# The Impact of Leadership Style, Thinking Style and Job Satisfaction on Iranian EFL Teacher Retention

Reza Khany Department of English, Ilam University, Ilam, Iran <u>Khani\_Reza@yahoo.com</u> and Fatemeh Azimi Amoli

Department of English, Ilam University, Ilam, Iran

#### Abstract

The main purpose of this study was to investigate the relationship among leadership style, job satisfaction, and teachers' retention with their respective sub-scales. To this end, 356 (145 male and 221 female) Iranian EFL teachers participated in the study. Osborne & Reiman's (2005) The Teacher Perception of success and teacher retention questionnaire, Fiedler & Garcia's (1987) Leadership questionnaire, Sternberg's Thinking Style Questionnaire (1991) and Smith's Job Satisfaction Questionnaire (1969) were used to measure the variables. The results of Structural Equation Modeling (SEM) analysis confirmed the hypothesized model of relationships among the study variables. The final model of the network of associations among variables also revealed significant correlations among various sub-scales of the study. The findings of this study can be used by language teachers and researchers in the field.

Key words: language learning strategy, personality trait, mindfulness, network of associations

#### **1. Introduction**

Success in teaching in general and language teaching in particular is a function of a complex set of variables. Much has been written on teacher's variables and the role they play in the given process, however, a recent surge of interest is being observed in the current literature which emphasizes the role teachers play in the general process of educational success in the field. Numerous variables have been referred to that are assumed to facilitate the teaching process with regard to the role of teachers. Among such variables, one can refer to leadership style, thinking style, teacher's job satisfaction and teacher retention.

With all these studies however, the fuzzy relationships among these variables seem not to have been vividly displayed. Two main reasons can be mentioned for the problem. First, the focus of studies done on the above-mentioned variables mostly has been on individual variables, and second the research designs adopted have not followed the modern measurement theories and computing models ignoring the subtle interrelationships among the sub-scale items of such variables. Hence using a more accountable research design, effort has been made in this paper to compare the effects of these variables; job satisfaction, leadership style, thinking style on teacher retention among Iranian EFL teachers. The findings are expected to provide a basis upon which to remedy teacher retention development programs and decrease attrition and turnover.

# 1.1.Job satisfaction

Generally speaking, job satisfaction is an effective response to one's situation at work. Thus it is a function of the discerned relationship between what one wants from teaching and what one perceives it is offering to a teacher (Zembylas & Papanastasiou, 2004).

Extrinsic factors have also been associated with teacher satisfaction, containing salary, support from administrators, accessibility of resources, (Thompson et al., 1997). These and other aspects of teachers' working environment have been identified as factors that contribute to increased teacher dissatisfaction and to teachers leaving the profession. This is considerable because it has been found that when teachers are not satisfied with their working conditions, they are more likely to leave the profession (Travers & Cooper, 1996; Tye & O'Brien, 2002).

#### 1.2 Job Satisfaction & Teacher Retention

Teacher job satisfaction as a general measure has been found to be a significant predictor of effective teacher retention (Hall, Pearson, & Carroll, 1992; Ostroff, 1992; Zigarreli, 1996). Those planning to leave teaching had lower levels of job satisfaction (Hall, et al., 1992; Ostroff, 1992. A New Jersey State Board of Education study in 1984 found similar results (Ellis, Klagholz, Schechter, & Newman, 1991; cited in Gold, 1996). Thus, it implies that while hiring individuals provides a teacher in the short term, it does not address the problem of retaining teachers in the long term. In addition to a higher probability of teacher attrition, teachers without proper personal and academic qualifications when entering teaching have lower satisfaction with their job than do traditionally prepared teachers (Lutz & Hutton, 1989).

## 1.3 Job Satisfaction, Teacher Retention, and Leadership Style

Teacher job satisfaction is also linked to teacher retention through such moderating variables as satisfaction with principal leadership and satisfaction in general (Zigarelli, 1996). Reyes and Shin (1995) found that teacher job satisfaction is a determinant of teacher commitment and that it "must be present before the individual develops organizational commitment" (p. 36). The relationship between job satisfaction and commitment is not necessarily characteristic of teachers only.

