

# The Influencing and Effective Model of Early Childhood Teachers' Job Satisfaction in China\*

Yong Jiang\*\* East China Normal University

**Abstract:** The purpose of this study was to explore the influencing and effective models of Chinese early childhood teachers' job satisfaction. Using a questionnaire of 317 teachers from 21 kindergartens in Shanghai, China, the present study established the influencing and effective structure model of teachers' job satisfaction. The results demonstrated that organizational climate and teachers' involvement in curriculum reform are the direct factors to affect teachers' job satisfaction, which is the important intermediate variable to influence on teachers' professional commitment, autonomy and burnout. It is also concluded that organizational climate improves teachers' professional commitment. What's more, involving in curriculum reform not only facilitates teachers' autonomy but also declines teachers' burnout.

**Key words:** influencing and effective model; job satisfaction; teacher

## 1. Introduction

Teachers' job satisfaction has perhaps been investigated more and more, often in relationship to teacher stress, job commitment, professional autonomy, school climate and so on (Jackson, Schwab, & Schuler, 1986). Satisfaction may be examined in the context of expectations: individual brings to a job situation value and job expectation and it is important that these factors are largely met with satisfaction to be experienced (Steers & Rhodes, 1978). In China, teacher job satisfaction has, in several years, been an area of concerning. What mentioned are, more recently, China-specific conditions related with job satisfaction should be suggested, such as the current educational changes in terms of the New Curriculum Reform led by the Ministry of Education in the latest five years. Although there are plenty of previous researches into teacher job satisfaction, the studies on early childhood teachers' are heavily neglected. The current study focuses on the influencing factors and effective mechanism of early childhood teachers' job satisfaction. It presents, as a structure equation model study, findings of research into Chinese early childhood teachers' job satisfaction. It describes the important variables, such as teachers' involvement in curriculum reform, organizational climate, professional commitment, teachers' autonomy, teachers' burnout and its complicated relationship with job satisfaction.

## 2. Literature Review

### 2.1 The Definition of Teachers' Job Satisfaction

Psychologists have explained the phenomenon of job satisfaction by examining the feelings or feedback of

---

\* This study is part of the research project funded by *Shanghai Social Science (2004JYS006)* in 2004.

\*\* Yong Jiang, Ph.D., assistant professor in the School of Early Childhood Education and Special Education, East China Normal University; Research field: teachers' education; Address: School of Early Childhood Education and Special Education, East China Normal University, No.3663, North Zhongshan Road, Shanghai, P.R.China; Postcode: 200062.

individuals. Hoppock (1935) described job satisfaction as “any combination of psychological, physiological and environmental circumstances that cause a person truthfully to say, ‘I am happy with my job.’”

In the account of the Cornell University studies of job satisfaction, Smith (1983) stated simply job satisfaction is “the feelings a worker has about his job.” She further indicated that job satisfaction is a “function of the knowledge of the factors or elements of job satisfaction would appear essential to an in-depth understanding of the phenomenon. And Monford, cited in Blocker and Richardson, stated that the factors that teachers found most important about their work were helpful supervisors, freedom to plan and teach, and good relations with coworkers.

In 1978, Teachers' job satisfaction has been studied as an overall construct and as a facet construct. In his research, Holdaway found that overall satisfaction was closely related to “working with students, societal attitudes, status of teachers, recognition, and achievement”. Zigarreli (1996) refers to teachers' job satisfaction as a single, general measure that is a statistically significant predictor of effective schools. Evans (1997), who addresses problems of the conceptualization and construct validity of teachers' job satisfaction, claims that the concept is ambiguous. She argues that the source of the ambiguity is the lack of a clear distinction between “satisfactory” and “satisfying”, which results in problems of construct validity. Evans suggests re-conceptualizing “job satisfaction” in terms of its two constituents: job fulfillment (related with achievement) and job comfort (related with working conditions). The former refers to one's evaluation of how well the job is performed, and is based on the assumption that achievements enhance both job-related and achievement-related satisfaction. The latter relates to what degree is satisfied with the conditions of the job.

