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Examination of Relationships between Instructional Leadership of School Principals and Self-Efficacy of Teachers and Collective Teacher Efficacy*

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Abstract

The purpose of this study was to examine the relationships between school principals' instructional leadership behaviors and self-efficacy of teachers and collective teacher efficacy. In this regard, a model based on hypotheses was designed to determine the relationships among variables. The study sample consisted of 328 classroom and branch teachers employed in primary schools in Ankara. Instructional Leadership Scale, Teachers' Sense of Efficacy Scale and Collective Efficacy Scale were used to gather data. Structural Equation Modeling was performed to test the model. Research findings indicated that the model fitted the data well with acceptable goodness of fit statistics. Consequently, instructional leadership had a significant direct and positive impact on collective teacher efficacy. Additionally, it was appeared that teachers' self-efficacy moderated the relationship between instructional leadership and collective teacher efficacy. Several suggestions were presented for improving teachers' self and collective efficacy.

Key Words

Instructional Leadership, Collective Teacher Efficacy, Teachers' Self Efficacy, Teacher, and School Principal

Teachers constitute one of the most important dimensions of innovative acts in education, school development, and effective school movements (Balcı, 2007; Özdemir, 2000). Teachers' beliefs about their self-efficacy (Büyüköztürk, Akbaba Altun, & Yıldırım, 2010) and collective-efficacy that has been discussed in various researches in recent years (Antonelli, 2005; Cooper, 2010; Mackenzie, 2000) were counted among the most important variables that determines teachers' performance and effectiveness in schools. Researches on teachers' sense of self-efficacy indicate that self-efficacy is closely related to student achievement (Allinder, 1995; Caprara, Barnabelli, Steca, & Malone, 2006; Domsch, 2009; Ross, 1992; Woolfolk Hoy & Davis, 2006), family involvement in education (Garcia, 2004; Hoover-Dempsey, Bassler, & Brissie, 1987), tendency to risk taking and innovation (Basım, Korkmazyürek, & Tokat, 2008; Ghaith & Yaghi, 1997; Ross, 1994), collective efficacy (Goddard & Goddard, 2001), and job stress (Betoret, 2009; Ross, 1994). It can clearly be expressed that the organizational forms and structures of schools, one of the most important organizations of society, have effects on the lives of everyone in the school (Lee, Dedrick, & Smith, 1991). One of the important elements of this organizational forms and

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structures is school principal's leadership. Previous research on leadership (Armstrong-Coppins, 2003; Cagle & Hopkins, 2009; Demir, 2008; Hipp, 1995, 1996; Lee et al.; Kurt, 2009; Nicholson, 2003; Ross & Gray, 2006; Oliver, 2001; Williams, 2010) states that some leadership behaviors are effective on determining teachers' perceptions of self and collective efficacy. According to related literature, among these leadership behaviors the instructional leadership behaviors, which became popular with the effective school movements (Short & Spencer, 1989), are related to the variables such as job performance (Enueme & Egwunyenga, 2008), student achievement (Alig-Mielcarek, 2003; Gaziel, 2007; Hearn, 2010; Krug, 1992; O'Donnell & White, 2005), teachers' professional development (Blasé & Blase, 1999a, 1999b), and teachers' attitudes towards the change (Kurşunoğlu & Tanrıöğen, 2009). Although there are some researches indicating that school principals' instructional leadership behaviors are related to teachers' self-efficacy (Derbedek, 2008; Howard, 1996; Tschannen-Moran & Hoy, 2007) and collective efficacy (Brinson & Steiner, 2007), it can be stated that studies in this area are not sufficient especially in terms of instructional leadership. In this regard, more research about teachers' self-efficacy, collective efficacy, and principals' behaviors that affect these efficacy beliefs is needed. It is expected that explaining the relationships between self-efficacy and collective efficacy, and detecting the effects of school principals' leadership behaviors on these efficacy beliefs will significantly contribute to improving school effectiveness and capacity, and increasing student achievement. At this point, Bitto and Butler (2010) also emphasize that more research must be conducted to determine the factors that reinforce teachers' efficacy. As a result, it is thought that the findings of this research that aim to reveal the effects of school principals' instructional leadership behaviors and teachers' self-efficacy perceptions on teachers' collective efficacy will make significant contributions to the literature.

The Purpose of the Study

The purpose of the study is to examine the relationships between school principals' instructional leadership behaviors and teachers' self-efficacy and collective efficacy, and also to observe the direct and indirect effects, through teachers' self-efficacy, of instructional leadership on teachers' collective efficacy.