Korkmaz (2007) studied the effects of leadership style on the organizational health of schools in Turkey. He cited studies that relate the dissatisfaction of teachers to low salaries, lack of resources, inappropriate administrative leadership styles, and job related stress. In addition, he cites studies that attribute strong correlations between the principal's leadership style and teachers' job satisfaction (p. 25). Leaders with transformational styles have a positive influence on teacher job satisfaction because they encourage innovation that leads to climates more conducive to learning and positive relationship among administrators, teachers, and students.

## 1.4 Thinking Styles

Thinking styles are encompassed by intellectual styles which also embrace cognitive styles, learning styles and problem-solving styles (Zhang & Sternberg, 2006). Zhang and Sternberg (2006), perceive thinking styles a wider concept than learning and cognitive styles since they can be applied to both academic and non-academic settings. Like the earlier discussed variables thinking style as mentioned has been found to correlate with inherent and Personal characteristics of EFL teachers

# 1.5 Job Satisfaction, Teacher Retention, Leadership Style and Thinking Style

As it is revealed by the aforementioned literature, the impact of job satisfaction and teacher retention and also the effect of leadership style, the thinking style and teacher retention have been separately investigated from different perspectives. With all these however, the research methods used to date lack a unified theory behind. Most of the studies reported do not draw upon the more robust methodological designs and models which can give a more precise and inclusive pictures of the associations of the variables in the study. Furthermore, we still do not exactly know the exact interplay of these variables studied simultaneously. To this we should add the lack of a proposed path model which delineates the direction through which these variables interact. To account for some of these methodological concerns, effort has been made in this study to adopt a much more dynamic model which can investigate the simultaneous relationships of these variables giving a more precise pic-

ture of their associations. In the following sections, the methodology adopted and the results will be presented.

#### 2. Method

#### 2.1 Participants and procedure

*356* (145 male and 221 female) EFL teachers participated in the study. They were selected some cities in Iran, namely, Ilam, Tehran and Mazandaran. Their mean age was 25 to 50 years. All the participants had at least 4 to 10 years of experience in teaching English. Participants completed the questionnaire within a month. The questionnaire distributed through email. Teachers received instructions on completing all questionnaires through a letter from the researcher.

## 2.2 Measures

To collect the data, the following instruments were utilized.

2.1.1 Osborne & Reiman's (2005) The Teacher Perception of success and teacher retention questionnaire which assesses teachers' perceptions of the effect of principal leadership on teacher retention. There are three sections to this questionnaire. The first section includes 35 statements that describe issues affecting teachers. These statements can be categorized into five domains: (a) time issues, (b) student discipline, (c) teacher professional growth and development, (d) school leadership, and (e) classroom materials, supplies, and resources. Teachers were asked to respond to: (a) the degree to which the statement is true for them in their school and (b) the degree of importance as to how each statement affects their decision to stay at or to leave their school. Responses were measured by a five point Likert scale (1 =never true to 5=always true and 1 =not important to 5= very important).

2.2.2 Fiedler & Garcia's (1987) Leadership questionnaire which is called LPC examines 18 scales and each scale has 2 choices. Because the LPC is a personality measure, the score you get on the LPC scale is believed to be quite stable over time and not easily changed. Low LPCs tend to remain low, moderate LPCs tend to remain moderate, and high LPCs tend to remain high. Research shows that the test–retest reliability of the LPC is very strong.

2.2.3 Sternberg's Thinking Style Questionnaire (1991) investigates the different strategies and ways people use to solve problems, to carry out tasks or projects, and to make decisions. There are four sections; functions including legislative, executive and judicial; forms including hierarchic, oligarchic, monarchic and anarchic; levels including global and local; scopes including internal and external.

2.2.4 Smith's Job Satisfaction Questionnaire (1969) is a valid measure of job satisfaction. This measure has been designed to measure satisfaction through 5 aspects of a job, the work itself, pay, promotion, supervision and co- workers.

## 2.3 Data analysis

In order to analyze the data assumed in our hypothesized model, the researchers used Lizrel 8.7 to investigate the model by SEM (structural equation modeling) analyses. At first phase, an exploratory factor analysis was utilized to determine the number of factors of questionnaire. We conducted Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test to validate the relationship among observed and latent variables. After deleting some scales in exploratory factor analysis, confirmatory factor analysis was used to evaluate construct validity (Pett et al., 2003; Royse et al., 2006) To investigate the appropriateness of the hypothetical models, goodness of fit indices were used. Therefore, Root Mean Square Error (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index also known as the non-normed fit index (TLI) or (NNFI) (Bentler & Bonett, 1980), the normed fit index (NFI) and the relative fit index (RFI) assessed an appropriate fit.