In the current study, which emphasizes the global notion of this concept, teachers' job satisfaction was examined using both dimensions. Job satisfaction relates to positive attitudes and beliefs towards several aspects of the job or the profession.

## **2.2 The Significance of Teachers' Job Satisfaction**

Several studies focused on the relationship between job satisfaction and extra-role behavior towards individuals inside and outside the organization. It is also important to study job satisfaction because of its effects on teacher retention and continuous development. Hall, Pearson, and Carroll (1992) found that teachers who were planning to leave the profession reported less satisfaction and a more negative attitude toward teaching as a career. Job satisfaction was also found to be associated with teacher quality, organizational commitment and organizational performance in reference to the following school areas: academic achievement, student behavior, student satisfaction, teacher turnover, and administrative performance (Ostroff, 1992; Mathieu, 1991).

## **2.3 The Dimensions of Teachers' Job Satisfaction**

A 1951 study by Kahn made use of a seventy-item satisfaction inventory that was administered to employees of a tractor company; the following interpretable factors emerged: satisfaction with immediate supervisor, intrinsic and status factors in the job itself, organization as a system, and indirect satisfaction with mobility and potential wages now and in the future.

Harrison analyzed inter-correlations of 78 items using Tryon's Cumulative Communality Cluster Analysis. The 1961 study produced the following eight factors: opportunity to advance and accomplish, working conditions, non-economic stability and security, personal relations with immediate supervisor, compensation, communications with top management, working with relations with other in-plant groups, and in-plant standard of operation.

Using the Science Research Associate (SRA) Employee Inventory, Bachr and Rench (1958) obtained five

identifiable factors relative to job satisfaction: organization and management, immediate supervision, material rewards, fellow employees, and intrinsic job satisfaction. A 1957 review of the literature on job satisfaction by Herzberg, Mausner, Peterson, and Capwell concluded that:

Factor analytic studies have indicated the presence of six relatively independent factors: (1) general satisfaction and moral, (2) attitudes toward the company and its policies, (3) satisfaction with intrinsic aspects of the job, (4) attitudes toward the immediate supervisor, (5) attitudes toward satisfaction of aspirations, and (6) satisfaction with conditions of present job.

In recent years, Job satisfaction is often classified into intrinsic and extrinsic dimensions (Chase, 1985). Intrinsic satisfaction is derived from individually determined task-related rewards and is related to feelings of competence, self-determination, and self-fulfillment. In contrast the sources of extrinsic satisfaction come from income, prestige, and power which exist independently of the individual who is occupying the role (Lortie, 1975; Steers & Rhodes, 1979).

In the present study, we lay emphasis upon the relation between teacher job satisfaction with several latent important variables, such as teachers' involvement in curriculum reform, organizational climate, professional commitment, professional autonomy, and teacher burnout. Some researcher suggested two distinct terms, job comfort and job fulfillment (see Evans, 1997), as components of job satisfaction, which is interpreted as: a state of mind determined by the extent to which the individual perceives her/his job-related needs to be met. However, the current study points out the two dimensions could be merged into one latent variable in terms of the results of the confirmatory factor analysis.

#### **2.4 The Influencing Factors on Teachers' Job Satisfaction**

Chase reported in a study in the early 1950s that freedom in planning work, adequacy of salary, feelings about quality leadership, and participation in educational and personnel policy planning affected satisfaction.