Conceptual Framework

Teachers' Self Efficacy

Self-efficacy is people's beliefs about their talents to activate motivation, cognitive resources, and action series need for ensuring control over the events in their lives (Wood & Bandura, 1989). Teachers' self-efficacy which has been developed in Bandura's concept of self-efficacy generally consists of teachers' beliefs about effecting and coping with students who have difficulty in motivation and learning (Guskey, 1987; Lewandowski, 2005; Yılmaz & Çokluk Bökeoğlu, 2008). As well as being the indicator of teachers' effectiveness, teachers' self-efficacy is indispensable for an effective school and program (Bitto & Butler, 2010). Teachers' self-efficacy beliefs are accepted to be an important variable that have to be considered in the process of restructuring schools and establishing effective schools (Hoy & Woolfolk, 1993; Pajares & Miller, 1994; Ross, 1994).

Collective Teacher Efficacy

Bandura (1997, p. 477) expressed that "collective efficacy is a shared belief of a group about organizing and managing action phases needed for producing skills at certain levels". In other words, collective efficacy reflects the belief of a group about efficiently organizing the actions needed for accomplishing a task (Goddard, Hoy, & Hoy, 2004) and it determines the power of organizations (Bandura, 1982). The reflection of collective efficacy in schools is called collective teacher efficacy. Collective teacher efficacy is defined as "teachers' perceptions that their effort, as a group, can have a positive impact on students" (Goddard, 2001, p. 467; Goddard, Hoy, & Hoy, 2000, p. 480). From this definition it can be expressed that the group of teachers who have high level of collective efficacy will be more persistent on overcoming the obstacles they face while educating students (Demir, 2008; Goddard, 2002; Hoy, Sweetland, & Smith, 2002).

Instructional Leadership

School principals are expected to carry out a lot of duties at schools. One of them is instructional leadership which has been at issue and studied recently (Hallinger, 2011). Daresh and Ching-Jen (1985) describe instructional leadership as principal behaviors' affecting learning and teaching directly and indirectly. An efficient instructional leader, by providing an effective teaching and learning envi-

ronment (Çelik, 2000; Gümüşeli, 1996; Hallinger & Murphy, 1987; Smith & Andrews, 1989), would increase the quality of education at schools (Marks & Printy, 2003), move the schools towards the ideal position, and increase student achievement (Özdemir & Sezgin, 2002). Hallinger (2005) states that instructional leadership has come into prominence with the increase in the expectations from schools and the efforts to establish a more accountable school system and it has drawn considerable interest of researchers.

Method

As this study aims at examining the relationships between school principals' instructional leadership behaviors and both teacher self-efficacy and collective efficacy, it has been designed as an associational research model. While descriptive studies aim to describe a given state of affairs as fully and carefully as possible, the purpose of the associational research is to examine the relationships between two or more variables without trying to influence them (Fraenkel & Wallen, 2009; Karasar, 2009).

Population and Sample

The population of the research consisted of classroom and branch teachers working in public primary schools in the center of Ankara in 2010-2011 academic year. The research sample consisted of 328 classroom and branch teachers. 65.5% of the participants (n=215) were female and 34.5% (n = 113) were male. The average of the participants' age was 34.3 (SD = 7.20). The average of the participants' teaching experience was 10.5 years (SD = 6.60). On the other hand, 47.9% of these participants were classroom teachers, and 52.1% of them were branch teachers.

Instruments

In this study, *Teachers' Sense of Efficacy Scale* developed by Tschannen-Moran and Hoy (2001) and adapted to Turkish culture by Çapa, Çakıroğlu and Sarıkaya (2005) was used to measure teachers' self-efficacy, and to gather data about teacher collective efficacy, *Collective Efficacy Scale* developed by Goddard et al. (2000) was used. To evaluate school principals' instructional leadership behaviors, instructional leadership scale developed by Şişman (2002) was used. In order to test the construct validity of the instruments, Confirmatory Factor Analysis (CFA) was done. The findings were interpreted on the basis of different fit indexes expressed in the literature (Byrne, 1998; Fan, Thompson, & Wang, 1999; Hu & Bentler, 1999; Jöreskog & Sörbom, 1993; Schreiber, Nora, Stage, Barlow, & King, 2006; Sümer, 2000).