Exploratory factor analysis (EFA) is utilized to determine the factors in the questionnaire used in the study. After carrying out factor analysis several times, 4 main factors in questionnaire components have been remained. These factors contain 58.14 percent of score variance. The result from exploratory factor analysis has been shown in Table 1.

Scales	Factor 1	Factor 2	Factor 3	Factor 4
Contingent Reward	0/746			
Job Promotion	-	-	-	-
Supervision	0/800			
Colleagues	0/403			0/688
Nature of Work	0/520			
Class Management		0/869		
Instructional Resources		0/854		
Judicial			0/593	
Local			0/694	
Anarchic	-	-	-	-
Legislative			0/580	0/446
Executive	-	-	-	-
Monarchic			0/755	
External			0/692	
Oligarchic			0/688	
Hierarchic			0/760	
Global			0/675	
Internal			0/529	
Conservative			0/659	
Idealized Influence				0/684
Inspirational Motivation				0/671
Intellectual Stimulation				0/420
Individualized Influence			0/448	0/578
Unexpected Reward				0/610
Exceptional Management				0/812
Laissez-faire Leadership			0/526	0/542

<b>Table 1.</b> Factor Loading of Scale Indices	Table 1.	Factor	Loading	of Scale	Indices
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In the exploratory analysis, such sub-scales as Colleagues, Judicial function, Individualized consideration, Laissez-faire leadership had common loading. Also, scales such as Job promotion, Executive function were lack of factor loading. Therefore, these scales had been deleted among the related variables under study. After the deletion process, The remaining factors resulted from these variables were found to account for 62.60 percent of the score variance.

To confirm factor structures resulted from exploratory analysis, confirmatory factor analysis (CFA) was utilized. Confirmatory factor analysis is an approach based on structural equation modeling which analyzes the relationship between latent variables and measured variables (McCallum & Austin, 2000).CFA is an analysis used to evaluate construct validity of the path model proposed (Pett et al., 2003; Royse et al., 2006). To test the suggested model, maximum likelihood was used and to consider the appropriateness in this hypothetical model, goodness of fit indices were used. According to Sun (2005), these indices are used to evaluate the validity of variables. The Chi square statistic is the first measure of how well a model fits the data; however, sample size greatly influences it and thus is rarely non-significant in samples sufficiently large to legitimately perform CFA

(Thompson & Daniel, 1996). Therefore, Root Mean Square Error (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index also known as the non-normed fit index (TLI) or (NNFI) (Bentler & Bonett, 1980), the normed fit index (NFI) and the relative fit index (RFI) were used in this stuidy to assess the appropriate fit of the model proposed. Further, To evaluate their validity, indices such as Root mean square of approximation (RMSEA), Tuker- Lewis index (TLI), Non normal fit index (NNFI), Comparative fit index (CFI), and Standardized root mean square residual (SRMR) had been utilized. Results from confirmatory factor analysis are shown in Table 2.

Fit Indices	Factor Structure	Value	Result
Normal chi-Square	2=437.20χ	0.777	Accept
Root Mean Squared Error of Approximation	RMSEA	070/	Accept
Root Mean Squared Residual	RMR	0.003	Accept
Goodness-of-Fit Index	GFI	00/93	Accept
Adjusted Goodness-of-Fit Index	AGFI	0/92	Accept
Normal Fit Index or Bentler-Bonett Index	NFI	0.92	Accept
Comparative Fit Index	CFI	0.94	Accept
Incremental Fit Index	IFI	0.94	Accept

#### Table 2. Fit Indices of the First Model

With regard to Table 2, the ratio of Chi Square to degree of freedom is 437.20 which is not a good index for goodness of fit but the other indices investigated accept the model. RMSEA with less than 0.05 is appropriate, between 0.05 and 0.08 for medium model and above 0.1 for weak models (Brown & Cudeck, 1993). As shown in Table 2, RMSEA and SRMR have an appropriateness of goodness. NFI, NNFI, CFI, GFI, IFI, AGFI are between 0.9 to 0.95 which are closer to 1 and they too are good indices and meaningful. IFI, NNFI, CFI, RMSEA and SRMR were not influenced in external variables (Hu & Bentler, 1998). Therefore, factor analysis in the present study is quietly desirable which confirm appropriateness of goodness in the model proposed.