Two major theoretical approaches are often cited in literature across disciplines: Herzberg's dual-factor theory (1959) and Quarstein *et al.*'s situational occurrences theory (1992). Herzberg distinguishes between motivator and hygiene factors as mutually exclusive. Environmental factors (or job context-related) such as policy, salary and physical working conditions are identified as "dissatisfiers", which are separated from satisfiers (or job content-related factors) such as achievement, responsibility, and intrinsic challenges. On the other hand, Quarstein's composite function of job satisfaction is not as strict on the dichotomy. Quarstein *et al.* believe that job satisfaction is a function of both situational occurrences, such as being recognized, and situational characteristics, such as pay, and that together these provide a better prediction of job satisfaction than either one alone. Trailing the second school of thought, this study developed a model that covered both positive and negative factors in one, not two, latent construct of job satisfaction.

In 1997, the National Center for Education Statistics (1997) (NCES) in the US published a report on job satisfaction among American teachers. The report was based on a large and comprehensive database of over 40,000 teachers in a complex and random sample of schools. The sample was stratified by state, sector, and school level. It encompassed both elementary and secondary, private and public schools throughout the United States. It analyzed the 1993–1994 Schools and Staffing Survey (SASS) data collected by the NCES that examined a wide range of schools, teachers and work characteristics. The second section of this three-part study compared characteristics of the most satisfied and the least satisfied teachers. The most salient finding of the study was that workplace conditions constitute a distinguishing factor between the most satisfied and the least satisfied teachers: The most satisfied teachers worked in a more supportive, safe, autonomous environment than the least satisfied

teachers.

The interrelationships of the concepts of job satisfaction and organizational climate have been studied in a variety of organizations (Repetti and Cosmas, 1991; Sheinfeld and Zalkind, 1987), with a frequently implied assumption that organizational climate is a causal factor in job satisfaction (Sharma and Sharma, 1989; Kumara and Kiochi, 1989). Lawler *et al.* (1974) have used organizational climate as a variable which intervenes between organizational processes and job satisfaction.

Although the NCEES report is comprehensive, it is only one report, and very few other studies have been conducted in this area. All in all, empirical work on demographic attributes of teachers has been relatively limited. Research on teacher job satisfaction has focused mainly on the effects of exogenous variables such as the principal's leadership style and strategies of decision-making on teachers' contentment and rate of burnout (Kirby, Paradise, & King, 1992; Koh, Steers, & Terborg, 1995; Silins, 1992). Since these researchers attempted to identify the factors that best predict teacher job satisfaction and to test for significant differences among a number of satisfaction sub-scales, they usually used regression analyses and multivariate analysis of variance (MANOVA), respectively.

Researchers have also studied the connection between teacher demographic variables and job satisfaction. Organizational behavior literature suggests that older employees tend to be happier with their jobs, have lower turnover rates, and miss fewer working days (Kasl, 1997; Naceur & Fook, 2001). Some research also has found that job satisfaction grows as teachers become more experienced in their work (Hutchinson, 1963), which seems logical, since unsatisfied teachers are more likely to leave the profession and, therefore, not have the chance to fully adapt to and build up a long career in teaching. Interestingly, Robertson, Smith, and Cooper (1992) in their study discovered that teacher satisfaction is positively correlated with age, except for teachers between the ages of 40 to 50. These teachers also have low satisfaction about promotion prospects. In addition, gender has also been the center of some research on job satisfaction. On average, female employees responded to surveys with higher satisfaction rating than their male colleagues; and the similarity has been observed in the teaching profession (Cox & Blake, 1991; Hom & Griffeth, 1995). In terms of gender, female teachers expressed greater job satisfaction than their male counterparts (e.g., Chapman & Lowther, 1982; Watson, Hatton, Squires, & Soliman, 1991). The more satisfied group consisted mostly of female teachers, teaching grades 1–4 rather than grades 5–8, in private rather than public schools, and with less teaching experience than their less satisfied counterparts. Plihal (1982), found that a teacher's years of experience was positively correlated with intrinsic rewards conceptualized by the importance attached to "reaching students". With regard to school location, rural teachers were found to be less satisfied (e.g., Haughey & Murphy, 1984) than suburban teachers (Ruhl-Smith, 1991).

