29 studies included in this study and consisting of the data concerning gender is given in Figure 2.

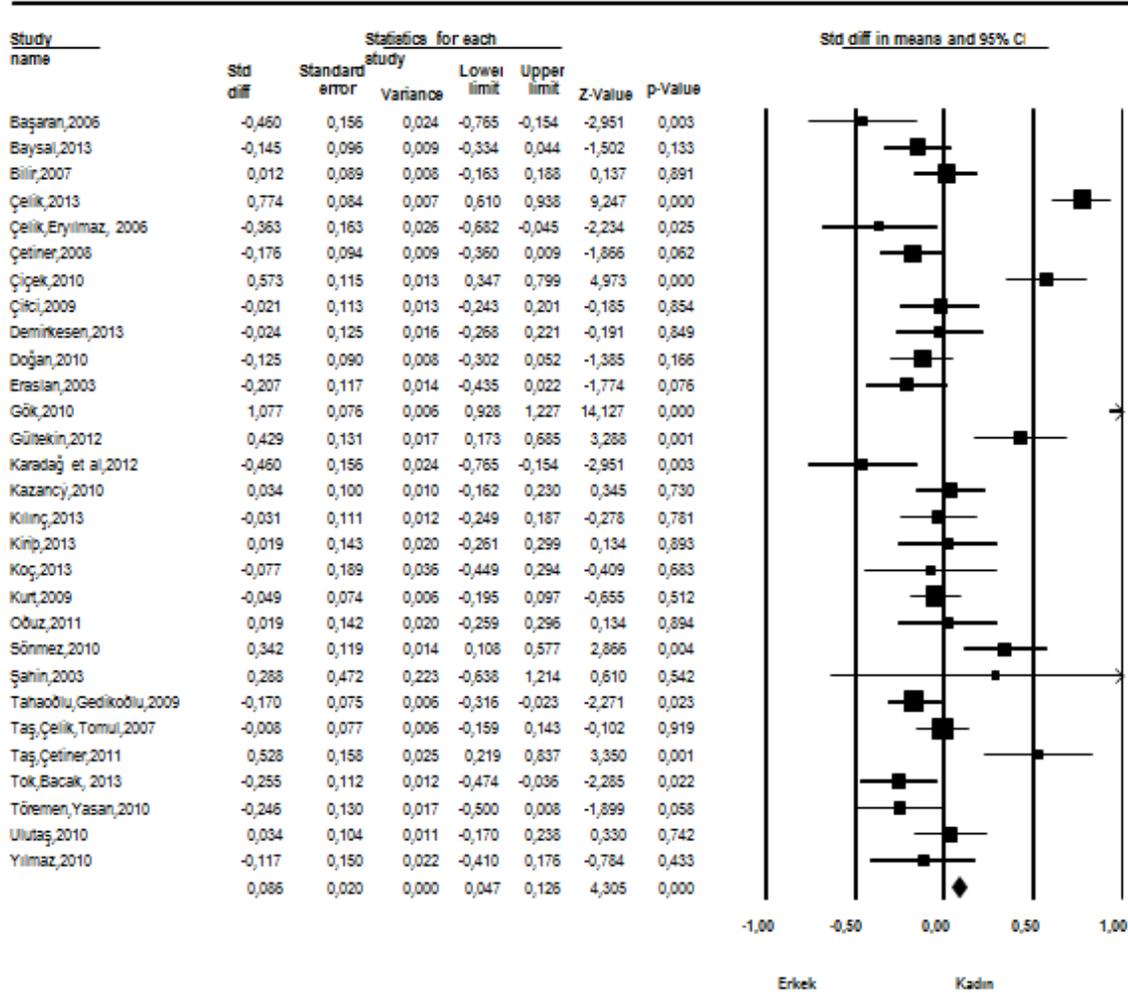


Figure 2. Forest plot of the effect sizes of teachers' perception about TL based on their gender

When Figure 3 is examined, a difference higher than zero in favor of female teachers is observed. The fact that there is a difference in favor of female teachers may be interpreted as a sign of the fact that they perceive and encounter TL more in proportion to male teachers.