Figure 1. Measurement Model of 4 Dependent & Independent Variables in Standardized Estimates

Figure 1 and 2 display the schematic representation of the accepted model as well as standardized path correlations among the main variables and sub-scales. According to this diagram, job satisfaction, thinking style, leadership style and teacher retention had been two-tailed path. It is worth mentioning though that the continuous analysis of the model called for the modification of some factors. Accordingly, some parameters which were not meaningful in the early model were deleted and the final model has improved (figure 2).



Figure 2. Measurement Model of Dependent Variable with 3 Independent Variables in Standardized Estimates

Table 3 shows Fit Indices of the Second Model.

Fit Indices	Factor Structure	Value	Result
Normal chi-Square	2=437.93χ	0.777	Accept
Root Mean Squared Error of Approximation	RMSEA	0770/	Accept
Root Mean Squared Residual	RMR	0.065	Accept
Goodness-of-Fit Index	GFI	950/	Accept
Adjusted Goodness-of-Fit Index	AGFI	890/	Accept
Normal Fit Index or Bentler-Bonett Index	NFI	0.95	Accept
Comparative Fit Index	CFI	0.95	Accept
Incremental Fit Index	IFI	0.95	Accept

According to Table 3, RMSEA and SRMR indicate that the goodness of model is desirable. Also, IFI, CFI, NNFI, NNF, NFI have been reported above 0.9 which show the acceptable goodness of model. GFI and AGFI both were in the medium but generally, goodness of fit in the final model has been confirmed and this factor model is the best fit for the data.

According to diagram 2, 3 independent variables with dependent variable have been represented through one way path. It represents an acceptable relationship between them. In other words, job satisfaction, thinking style and leadership style had a direct effect on teacher retention.

To see further how factor load ,two multiple regression analyses were run. The results are shown in tables 4 and 5 below.

 Table 4. Multiple Regression between Dependent & Independent Variables

Model Summary											
Model	R	Durbin-Watson									
				Estimate							
1 .749 <sup>a</sup> .202 .181 .48528 2.366											
a. Predictors: (Constant), Leadership Style, Job Satisfaction, Thinking Style											
b. Dependent Variable: Teacher Retention											

a. Predictors: (	(Constant), Leadership Style, Job Satisfactio	on, Thinking Style		
b. Dependent	Variable: Teacher Retention			
Table 5.	Multiple Regression Analysis P	Predicting Teach	ier Retei	ntion
Coefficients				
Model	Unstandardized Coefficients	Standardized	t	Sig

Coefficio	ents						
Model		Unstandardi	zed Coefficients	Standardized Coefficients	t	Sig.	
				Coefficients			
		В	Std. Error	Beta			
1	(Constant)	1.331	.318		4.187	.000	
-	Job Satisfaction	.288	.087	.625	3.329	.001	

.560

.414

2.166

2.017

.032

.046

.175

.113

As shown in the above tables, multiple regression findings also confirmed the relationships obtained by SEM.

We then explored the significant among the main variables and sub-scales of our proposed model. Tables 6 and 7 show the correlation matrices of the main and subscale variables showing the subtle interplays more.

In determining correlations, vicariate coefficients or Pearson's r parametric test of correlation revealed that four of the variables correlated with each other. Table 6 displays the correlation matrices of each subscale with the other subscales in job satisfaction, leadership style, thinking style (Independent variables) and teacher retention (dependent variable) with each of subscales. The correlation between teacher retention and the remaining subscales in independent variables are as follow: Conservative (thinking style) (r= .644, p< .007); Nature of work (job satisfaction) (r= .526, p< .000); Judicial (thinking style) (r= .621, p< .000); Oligarchic (thinking style) (r= .042, p< .03); Contingent of Reward (job satisfaction) (r= .435, p< .000); Internal (thinking style) (r= .818, p< .001); External (thinking style ) (r= 526, p< .03); Supervision (job satisfaction) (r= .359 , p< .000); Global (r= .472, p< .04); Idealized influence (r=565, p< .004); Hierarchic (thinking style) (r=496, p< .03). The correlation matrices between the mentioned subscales and teacher retention were statistically significant.