Data Analysis

In the study, Pearson product-moment correlation coefficient (r) was calculated to determine the relationships between variables. Moreover, path analysis was performed for the analysis of direct and indirect effects of independent variables on dependent variables in the framework of structural equation model (Yılmaz & Çelik, 2009). AMOS 18, LISREL 8.70 and SPSS15.0 programs were used in data analysis.

Findings

When the relationships between the research variables were examined, it was observed that the highest level of correlation was between collective efficacy and supporting and developing teachers, the fourth dimension of instructional leadership (r = .39, p < .01). On the other hand, when the relationships between the dimensions of instructional leadership and teachers' self-efficacy were observed, it was obviously seen that the highest level of relationship was between evaluating teaching process and students, a dimension of instructional leadership, and teachers' self-efficacy for using instructional strategies (r = .27, p < .01). At the same time, there were significant relationships between teachers' self-efficacy and collective teacher efficacy. Another result derived from the correlation analysis was that instructional leadership had a partially stronger relationship with collective teacher efficacy when compared to teachers' self-efficacy, besides, it was put forward that instructional leadership had a positive and significant effect on collective efficacy (β = .34, p < .01). Additionally, instructional leadership had a positive and significant effect on self-efficacy (β = .32, p < .01). When the direct effect of self-efficacy on collective efficacy was analyzed, a positive and significant effect was observed (β = .13, p < .05). It was also seen that instructional leadership had a positive, significant and indirect effect on collective efficacy through self-efficacy (β = .04, p < .05). In other words, teachers' self-efficacy plays a mediator role between instructional leadership and collective teacher efficacy. As a result, it can be asserted that self and collective efficacy of teachers increase depending on the instructional leadership they perceive.

Discussion

Firstly, all the variables were analyzed and significant relationships were discovered. Many previous studies showed that there were positive and significant relationships between collective efficacy and teachers' self-efficacy (Goddard et al., 2000; Kurt, 2009; Lev & Koslowsky, 2009; MacKenzie, 2000; Skaalvik & Skaalvik, 2007). Research findings are parallel to the findings of the research mentioned above. Bandura (1997) used the term *reciprocal causality,* a two-way relationship, while interpreting relationship between collective teacher efficacy and teachers' self-efficacy. It is thought that it would be useful to interpret the findings of this study in the context of reciprocal causality. In the study, it was put forward that instructional leadership appears as an effective antecedent while building the collective efficacy. Jhanke (2010) listed the factors which were effective in developing collective efficacy. Some of those factors were a positive and supportive environment, clear and understandable vision and aims, high expectations, a significant professional development, and shared leadership. Among them, especially clear and understandable vision and specifying high expectations behaviors are also the behaviors of an instructional leader. Mastery experiences, vicarious experience, social persuasion and emotional states are listed among the resources of self-efficacy (Wood & Bandura, 1989). These factors, which are crucial in the development process of self-efficacy also form the basis for building collective efficacy (Goddard, Hoy et al., 2004).

Another finding of the research was that school principals' instructional leadership behaviors have a positive and significant effect on teachers' self-efficacy. When the related literature is reviewed, studies supporting this finding can easily be seen. For instance, Derbedek (2008) found that school principals' instructional leadership behaviors predicted approximately 15% of teachers' self-efficacy. Similarly, Howard (1996) mentions about a causal link between these two variables. Besides, Ross (1994) expresses that leadership is an important variable in determining teachers' self-efficacy. Weisel and Dror (2006) note that there is a positive and significant relationship between supportive and non-threatening leadership and teacher self-efficacy.

Finally, in the study, it was revealed that instructional leadership affected the collective efficacy indirectly through teachers' self-efficacy. In other words, when the school principals demonstrated instructional leadership behaviors, teachers' perceptions about their own self efficacy grew stronger. They saw themselves more sufficient in educating and teaching the students, and they made a great effort for this purpose. As the number of teachers who had high self-efficacy increased, their collective efficacy grew stronger. In other words, instructional leadership behaviors can be said to increase collective efficacy although Fancera (2009) asserted the opposite. Thus, teachers at a school set an important step on the road to be an effective team. Accordingly, Demir (2008) expresses that self-efficacy plays a mediator role between collective efficacy and transformational leadership. Besides, Scurry (2010) emphasizes that positive feedbacks and leadership behaviors that strengthen teachers professionally predict the three dimensions of teachers' self-efficacy significantly.