Findings of Effect Size Meta-Analysis of Teachers' Term of Office Conjoined in accordance with Fixed and Random Effect Models

The average effect size of the perception of male and female teachers about TL in schools conjoined in accordance with fixed and random effect models (without subtracting the outliers), standard error and its upper and lower limits based on a confidence interval of 95% are given on Table 3.

Table 3. Findings of Effect Size Meta-Analysis Based on Gender Variable Conjoined in accordance with the fixed effect model and random effect model and Homogeneity Test

Model	Effect size and confidence interval of 95%						Heterogeneity			
	Number of studies	Point estimate	Standard error	Variance	Lower limit	Upper limit	Z-value	Q-value (Q)	df (Q)	I ²
Fixed effect	29	0,086	0,020	0,000	0,047	0,126	4,305	370,735	28	92,447
Random effect	29	0,041	0,075	0,006	-0,106	0,188	0,547			

On Table 3, the average effect size value obtained from the effect size values of the studies included in this study based on gender variable in accordance with fixed effect model was calculated as $d=0,086$ whereas the standard error of the average effect size, the upper limit and lower limit of confidence interval of the average effect size was calculated as $SE=0,020$; $0,126$; and $0,047$, respectively. Data obtained from 29 studies included in this study based on the calculations showed that female teachers have a more positive perception about TL than male teachers in accordance with fixed effect model. However, since the effect size value is lower than $0,20$, it was determined as an effect even less than the lower level in accordance with Cohen's classification (Cohen, 1988, 40). According to Lipsey's classification, there is an effect even less than the lower level when the effect size is lower than $0,15$. The classification of Thalheimer and Cook (2002) shows that there is an insignificant difference ($-0,15-0,15$).

When statistical significance is calculated according to Z test, $Z=4,305$ was found. The obtained result was found to have statistical significance with $p=0,005$. Only 6 of the 29 studies included in this study based on gender variable have remained within the upper and lower limits of effect size and reached a result close to the existent effect size whereas the remaining 23 studies have remained over or below these limits.

As for the homogeneity test, that is to say, Q-statistics, Q was calculated as $370,735$. 28 degrees of freedom at a significance level of 95% from χ^2 table was found to be $41,3$. The hypothesis on the absence of homogeneity in terms of the distribution of effect sizes was rejected in fixed effect model because Q-statistics value ($Q=370,735$) exceeded the critical chi square distribution value ($\chi^2_{0,95} = 41,3$) with a degree of freedom of 28. Thus, effect sizes distribution was determined to be heterogeneous in accordance with fixed effect model.

I^2 , which was developed as a supplement to Q statistics, puts forth a clearer result concerning heterogeneity (Petticrew&Roberts, 2006; Yıldırım, 2014). I^2 shows the rate of total variance about the effect size. As opposed to Q-statistics, I^2 Statistics are not affected by number of studies. During the interpretation of I^2 , 25% indicates a low-level heterogeneity, 50% indicates a mid-level heterogeneity and 75% shows a high-level heterogeneity (Cooper et al, 2009, 263). Since a level of heterogeneity close to a high-level heterogeneity was found in the consequence of the homogeneity tests conducted for gender variable (Q and I^2) the model to be used for conjoining process was transformed into a random model. The results of the moderator analysis made to put forth the reasons for this heterogeneity are given on Table 4.