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Thinking Style

Leadership style

a. Dependent Variable: Teacher Retention

.379

-.228

Table 6. Correlational Matrices among Latent & Observed Variables									es		
			1	2	3	4	5	6	7	8	Teacher Retention
1.conservative (T.S)	1										
2.Nature of work	.135	1									
( <b>J.S</b> )	.143										
3.Contingent Re-	.283**	.046	1								
ward (L.S)	.002	.621									
4.Judicial (T.S)	.277**	.300**	.026	1							
	.002	.001	.774								
5.Inspirational	.370***	018	.225*	.010	1						
Motivation (L.S)	.000	.847	.013	.918							
6.Laissez-faire	.349**	.129	.265**	.030	.120	1					
Leadership (L.S)	.000	.159	.003	.742	.191						
7.Oligarchic (T.S)	.432**	.204*	.130	.159	.280**	.259**	1				
	.000	.025	.158	.082	.002	.004					
8.Contingent Re-	.443**	.181*	.098	$.205^{*}$	.035	021	.313**	1			
ward (J.S)	.000	.048	.286	.025	.706	.822	.001				
<b>Teacher Retention</b>	.644**	.526**	.019	.621**	056	.042	<b>.708</b> *	.435**	1		
	.007	.000	.837	.000	.546	.032	.022	.000			

\*\*. Correlation is significant at the 0.01 level (2-tailed).\*. Correlation is significant at the 0.05 level (2-tailed).

Table 7.	<b>Correlational Matrices among</b>	Latent & Observed	Variables (Section 2)

Correlations													
				9	10	1	1	12	13	14	15	16	Teacher Retention
9.Internal (T.S)	1												
10.External (T.S)	.318 <sup>**</sup> .000	1											
11.Intellectual Stimu-	.072	.298**	1										
lation (L.S)	.433	.001											
12.Supervision (J.S)	.333**	.471**	$.228^{*}$	1									
12.Supervision (J.S)	.000	.000	.012										
13.Monarchic (T.S)	.366**	.624**	.338**	.2	<b>20</b> *	1							
15. violai cinc (1.5)	.000	.000	.000		16								
14.Global (T.S)	.424**	.529**	.506**	.4	<b>68</b> **	.582**	1						
14.0100al (1.5)	.000	.000	.000		00	.000							
15.Idealized Influ-	$.222^{*}$	$.220^{*}$	.283**	.3	25**	.235**	.381**	1					
ence (L.S)	.015	.016	.002	.0	00	.010	.000						
16.Hierarchic (T.S)	.405**	.591**	.177	.3	80**	.564**	.463**	.345**	1				
10.merarchic (1.5)	.000	.000	.054	.0	00	.000	.000	.000					
Teacher Retention	.818	.526	$.217^{*}$	.3	<b>59</b> **	060	.472	.565**	.496*	1			
reacher Ketention	.001	.030	.117	.0	00	.516	.040	.004	.032				

# Discussion

This study sought to investigate the impact of leadership style, thinking style and job satisfaction on teacher retention. The findings revealed that there was a nearly high correlation between job satisfaction and teacher retention and also leadership style and teacher retention which conform some of the previous studies (Hall, Pearson, & Carroll, 1992; Ostroff, 1992; Zigarreli, 1996). A New Jersey State Board of Education study in 1984 found similar results (Ellis, Klagholz, Schechter, & Newman, 1991; cited in Gold, 1996). The findings further demonstrated the relationship among job satisfaction, teacher retention, and leadership style. (Betancourt-Smith, Inman, & Marlow, 1994; Zigarelli, 1996; Reyes and Shin, 1995).

The result of this study was, also consistent with Catalano's (2002), Butler, Cantrell, and Flick (1999), Brock & Grady (2007), Futernick (2007), and Johnson (2006) who argue that effective school leaders will provide sufficient planning time for their teachers and will appropriately protect teachers' teaching time so that they can more effectively do their jobs. Teachers will feel more supported by their administrators and will be more likely to remain in education and possibly in their current schools.

Research overwhelmingly supports the idea that school leadership affects teacher retention ( Brock & Grady, 2007; Ingram, 2002; Tschannen-Moran, 2004; Waters & Cameron, 2003). The findings of this study support the research cited. According to the results of this study, there was a statistically significant relationship between teachers leadership and teacher retention. According to Moller and Pankake (2006), "Leadership is all about relationships" (p. 88). If principals create opportunities to develop relationships with their teachers, perhaps teachers will perceive their own roles more importantly in their schools and result in higher teacher retention. In general, research supports that teacher professional growth and development is important for all teachers - both new and veteran (Brock & Grady, 2000; Futernick, 2007; Johnson & Birkeland, 2002).