In addition to the discussion mentioned above, it can be asserted that study findings can add significant information to the literature about students' academic achievement. Studies about collective efficacy (Bandura, 1993; Goddard, 2001; Goddard, Hoy et al., 2004; Goddard, LoGerfo, & Hoy, 2004; Jackson, 2009) and teacher self-efficacy (Allinder, 1995; Caprara et al., 2006; Domsch, 2009; Ross, 1992; Woolfolk Hoy & Davis, 2006) revealed that these two variables played an important role for increasing students' academic achievement. Thus, it can be said that the model tested in this study also presents a way to increase student achievement. However, this assertion should be tested with a new model by future studies.

References/Kaynakça

Alig-Mielcalek, J. M. (2003). *A model of school success: Instructional leadership, academic press, and student achievement* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database. (UMI No: 3093620).

Allinder, R. M. (1995). An examination of the relationship between teacher efficacy and curriculum-based measurement and student achievement. *Remedial and Special Education, 16* (4), 247-255.

Antonelli, L. A. (2005). *Organizational and SES predictors of student achievement and school effectiveness* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database. (UMI No: 3189160).

Armstrong-Coppins, D. R. (2003). *What principals do to increase collective teacher efficacy in urban schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database. (UMI No: 3119769).

Balcı, A. (2007). *Etkili okul ve okul geliştirme* (4. bs). Ankara: Pegem A.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.

Basım, H. N., Korkmazyürek, H. ve Tokat, A. O. (2008). Çalışanların öz yeterlilik algılamasının yenilikçilik ve risk alma üzerine etkisi: Kamu sektöründe bir araştırma. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 19*, 121-130.

Betoret, F. D. (2009). Self-efficacy, school resources, job stressors and burnout among Spanish primary and secondary school teachers: A structural equation approach. *Educational Psychology, 29* (1), 45-68.

Bitto, L., & Butler, S. (2010). Math teacher self-efficacy and its relationship to teacher effectiveness. *Journal of Cross-Disciplinary Perspectives in Education, 3* (1), 40-45.

Blase, J., & Blase, J. (1999a). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration, 38* (2), 130-141.

Blase, J., & Blase, J. (1999b). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly, 35*(3), 349-378.

Brinson, D., & Steiner, L. (2007). *Building collective efficacy: How leaders inspire teachers to achieve (Issue Brief)*. Washington, DC: Center for Comprehensive School Reform and Improvement. Retrieved December 20, 2010 from http://www.centerforcsri.org/files/CenterIssueBriefOct07.pdf.

Büyüköztürk, Ş., Akbaba Altun, S. ve Yıldırım, K. (2010). *TALIS Türkiye ulusal raporu.* MEB Dış İlişkiler Genel Müdürlüğü, Ankara. http://digm.meb.gov.tr/uaorgutler/OECD /TALIS_tr_Rapor.pdf adresinden 27 Kasım 2010 tarihinde edinilmiştir.

Byrne, B. M. (1998). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming.* Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc., Publishers.

Cagle, K., & Hopkins, P. (2009). Teacher self-efficacy and the supervision of marginal teachers. *Journal of Cross-Disciplinary Perspectives in Education, 2*(1), 25-31.

Caprara, G. V., Barnabelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology, 44*(6), 473-490.

Cooper, J. D. (2010). *Collective efficacy, organizational citizenship behavior, and school effectiveness in Alabama public high schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI: 3422943).

Çapa, Y., Çakıroğlu, J. ve Sarıkaya, H. (2005). *Turkish version of the teachers' sense of efficacy scale (TTSES).* http://people.ehe.ohio-state.edu/ahoy/files/2009/02/ttses.pdf adresinden 15 Ekim 2010 tarihinde edinilmiştir.

Çelik, V. (2000). *Eğitimsel liderlik* (2. bs). Ankara: Pegem A.

Daresh, J. C., & Ching-Jen, L. (1985, March). *High school principals' perceptions of their instructional leadership behavior.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Demir, K. (2008). Dönüşümcü liderlik ve kolektif yeterlik inancı: İşbirliği kültürü ve öz yeterlik inancının rolü. *Eurasian Journal of Educational Research, 33*, 93-112.

Derbedek, H. (2008). *İlköğretim okul müdürlerinin öğretimsel liderlik özelliklerinin öğretmenlerin öz yeterlikleri üzerindeki etkileri (Bursa ili örneği).* Yayımlanmamış yüksek lisans tezi, Pamukkale Üniversitesi, Denizli. http://tez2.yok.gov.tr/ adresinden 27.02.2011 tarihinde edinilmiştir.