Table 4. Categorical Moderator Results about the Effect of Gender on TL

Moderator	k	d	SE	%95 CI	Q
Region of the study					
Mediterranean	5	0,407	0,047	[0,315; 0,499]	90,793
Aegean	5	0,021	0,055	[-0,087; 0,128]	
Southeastern	2	-0,189	0,065	[-0,316; -0,062]	
Central Anatolia	5	-0,096	0,043	[-0,180; -0,011]	
Aegean	2	-0,002	0,068	[-0,134; 0,131]	
Marmara	10	0,171	0,038	[0,097; 0,246]	
Education level					
Primary/secondary	22	0,115	0,023	[0,071; 0,159]	10,586
Primary/secondary	3	0,067	0,071	[-0,072; 0,206]	
High school	4	-0,083	0,057	[-0,194; 0,028]	
Scale Type					
Ready	4	-0,112	0,057	[-0,223; 0,000]	13,747
Developed	25	0,114	0,051	[0,072; 0,157]	
Researcher's sex					
Male	14	0,053	0,029	[-0,004; 0,110]	33,876
Female	11	0,211	0,033	[0,147; 0,275]	
Male/Female	4	-0,142	0,054	[-0,249; 0,036]	

Note: k=number of studies, d=Cohen's d, SE= Standard Error, CI= Confidence Interval, Q=heterogeneity among the studies
Comparison analyses were made for those studies whose number of subgroups is 2 and more. *p<.05

In the consequence of the moderator analysis conducted, the effect sizes were found to vary depending on the publication type (p=0,000). While results of PhD dissertations and research articles indicated a result in favor of male teachers (PhD dissertations: 0,041 and research articles: -0,119), effect size of studies dealing with MA theses varied in favor of female teachers (MA theses: 0,207).

Studies in regions where the provinces in which this research was conducted are located ($p=0,000$) were determined to influence the effect sizes. Researches made in Southeastern Anatolia, Central Anatolia and Black Sea regions had results in favor of male teachers (Southeastern Anatolia: 0,189, Central Anatolia: -0,096, and Black Sea: -0,002) whereas the effect sizes of the researches, the sample groups of which resided in Mediterranean, Marmara and Aegean regions, varied in favor of female teachers (Mediterranean: 0,407, Marmara: 0,171 and Aegean: 0,021).

The effect sizes were found to vary depending on the education level ($p=0,005$). While results of the studies conducted at primary/secondary and high school levels indicated an a result (primary/secondary school: 0,115 and high school: 0,067) in favor of female teachers, effect size of studies conducted only at primary/secondary school level as sample varied in favor of male teachers (-0,083).

Effect sizes of the studies were observed to change based on the researcher's sex ($p=0,000$). Direction of the difference was observed to change in favor of female teachers when the researcher was female; and in this sense, it may be said that a moderator effect of the researcher's sex existed. The scale type (ready or developed) and publication type used in the study, the region where the research was conducted, education level and the researcher's sex were observed to have a moderator effect.