#### Conclusion

The correlation between leadership style, job satisfaction, and teachers' retention was determined in this study. The results were consistent with other researchers' findings. Job satisfaction has been linked to employee retention, quality, and productivity in organizations (Crossley et al., 2007; McNatt & Judge, 2008). The findings of this study indicate that transformational leaders have a positive relationship to job satisfaction, whereas laissez-faire leaders have a negative relationship to job satisfaction. With this information, principals or managers can develop strategies that can decrease teachers' job dissatisfaction and increase their job satisfaction. These changes could result in improved employee retention, productivity, and quality. The result may help improve EFL teachers Job Satisfaction and Retention.

#### References

Ash, R & Persall M (2000). The principal as chief learning officer: Developing teacher leaders, *NASSP Bulletin*, May, 15–22.

Avolio, B.J., & Howell, J.M. (1992). The impact of leader behavior and leader-follower personality matches on satisfaction and unit performance. In K.E.Clark, M.B.Clark., & D.R. Campbell (Eds.), *Impact of Leadership* (PP. 225-247). Greensboro, NC: The Center for Creative Leadership.

Bagossi, R.P. (1980). Causal Models in Marketing, John Wiley & Sons, New York, NY.

Bass, B.M. (1985). Leadership and performance beyond expectations. New York: Free Press.

Johnson, S.M., & The Project on the Next Generation of Teachers (2004). *Finders and keepers: Helping new teachers survive and thrive in our schools.* San Francisco: Jossey-Bass.

Bass, B. & Avolio, B. (2000). *Multifactor leadership questionnaire: Manual leader form, rater, and scoring key for the MLQ* (Form 5x short). Redwood City, CA: Mind Garden.

Beer, J., and J. Beer. 1992. "Burnout and stress, depression and self-esteem of teachers." *Psychological Reports*. 71, 1331-6.

Bentler, P.M., & Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.

Brock, B.L., & Grady, M.L., (2007). From first year to first rate: Principals guiding beginning teachers (3<sup>rd</sup>. ed.). Thousand Oaks, CA: Corwin.

Browne, M.W. & Cudeck (R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J. S. Long (Eds). *Testing Structural Equation Model* (pp. 136-162). Newbury Park: Sage.

Cantrell.k, & Flick..l (1999). Charismatic leadership and follower effects. Journal of Organizational Behavior, 21(7), 747–767.

Catalano, Richard F., M. Lisa Berglund, Jean A. M. Ryan, Heather S. Lonczak, and J. David Hawkins. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment*, 5 (15).

Clemson-Ingram, R. & Fessler, R. (1997) Innovative programs for teacher leadership, *Action in Teacher Education*, 19(3), 95–106.

Crossley, C. D., & Stanton, J. M. (2005). Negative affect and job search: Further examination of the reverse causation hypothesis. *Journal of Vocational Behavior*, *66*, 549–560.

Darling-Hammond, L. (2003). The challenge of staffing our schools. *Educational Leadership*, 58 (8), 12-17.

Day, C. & Harris, A. (2003) Teacher leadership, reflective practice and school improvement in Leithwood K & Hallinger P (eds) *Second International Handbook of Educational Leadership and Administration*, Dordrecht: Kluwer Academic.

Ellis, J., Klagholz, L., Schechter, E., & Newman, J. (1991). *Provisional teacher program implementation guidelines*. Trenton, NJ: State Department of Education.

Fiedler, F.E. & Garcia, J.E. (1987). New approaches. to effective leadership: cognitive resources and organizational performance. New York: Wiley.

Frost, D. & Durrant, J. (2003) *Teacher led development work: Guidance and support*, London: David Fulton Press.

Futernick, K. (2007). A possible dream: Retaining California's teachers so all students learn. Sacramento, CA: California State University.

Gehrke, N. (1991). Developing teacher leadership skills, ERIC Digest, 5.

Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula

(Ed.), *Handbook of Research on Teacher Education* (pp. 548-594). New York, NY: Association of Teacher Educators.

Hall, G., & Loucks, S. (1978). Teacher concerns as a basis for facilitating and personalizing staff development. *Teacher College Record*, 80, 36-53.

Hall, B.W., Pearsonn, L.C., & Carroll, D. (1992). Teachers' long-range teaching plans: A discriminant analysis. *Journal of Educational Research*, 85(4), 221-225.