Domsch, G. D. (2009). *A study investigating relationships between elementary principals' and teachers' self-efficacy and student achievement* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI: 3383305).

Enueme, C. P., & Egwunyenga, E. J. (2008). Principals' instructional leadership roles and effect on teachers' job performance: A case study of secondary schools in Asaba Metropolis, Delta State, Nigeria. *Journal of Social Sciences, 16* (1), 13-17.

Fan, X., Thompson, B., & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal*, *6* (1), 56-83.

Fancera, S. F. (2009). *Instructional leadership influence on collective efficacy and school achievement* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI: 3373674).

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education* (7th ed.). New York: McGraw-Hill Higher Education.

Garcia, D. C. (2004). Exploring connections between the construct of teacher efficacy and family involvement practices: Implications for urban teacher preparation. *Urban Education, 39* (3), 290-315.

Gaziel, H. H. (2007). Re-examining the relationship between principal's instructional/educational leadership and student achievement. *Journal of Social Sciences, 15* (1), 17-24.

Ghaith, G., & Yaghi, H. (1997). Relationships among experience, teacher efficacy, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 13* (4), 451-458.

Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of the schools and student achievement. *Journal of Educational Psychology, 93* (3), 467-476.

Goddard, R. D. (2002). Collective efficacy and school organization: A multilevel analysis of teacher influence in schools. In W.K. Hoy, and C. G. Miskel (Eds), *Theory and Research in Educational Administration* (pp. 169–184). Greenwich, CT: Information Age Publishing.

Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education, 17*, 807-818

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37* (2), 479-507.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researcher, 33* (3), 3-13.

Goddard, R. D., LoGerfo, L., & Hoy, W. K. (2004). High school accountability: The role of perceived collective efficacy. *Educational Policy, 18*(3), 403-425.

Guskey, T. R. (1987). Context variables that affect measures of teacher efficacy. *Journal of Educational Research, 81* (1), 41-47.

Gümüşeli, A. İ. (1996). Okul müdürlerinin öğretim liderliğinin sınırlayan etkenler. *Eğitim Yönetimi Dergisi, 2*, 1-12.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and Policy in Schools, 4* (3), 221-239.

Hallinger, P. (2011). A review of three decades of doctoral studies using the principal instructional management rating scale: A lens on methodological progress in educational leadership. *Educational Administration Quarterly, 47* (2), 271-306.

Hallinger, P., & Murphy, J. F. (1987). Assessing and developing principal instructional leadership. *Educational Leadership, 45* (1), 54-61.

Hearn, R. M. (2010). *An evaluation of instructional coaching at selected high schools in North Louisiana and its effect on student achievement, organizational climate, and teacher efficacy* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI: 3411210).

Hipp, K. A. (1995). *Exploring the relationship between principals' leadership behaviors and teachers' sense of efficacy in Wisconsin Middle Schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No: 9527144)

Hipp, K. A. (1996, April). *Teacher efficacy: Influence of principal leadership behavior*. Paper presented at the annual meeting of American Educational Research Association (ED: 396 409).

Hoover-Dempsey K. V., Bassler O. C., & Brissie J. S. (1987) Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal, 24* (3), 417-435.

Howard, B. B. (1996). *The effect of instructional leadership on teacher efficacy and school climate: A structural modeling approach* (Doctoral dissertation). Appalachian State University. Retrieved 11 April, 2010 from http://edl.appstate.edu/dissertation-titles/95.

Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of school. *Elementary School Journal, 93* (4), 355-372.

Hoy, W. K., Sweetland, S. R., & Smith, P. A. (2002). Toward an organizational model of achievement in high schools: The significance of collective efficacy. *Educational Administration Quarterly, 38* (1), 77-93.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6* (1), 1-55.

Jackson, J. C. (2009). *Organizational citizenship behaviors, collective teacher efficacy, and student achievement in elementary schools*. Unpublished doctoral dissertation, Retrieved from ProQuest Dissertations and Thesis database (UMI: 3392567).

Jhanke, M. S. (2010). *How teacher collective efficacy is developed and sustained in high achieving middle schools*. Unpublished doctoral dissertation, Retrieved from ProQuest Dissertations and Thesis database (UMI: 3410320).

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Lincolnwood, USA: Scientific Software.

Karasar, N. (2009). *Bilimsel araştırma yöntemi* (19. bs). Ankara: Nobel.