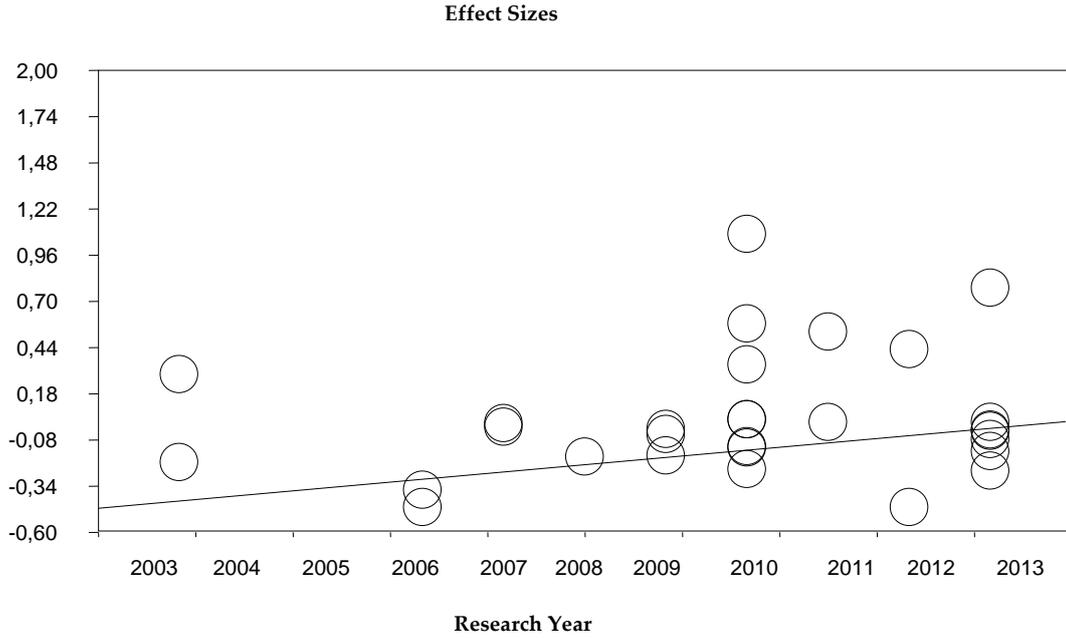


Figure 3. Effect Sizes Meta-Regression Results based on the years in which the research was conducted.

As reflected in Figure 3, a decrease tendency in gender difference by years in terms of the effect sizes of the studies is observed.

Result, Discussion and Recommendations

In this study, 29 effect sizes related to 29 studies constituting a sample of 10693 people were calculated. A statistically significant difference between TL and gender was detected in 4 studies while no significant difference was found in 12 studies. In fixed effect model, as a result of the conjoining process, a statistically significant effect size of 0,018 in favor of female teachers was found. This result may be regarded as low and insignificant in accordance with the classification of Cohen (1988) and Thalheimer and Cook (2002). In random effect model, as a result of the conjoining process, a statistically significant effect size of 0,027 in favor of male teachers was found. This result may also be regarded as low and insignificant in accordance with the classification of Cohen (1988) and Thalheimer and Cook (2002). Within this context, there is a difference which may be regarded as insignificant for social sciences among teachers' perceptions about TL in schools in terms of gender variable. Thus, not using gender as a variable in future studies may be brought to the agenda. Since

there is not any other meta-analysis regarding teachers' perception about teachers' TL based on gender variable, it was not possible to compare and contrast these results.

Results of the studies conducted by Kiriş (2013), Koç (2013), Çelik (2013), Demirkesen (2013), Baysal (2013), Kılınç (2013), Çiçek (2010), Gök (2010), Yılmaz (2010), Töremen and Yasan (2010) Kazancı (2010), Kurt (2009), Çifci (2009), Çetiner (2008), Bilir (2007), and Zeren (2006) indicating that there is an insignificant difference among teachers' opinions about TL based on their gender in favor of female teachers are in compliance with the results of this study. According to these results, it may be said that there is not a significant difference between the perceptions of female and male teachers' about TL based on their gender. The results of this study show that school managers exhibit TL behaviors more in favor of female teachers even if it is at an insignificant level. Maher (1997) and Heilman (1989) suggest negativity in female teachers' perception about TL approach. Sönmez (2010) and Gültekin (2012), in their studies, claim that teachers' gender leads to a significant difference between TL perceptions exhibited by school managers. When teachers' TL perception is analyzed based on their gender in these studies, it may be seen that female teachers perceive their school managers as leaders who have transformational leadership characteristics more than their male counterparts. As is seen, in other studies, in which TL perception is not at an insignificant level, female teachers may be considered to perceive TL behaviors more and notice them more easily.

In the consequence of this study, it may be seen that difference between the effect sizes of teachers' perception based on their gender in accordance with research year moderator variable has a tendency to decrease. The result showing the fact that there is no significant difference between teachers' opinions about TL perception based on gender may be evaluated as an indication of the possibility to ignore teachers' gender as an independent variable in studies dealing with TL. Results of the recent studies also support this finding. This meta-analysis, referring to the fact that there is a low-level difference between teachers' opinions about TL approach they perceive in schools based on their gender, reveals the need for further meta-analyses using various variables predicting TL such as marital status, school type and seniority.