### **2.5 Comment on Literature**

Reviewing literature across disciplines on job satisfaction, it is interesting to observe that educational research primarily looks at extrinsic factors like salary and working conditions, while many other fields often study internal factors like personality and interpersonal relationships (Hirsch, Koppich & Knapp, 1998; Judge, Bono, & Locke, 2000; Salopek, 2000; Tratt, 2000). In addition, political intervention is unique component of being a teacher that is regularly mentioned in the press but not often studies.

There are numerous variables contributing to the construct of overall job satisfaction. Management and organizational behavior literature suggests that to raise job satisfaction for the benefit of increasing teachers' commitment and productivity, organizations should attach more importance on pay, promotion, working conditions, supervision, and the organization itself (Lock, Schweiger, & Latham, 1986; Mitchell, Holton, Lee, &

Graske, 2001; Pitt & Foreman, 1999). In educational research, teachers most frequently mention salaries, the control over one's own classroom and lesson plans, administrative and mentoring support, and the opportunity to participate in school decision making as the most significant factors that influence teacher job satisfaction (Caudron, 1998; Ingersoll & Rossi, 1995; Pisciotta, 2000). In addition, irrelevant or lack of professional development, pressures from changing policies that are almost ever-present nowadays, inadequate facilities and overly restricted resources, low respect and under-appreciation all add to the already chaotic work days of teachers (Boe, Bobbitt, Cook, & Barkanic, 1998; Prince, 2000; Rollefson, 1990). These components independently as well as interactively influence teacher's feelings and attitudes about teaching.

Although there are many studies investigated the connection between teacher job satisfaction and some outside variables, there still exist insufficiencies and problems. Firstly, with the rapid development of education and curriculum reform, Chinese teachers face new challenges and opportunities. However, related studies on this changing society and teachers' job satisfaction are very few. Secondly, the previous researches studied the relation between teacher satisfaction and only one or two latent variables separately, lacking of the systematic, compound, integrated research on teachers' job satisfaction. Thirdly, early childhood teacher is a "special" group, they have the characteristics in job satisfaction and its influencing factors, however, the related studies are almost none in China. Hence, the study on early childhood teacher job satisfaction and its connection with latent variables is very important and necessary.

### 3. Method

#### 3.1 Participation

A questionnaire was completed anonymously in October 2004 by a sample consisting of 317 early childhood teachers from 21 kindergartens in Shanghai, China. This represents a response rate of 87.4%.

**Table 1 The General Information of Teachers**

Academic level of teachers	Below high school	College	Scholar	Master and above	Summary
Number	5	85	199	28	317
Ages of teachers	Under 22-year-old	23-29-year-old	30-40-year-old	40-year-old above	Summary
Number	92	132	131	62	317

#### 3.2. Materials

In the present study, *Teacher Job Satisfaction Questionnaire (TJSQ)* is developed to inquiry the affective and effecting factors related with job satisfaction in Chinese early childhood teachers. There were a total of 24 response items from six aspects. We ranked the items on a Likert-type scale from 1 (*strongly agree*) to 5 (*strongly disagree*). The six aspects were: teachers' involvement in curriculum reform, school climate, professional commitment, professional autonomy, teacher burnout, and teacher job satisfaction.

The items of *teacher job satisfaction* were developed according to the questionnaire of teacher work satisfaction by Hendrix (1995), including teachers' satisfaction to his/her teaching, to his/her job, and to his/her current working status, with 6 items, and internal consistency coefficient is 0.878.

Following the items of teacher job satisfaction are the related items, including teachers' involvement in curriculum reform, school climate, professional commitment, and professional autonomy, with 18 items, the internal consistency is 0.921.

The *involvement in curriculum reform* reflects the degree of teachers' participation in the current reform in

curriculum in China, with 3 items, such as “If curriculum reform in the kindergarten is on the process, I will be the best person principal choose to do it.”