Krug, S. E. (1992). *Instructional leadership, school instructional climate, and student learning outcomes*. Project Report. Illionis: National Center for School Leadership. Retrieved 10 May, 2010 from http://www.eric.ed.gov (ED 359 668).

Kurşunoğlu, A., & Tanrıöğen, A. (2009). The relationship between teachers' perceptions towards instructional leadership behaviors of their principals and teachers' attitudes towards change. *Procedia Social and Behavioral Sciences, 1*, 252-258.

Kurt, T. (2009). *Okul müdürlerinin dönüşümcü ve eylemci liderlik stilleri ile öğretmenlerin kolektif yeterliği ve öz yeterliği arasındaki ilişkilerin incelenmesi.* Yayımlanmamış doktora tezi, Gazi Üniversitesi, Ankara.

Lee, V. E., Dedrick, R. F., & Smith, J. B. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education, 64* (3), 190-208.

Lev, S., & Koslowsky, M. (2009). Moderating the collective and self-efficacy relationship. *Journal of Educational Administration, 47* (4), 452-462.

Lewandowski, K. H. (2005). *A study of the relationship of teachers' self-efficacy and the impact of leadership and professional development* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI: 3164695).

Mackenzie, S. V. (2000). *Collective efficacy and collaborative climate in Maine high schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No: 9986550)

Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39* (3), 370-397.

Nicholson, M. R. (2003). *Transformational leadership and collective efficacy: A model of school achievement* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No:3093682)

O'Donnell, R. J., & White G. P. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin, 89* (645), 56-71.

Oliver, D. F. (2001) *Teachers personal and school culture characteristics in effective schools: Toward a model of a professional learning community* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No: 3093682).

Özdemir, S. (2000). Eğitimde örgütsel yenileşme (5. bs). Ankara: Pegem A.

Özdemir, S. ve Sezgin, F. (2002). Etkili okullar ve öğretim liderliği. *Kırgızistan Türkiye Manas Üniversitesi Sosyal Bilimler Dergisi, 3*, 266-282.

Pajares, F., & Miller, M. D. (1994). The role of self efficacy and self concept beliefs in mathematical problem solving: A path analysis. *Journal of Educational Psychology, 86* (2), 193–203.

Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education 17* (1), 51-65.

Ross, J. A. (1994). The impact of an inservice to promote cooperative leaming on the stability of teacher efficacy. *Teaching & Teacher Education, 10* (4), 381-394.

Ross, J. A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement, 17* (2), 179-199.

Schreiber, J. B., Nora, A., Stage, F. K. , Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research, 99* (6), 323-338.

Scurry, S. N. (2010). *Perceptions of instructional coaches in the elementary school setting and their impact on teacher self efficacy.* Unpublished doctoral dissertation, Retrieved from ProQuest Dissertations and Thesis database (UMI No: 3438286).

Short, P. M., & Spencer, W. A. (1989, March-April). *Principal instructional leadership*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago. IL.

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99* (3), 611-625.

Smith, F. W., & Andrews, R. L. (1989). *Instructional leadership: How principals make a difference* (ED 314826). Retrieved 05 May, 2010 from http://eric.ed.gov/.

Sümer, N. (2000). Yapısal eşitlik modelleri: Temel kavramlar ve örnek uygulamalar. *Türk Psikoloji Yazıları, 3* (6) 49-74.

Şişman, M. (2002). *Öğretim liderliği.* Ankara: Pegem A.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17* (7), 783-805.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23* (6), 944-956.

Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship and Social Justice, 1* (2), 157-174.

Williams, A. (2010). *Eacher self-efficay and shared leadership: Portrays of teachers in high poverty schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No: 3409059).

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14* (3), 361-384.

Woolfolk Hoy, A., & Davis, H. A. (2006). Teacher self-efficacy and its influence on the achievement of adolescents. In F. Pajares & T. Urdan (Eds.), *Self-efficacy of adolescents* (pp. 117-137). Greenwich, Connecticut: Information Age.

Yılmaz, K. ve Çokluk Bökeoğlu, O. (2008). *İlköğretim okulu öğretmenlerinin yeterlik inançları. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi, 41* (2), 143-167.

Yılmaz, V. ve Çelik, H. E. (2009). *LISREL ile yapısal eşitlik modellemesi – I: Temel kavramlar, uygulamalar, programlama*. Ankara: Pegem Akademi.