Reference

Those references marked with the asterisk (*) indicate those studies included in the meta-analysis.

- Açıkalin, A. (2000). *İlköğretim okulu yöneticilerinin dönüşümcü liderlik özellikleri ve empati becerileri arasındaki ilişki (Ankara İli Örneği)*. Yayınlanmamış yüksek lisans tezi, Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- *Akkaş B. E. (2013). *İlköğretim okul müdürlerinin dönüşümcü liderlik rollerinin öğretmenlerin örgütsel vatandaşlık davranışlarına etkisi*. Yayınlanmış yüksek lisans tezi, Afyon Kocatepe Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Afyonkarahisar.
- Allix, N. (2000). Transformational leadership: Democratic or despotic, *Educational Management&Administration*, 28 (1), 7-20.
- Arıkan, S. (2001). *Yönetim ve organizasyon*. Ankara: Nobel Yayıncılık.
- Arslan, S. (2014). *Dönüştürücü liderlik ve toplumsal cinsiyet: Tıp fakültesi son sınıf öğrencileri üzerine bir araştırma*. Yayınlanmamış yüksek lisans tezi, Sakarya Üniversitesi, Sosyal Bilimler Enstitüsü, Sakarya.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military and educational impacts*. Mahwah, NJ: Erlbaum.
- Bass, M. B., Bruce J. Avolio (1994). *Improving organizational effectiveness: Through transformational leadership*. Sage Publication.
- *Başaran, A.(2006). *İlköğretim okulu öğretmenlerinin algıladıkları liderlik stilleri ile iş doyum düzeyleri arasındaki ilişki*. Yayınlanmış yüksek lisans tezi, Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, İstanbul.
- Bem, S.L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*. 42(2), 155-162.
- * Bilir, M. E. (2007). *Öğretmen algılarına göre ilköğretim okul yöneticilerin dönüşümcü liderlik özellikleriyle öğretmenlerin iş doyumunu ilişkisinin incelenmesi*. Yayınlanmış yüksek lisans tezi, Selçuk Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi, Teftişi, Planlaması ve Ekonomisi Bölümü, Konya.
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. west sussex-UK: John Wiley & Sons Ltd.
- Bottery, M. (2001). Globalisation and UK competition state: No room for transformational leadership in education? *School Leadership&Management* 21(2).
- * Bulut, K, S. (2013). *İlkokul ve ortaokullarda görev yapan okul yöneticilerinin etkileşimsel ve dönüşümsel liderlik becerileri ile empati eğilimleri arasındaki ilişkinin incelenmesi (İstanbul ili Sancaktepe ilçesi Örneği)*. Yayınlanmış yüksek lisans tezi, Yeditepe Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, İstanbul.
- Carless, S. A. (1998). Gender differences in transformational leadership: an examination of superior, leader, and subordinate perspectives. *Sex Roles*, 39(11/12), 887-902.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2 nd. edition). New Jersey: Lawrence Erlbaum Associates, Inc.
- Cook, L., Rotwell, B. (2004). *Kadınlar, Erkekler ve Liderlik*. Optimist Yayınevi
- Cumming, G. (2012). *Understanding the new statistics*. New York: Routledge, Taylor and Francis Group.