The *school climate* shows whether the kindergarten has the supportive, facilitative, and democratic atmosphere to teacher development, with 3 items, such as “The kindergarten I am in is democratic, and the teachers have large freedom on teaching”, according to the OCDQ (the organizational culture and development questionnaire) by Horowitz (2000).

The *professional commitment* points out the degree which teachers agree and satisfy with the job they have, and the possibility to their retentions, with 3 items, such as “I will still choose to be a kindergarten teacher if I have one more choice of jobs.”

The *professional autonomy* reflects whether teachers have the motivation, ideas, plan and action to autonomous development, with 4 items, such as “I always try to get any opportunities to the lectures and seminars of early childhood education.”

The *teacher burnout* identifies whether teachers feel pressures and exhausted with their working conditions, and whether teachers are overloaded, with 5 items, such as “I feel anxious when I think about the heavy work.”

Using the version 10.0 of *Spss* and 4.0 of *AMOS*, the structure model of teachers' job satisfaction was established to identify the fitness of the model.

### 3.3 Purpose

The purpose of this study is to investigate and establish the affective and effecting structure model of teachers' job satisfaction, with the latent variables of school climate, involvement in curriculum reform, professional commitment, teachers' autonomy, and teachers' burnout.

## 4. Results

This current study built up 3 different kinds of assumption models respectively in order to find out the affecting and effecting mechanism to Chinese early childhood teachers' job satisfaction. The indices of fitness to the structure models are seen in table 2.

**Table 2 The indices of Fitness of the Structure Models on Teachers' Job Satisfaction**

Models	$\chi^2/df$	CFI	IFI	NFI	RFI	TLI	RMSEA
Saturated model	/	1.000	1.000	1.000	/	/	/
Independent model	50.870	0.000	0.000	0.000	0.000	0.000	0.540
Model 1	8.406	0.871	0.871	0.856	0.835	0.851	0.208
Model 2	9.711	0.848	0.849	0.834	0.809	0.825	0.226
Model 3	2.104	0.984	0.984	0.970	0.959	0.978	0.070

### 4.1 Model 1

Model 1 takes job satisfaction as dependent factor, with other five main latent variables, such as curriculum reform involvement, school climate, professional commitment, and professional autonomy as independent factors. The assumption of model 1 is that involvement in curriculum reform, school climate, professional commitment, and autonomy are all the direct influencing factors to teachers' job satisfaction. From the above table 2 it can be concluded that each indices of fitness of model 1 is worse, in terms of the ratio between  $\chi^2$  and *df* (*degree of freedom*) is more than 8.406 (over 5), *RMSEA* is over 0.10 (0.208), and each indices of fitness is all below 0.90. Meanwhile, the effecting coefficients are lower than expected, seeing figure 1.