Harris, A (2003) Teacher leadership: a new orthodoxy? in Davies, B & West Burnham J (eds) *Handbook of Leadership and Management*, London: Pearson Publishing (in press).

Hu, L., & Bentler, P.(1998). Cutoff criteria for fit indexes in covariance structure analysis Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

Hull, J. W. (2004). Filling in the gaps: Understanding the root causes of the "teacher shortage" can lead to solutions that work. *Threshold*, 8-15. Retrieved July 29, 2004, from <u>www.ciconline.org</u>

Ingersoll, R.M. & Smith, Thomas M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.

Ingram, D. (2002). The measurement of whole-word productions. *Journal of Child Language* 29, 713-733.

Johnson, S.M., & Birkeland, S.E. (2003). Pursuing a "Sense of Success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581-617.

Kardos, S.M., Johnson, S.M., Peske, H.G., Kauffman, D., & Liu, E.L. (2001). Counting on colleagues: New teachers encounter the professional cultures of their schools. *Educational Administration Quarterly*, *37*(2), 250-290.

Korkmaz, M. (2007). The effects of leadership styles on organizational health. *Educational Research Quarterly*, 30(3), 22-54.

Lambert, L (1998) *Building Leadership Capacity in Schools*, Alexandria, VA, Association for Supervision and Curriculum Development.

Little, J.W. (1995) Contested ground: the basis of teacher leadership in two restructuring high schools, *The Elementary School Journal*, 96(1), 47–63.

Louis, K.S., & Marks, H.M. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American Journal of Education*, 106, 532-575.

Lutz, F. W., & Hutton, J. B. (1989). Alternative teacher certification: Its policy implications for classroom and personnel practice. *Educational Evaluation and Policy Analysis*, *11*, 237-254.

MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling I psychological research. *Annual Review of Psychology*, *51*, 201–226.

Minarik, et al.(2003). The meaning(s) of teacher leadership in an urban high school reform. *Educational Administration Quarterly*, 46(4), 491-522.

Moller, G., & Pankake, A. (2006). *Lead with me: A principal's guide to teacher leadership.* Ne York: Eye on Education.

Muijs, D & Harris, A (2002) Teacher leadership: principles and practice, GTC and NUT websites www.gtc.org.uk, <u>www.nut.org.uk</u>

Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organizational level analysis. *Journal of Applied Psychology*, 77, 963-974.

Pett, M., Lackey, N. & Sullivan, J. (2003). *Making sense of factor analysis*. Thousand Oaks Sag Publications, Inc.

Reyes, P., & Shin, H. S. (1995). Teachercommitment and job satisfaction: A causal analysis. *Journal of School Leadership*, 5(1), 22-39.

Royse, D., Thyer, B. A., Padgett, D. K., & Logan, T. K. (2006). Program evaluation: An introduction (4th ed.). Belmont, CA: Thomson.

Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement: A strategy for the study of attitudes. Rand McNally: Chicago.

Sternberg, R. J. (1991). *Thinking styles*. New York: Cambridge University Press. Sternberg, R. J., & Wagner, R. K. (1991). *MSG Thinking Styles Inventory*. Unpublished manual.

Sun 4. (2005). Assessing goodness of fit in confirmatory factor analysis *Measurement and Evaluation in Counseling and Development*, 37, 240-256.

Thompson, B., & Daniel, L. G. (1996). Factor analytic evidence for the construct validity of scores: A historical overview and some guidelines. *Educational and Psychological Measurement*, 56, 197-208.

Tschannen-Moran, M. (2004, Nov.). What's trust got to do with it? The role of faculty and principal trust in fostering student achievement. Paper presented at the annual meeting of the University Council for Educational Administration, Kansas City, MO.

Tye, B. B., & O'Brien, L. (2002). Why are experienced teachers leaving the profession? Phi Delta Kappan, 84(1), 124–132.

Veenman, S. (1984). Perceived Problems of Beginning Teachers. *Review of Educational Research*, 54(2), 143-178.

Walsdorf, K.L., & Lynn, S.K. (2002). The early years: mediating the organizational environment. *The Clearing House*, 75(4), 190-194.

Waters, T., & Cameron, G. (2003). *The Balanced Leadership Framework : Connecting Vision with Action*. Denver CO; Mid-Continent Research for Education and Learning (McREL).