- *Çelik, M. (2013). *Öğretmen algularına göre ilkokul yöneticilerinin dönüşümcü liderlik ve girişimcilik becerileri arasındaki ilişki (Bağcılar ve Bakırköy ilçeleri örneği)*. Yayınlanmış yüksek lisans tezi, Sakarya Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, Sakarya.
- *Çelik, S., Eryılmaz, F. (2006).*Öğretmen algularına göre endüstri meslek lisesi müdürlerinin dönüşümcü liderlik düzeyleri (ankara ili örneği)*. *Politeknik Dergisi* 9(4),211-224.
- Çelik, V. (2000). *Eğitimsel Liderlik*. Ankara: Pegem Yayıncılık.
- *Çetiner, A. (2008). *İlköğretim okulu müdürlerinin dönüşümcü liderlik davranışlarını gösterme düzeylerine ilişkin öğretmen görüşleri (burdur ili örneği)*. Yayınlanmış yüksek lisans tezi, Süleyman Demirel Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Yönetimi, Teftişi, Planlaması ve Ekonomisi Bölümü, Isparta.
- *Çiçek, G. E. (2010). *İlköğretim okulu öğretmenlerinin müdürlerinin liderlik rollerine ilişkin algılarının bazı değişkenlere göre incelenmesi*. Yayınlanmış yüksek lisans tezi, Ege Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi, Teftişi, Planlaması Ve Ekonomisi Anabilim Dalı, İzmir.
- *Çifci, Ç.(2009). *İlköğretim okullarındaki öğretmenlerin etkili okul müdürü algıları (eyüp ilçesi örneği)*. Yayınlanmış yüksek lisans tezi, Beykent Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Yönetimi Anabilim Dalı, İstanbul.
- Chin, J. M. (2007). Meta-Analysis of transformational school leadership effects on school outcomes in Taiwan and the USA. *Asia Pacific Education Review*, 8(2), 166-177.
- *Çimili-Gök, E. B.(2010). *Okul yöneticilerinin liderlik stiline ilişkin öğretmen algılarının örgütsel vatandaşlık davranışlarına etkisi*. Yayınlanmış yüksek lisans tezi, Akdeniz Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, Antalya.
- Daughtry, L. H., & Finch, C. R. (1997). Effective leadership of vocational administrators as a function of gender and leadership style. *Journal of Vocational Education Research*, 22 (3), 173-186.
- *Demirkesen, H.(2013). *İlkokul yöneticilerinin liderlik yeterliklerinin değerlendirilmesi (uşak ili örneği)*. Yayınlanmış yüksek lisans tezi, Uşak Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Uşak.
- *Doğan, S.(2010). *Öğretmen ve yönetici görüşlerine göre ilköğretim okulu yöneticilerinin liderlik stilleri*. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, Özel Sayı 11(3), 101-123.
- Eagly, A. H., Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, 108(2), 233.
- Eagly, A. H., Johannesen-Schmidt, M. C., Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin*, 129(4), 569.
- Eagly, A. H., Karau, S. (1990). Gender and the emergence of leaders: a meta-analysis. *Journal Of Personality And Social Psychology*, 60 (5), 685-710.
- * Eraslan, L. (2003). *İlköğretim okulu müdürlerinin dönüşümcü liderlik özellikleri (kırıkkale il örneği)*. Yayınlanmamış yüksek lisans tezi, Kırıkkale Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi Ve Denetimi Anabilim Dalı, Kırıkkale.
- Eren, E. (2000). *Yönetim ve organizasyon*. İstanbul: Beta Basım Yayım Dağıtım.
- Fiedler, E. E. (1967). *A Theory of leadership effectiveness*. New York: Mcgraw-Hill.
- * Gültekin, C. (2012). *Okul yöneticilerinin liderlik stillerinin okul iklimi üzerine etkisi "istanbul ili anadolu yakası örneği"*. Yayınlanmış yüksek lisans tezi, Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, İstanbul.