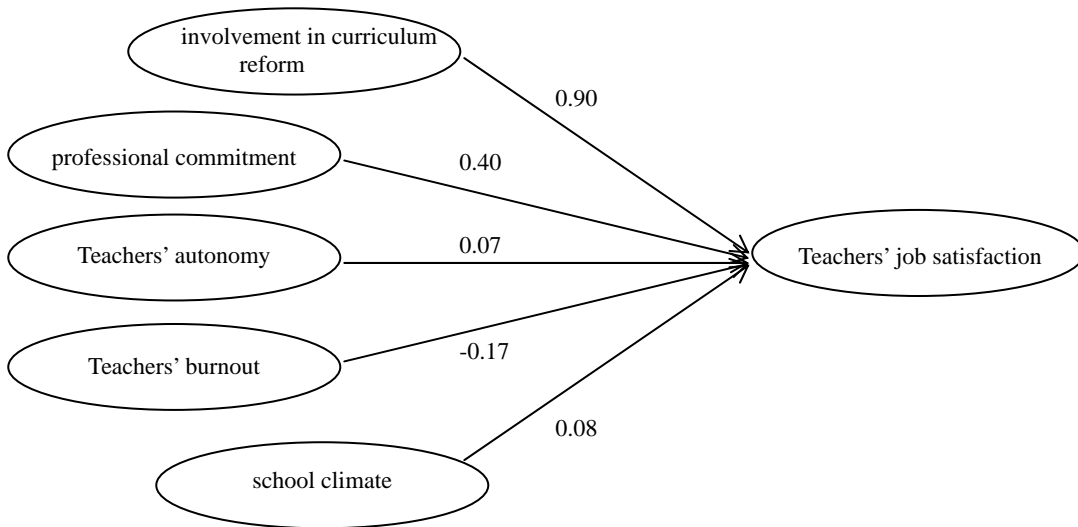


Figure 1 The Structure Model 1 of Teachers' Job Satisfaction

4.2 Model 2

The theoretic hypothesis of model 2 is that teacher job satisfaction, professional commitment, teachers' autonomy, and teachers' burnout are the four dependent latent variables, and teachers' involvement in curriculum reform and school climate are both the independent and influencing factors. The results are also shown that the indices of fitness of model are worse than theoretical expectation, seeing table 2. All the indices of fitness of model 2 are still below 0.90, the ratio between  $\chi^2$  and df is 9.711, much bigger than 5. At the same time, the effective coefficients between latent variables are not obviously raised from the figure 2.

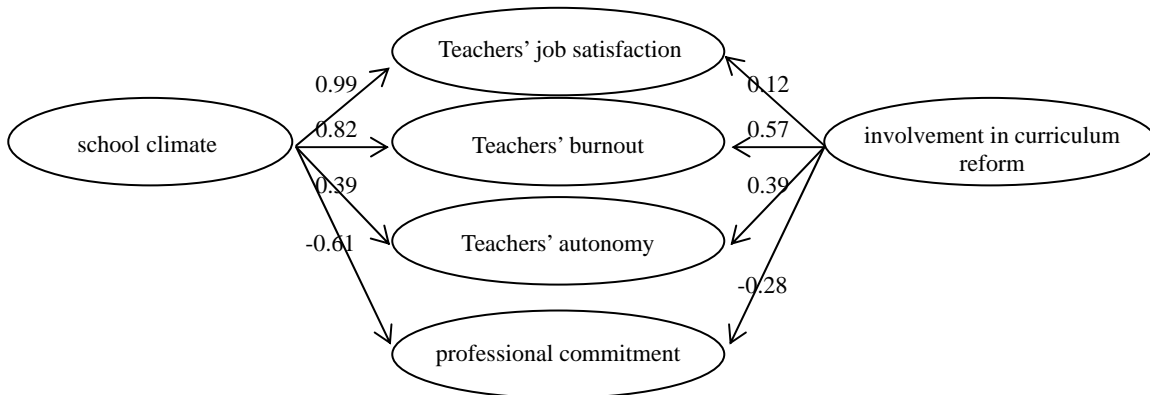


Figure 2 The Structure Model 2 of Teachers' Job Satisfaction

4.3 Model 3

The established model 3, which makes some revised modifications to model 2, increasing a mediate variable with teachers job satisfaction, highly promote the fitness indices on structure model. The theoretic hypothesis in model 3 is that teachers job' satisfaction is the unique important intermediate variable, which is not only influenced by the school climate and teachers' involvement in curriculum reform, but also as the effective factor to promote teachers' autonomy, professional commitment, and decrease teachers' burnout.

The result shows that the fitness of structural model 3 is the best in the 3 models, with all the indices of fitness are above 0.90, As a result express that model 3 of data draw up to match the result best, each draw up to

match one degree value all above 0.90, the ratio between  $\chi^2$  and  $df$  declines to 2.104 (below 5 on the request) quickly, and the  $RMSEA$  is 0.070 (below 0.10). Meanwhile, the effective coefficients between latent variables are obviously raised above 0.20. Hence, model 3 is the unique acceptable model in terms of the statistic analysis.