- Hartung, J., Knapp, G., Sinha, B. K. (2008). *Statistical meta-analysis with applications*. New Jersey: Wiley Publishing Inc.
- İnci, M. (2001). *Dönüştürücü liderlik yaklaşımı ve uygulamadan örnekler*. yayınlanmamış yüksek lisans tezi, Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, İstanbul.
- *Karadağ, E., Başaran, A., Korkmaz, T. (2009). İlköğretim okulu öğretmenlerinin algıladıkları liderlik biçimleri ile iş doyumları arasındaki ilişki. *Balikesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11(21), 32-45.
- Karip, E. (1998). Dönüşümcü liderlik. *eğitim yönetimi*, 4(16), Ankara: Pegem Yayıncılık.
- *Kazancı, N. (2010). *İlköğretim okullarındaki yöneticilerin liderlik stilleri ile öğretmenlerin örgütsel adalet algıları arasındaki ilişki düzeyi*. Yayınlanmış yüksek lisans tezi, Sakarya Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Yönetimi Ve Denetimi Bölümü, Sakarya.
- Keçecioglu, T. (1998). *Liderlik ve liderler*. İstanbul: Kal-Der Yayınları.
- *Kılınc, T. D. (2013). *Sınıf öğretmenlerinin okul müdürlerinin dönüşümcü ve etkileşimci liderlik stilleri ve kendi örgütsel bağlılıklarını algılamaları ile okul müdürlerinin sınıf öğretmenlerinin örgütsel bağlılıklarını algılamaları arasındaki ilişki: mersin ili tarsus ilçesi örneği*. Yayınlanmış yüksek lisans tezi, Çağ Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Yönetimi Anabilim Dalı, Mersin.
- Kış, A. (2013). *Okul müdürlerinin öğretimsel liderlik davranışlarını gösterme düzeylerine ilişkin yönetici ve öğretmen görüşlerine yönelik bir meta-analiz*. Yayınlanmamış doktora tezi, İnönü Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri, Ana Bilim Dalı, Eğitim Yönetimi ve Denetimi Bilim Dalı, Malatya.
- Kirby, P., Paradise, M. (1992). Extraordinary leaders in education: Understanding transformational leadership. *Journal of Educational Research*, 85(2), 303-311.
- *Kiriş, İ. (2013). *İlkokul müdürlerinin dönüşümcü liderlik özelliklerini gösterme düzeylerine ilişkin öğretmen görüşleri: Adana ili örneği*. Yayınlanmış yüksek lisans tezi, Çağ Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Yönetimi Anabilim Dalı, Mersin.
- Klenke, K. (1994). Meta-analytic studies of leadership: Added insights or added paradoxes?. *Current Psychology*, 12(4), 326-343.
- Koçel, T. (2001). *İşletme yöneticiliği*. İstanbul: Beta Yayınevi.
- Korkmaz, M. (2006). Okul yöneticilerinin kişilik özellikleri ile liderlik stilleri arasındaki ilişki. *Kuram ve Uygulamada Eğitim Yönetimi*, 46, 199-226.
- *Kurt, T. (2009). *Okul müdürlerinin dönüşümcü ve işlemci liderlik stilleri ile öğretmenlerin kolektif yeterliği ve öz yeterliği arasındaki ilişkilerin incelenmesi*. Yayınlanmış doktora tezi, Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Yönetimi Ve Denetimi Bölümü, Ankara.
- Lin, L. H., Ho Y., Lin W. E. (2013). Confucian and taoist work values: an exploratory study of the chinese transformational leadership behavior, *Journal of Business Ethics*, 113, 91-103.
- Mackenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Leadership and salesperson performance. *Journal Of The Academy Of Marketing Science*. 29(2), 115-134.
- Maher, J. K. (1997). Gender-related stereotypes of transformational and transactional leadership, *Sex Roles*, 37(3), 209-224.
- Mandell, B., Pherwani, S. (2003). Relationship between emotional intelligence and transformational leadership style: A gender comparison. *Journal of Business and Psychology*, 17(3), 387-404.
- *Oğuz, E. (2011). Öğretmenlerin örgütsel adalet algıları ile yöneticilerin liderlik stilleri arasındaki ilişki. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 12(1), 45-65.

- Park, D. (1996). Gender role, decision style and leadership style. *Women in Management Review*. 11(8), 13–17.
- Paustian, U., Samantha C., Walker, L. S., Woehr, D. J. (2014). Gender and perceptions of leadership effectiveness: A meta-analysis of contextual moderators. *Journal of Applied Psychology*, Vol. 3., Pp.132-147.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences*. MA- USA: Blackwell Publishers Ltd.
- Rosenthal, R. (1984). *Meta-analytic procedures for social research*. Beverly Hills, CA: Sage.
- Sorenson, G. (1992). An intellectual history of leadership studies: The role of james macgregor burns. *Kellogg Leadership Studies Project Working Papers*, Retrieving From www.academy.umd.edu/scholarship/casl/klsp/2000
- * Sönmez, A. (2010). *Ortaöğretim okulu müdürlerinin öğretmenler tarafından algılanan durumsal liderlik stilleri ile öğretimsel liderlik rolleri arasındaki ilişkinin incelenmesi (bahçelievler örneği)*. Yayınlanmış yüksek lisans tezi, Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, İstanbul.
- *Şahin, S.(2003). *Okul müdürlerinin liderlik stilleri okul kültürü arasındaki ilişkiler*. Yayınlanmış doktora tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Yöneticiliği ve Deneticiliği Bölümü, İzmir.
- *Tahaoglu, F., Gedikoğlu, T. (2009). İlköğretim okulu müdürlerinin liderlik rolleri. *Kuram ve Uygulamada Eğitim Yönetimi*, 15(58), 274-298.
- *Taş, A.,Çelik, K., Tomul, E. (2007).Yenilenen ilköğretim programının uygulandığı ilköğretim okullarındaki yöneticilerin liderlik tarzları. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, Sayı 22 (2007/2), 85-98.
- *Taş, A., Çetiner, A. (2011). Ortaöğretim okulu müdürlerinin dönüşümcü liderlik davranışlarını gerçekleştirme durumlarına ilişkin öğretmen görüşleri. *Türk Eğitim Bilimleri Dergisi*, 9(2), 369-392.
- Thalheimer, W., Cook, S. (2002). *How to calculate effect sizes from published research articles: a simplified methodology*. http://work-learning.com/effect_sizes.htm adresinden 20 Ocak 2014 tarihinde erişilmiştir.
- *Tok, T. N., Bacak, E. (2013). Öğretmenlerin iş doyumu ile yöneticileri için algıladıkları dönüşümcü liderlik özellikleri arasındaki ilişki. *International Journal Of Human Sciences*, 10(1), 1135-1166.
- *Töremen, F., Yasan, T. (2010).İlköğretim okulu yöneticilerinin dönüşümcü liderlik özellikleri (malatya ili örneği). *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, Sayı 28 (Temmuz 2010/II), 27-39.
- Trinidad, C., Normore, A.H. (2005). Leadership and gender: a dangerous liaison? *Leadership& Organization Development Journal*, 26(7), 574-590.
- *Ulutaş, S. (2010). *Kriz yönetimi ve dönüşümcü liderlik*. Yayınlanmış yüksek lisans tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Yönetimi ve Denetimi Bölümü, İzmir.
- Vroom, V. H., Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh, PA: University Of Pittsburgh Press.
- Yıldırım, N. (2014). *Meta analiz. Kuramdan uygulamaya eğitimde bilimsel araştırma yöntemleri*, Ed: Doç.Dr. Mustafa Metin, (S.137-159), Ankara; Pegem Akademi.

*Yılmaz, L. (2010). Halk eğitimi merkezi yöneticilerinin dönüşümcü liderlik özellikleri (istanbul ili anadolu yakası örneği). Yayınlanmış yüksek lisans tezi, Maltepe Üniversitesi-Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, İstanbul.

Zeren, H. (2006). *Dönüştürücü liderlik stili ve örgütsel bağlılık*. Yüksek lisans tezi, Harran Üniversitesi, Eğitim Bilimleri Bölümü, Eğitim Denetimi ve Yönetimi Anabilim Dalı, Şanlıurfa.