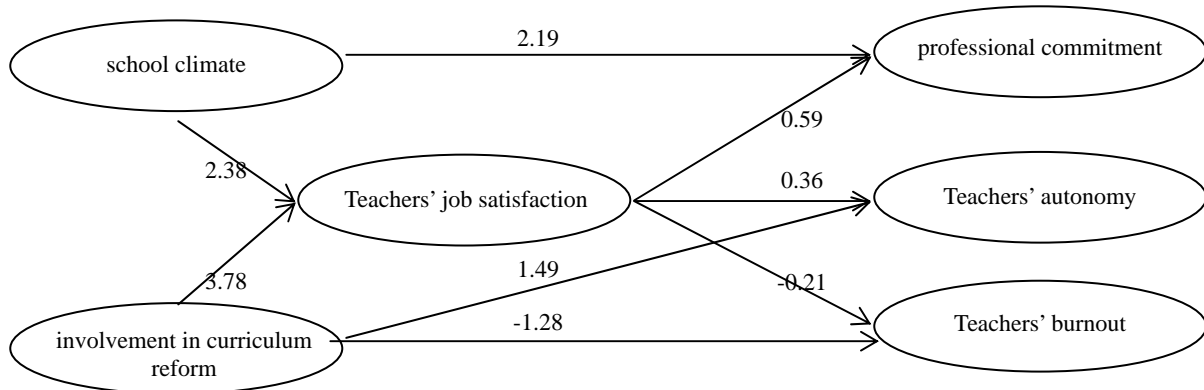


Figure 3 The Structure Model 3 of Teachers' Job Satisfaction

The result shows that school climate and teachers' involvement in curriculum reform not only are both the direct influencing factors to teachers' job satisfaction, but also indirectly affect teachers' professional commitment, teachers' autonomy, and teachers' burnout through teachers' job satisfaction, which is the intermediate variable, according to the figure3.

### 5. Discussion

It was Hoppock who started on the research in job satisfaction in 1935. The previous studies pointed out that teachers' job satisfaction has direct influences on teacher autonomy, professional commitment, and teacher burnout and so on, even affects teachers' personal life outside the workplace. The results of the present study supported the above-mentioned researches.

The result shows that the direct influencing efficiency of teacher's job satisfaction on professional commitment, teacher's autonomy, and teacher's burnout is 0.59, 0.36, and  $-0.21$  respectively, among them the effect on professional commitment is outstanding. The reason is that professional commitment is the affirm and acceptable by the teachers, the higher satisfaction teachers have, the more acceptable and satisfied the teachers will be. That is why professional commitment is greatly affected by teachers' job satisfaction.

At the same time, the present study further points out, teachers' job satisfaction, which is obviously affected by school climate and involvement in curriculum reform, is the major important intermediate variable. Hence, school climate and involvement in curriculum reform have indirect influence on professional commitment, teacher autonomy, and teacher burnout through job satisfaction. Meanwhile, other studies (Pisciotta,2000) identified that salaries and subsidies have no significant influences on teacher's job satisfaction, although some previous researches pointed out that teacher's job satisfaction has the relationship with welfare, salaries, and promotion (Richard & Joshua,2000). The results of the current study support Pisciotta's findings, with salary and subsidy not entering the structure equation model accounts of the low relationship coefficient. Why the present study is different with Richard's finding? That is possibly related with the sample. In this study, the teachers' sample is from Shanghai, which is the metropolitan and teachers' living condition is higher than other cities in China, which leads unobvious influence on job satisfaction. On the contrary, there is curriculum reform in current Shanghai,



which has great influence on teacher development. The involvement in new curriculum can inspire teachers' activity, self-efficacy, and autonomy, which has great positive impacts on teachers' job satisfaction. It is also pointed out through the in-depth interview that the more feelings of involvement and empowerment, the higher job satisfaction they have. At the same time, school climate has also the direct influence on teacher's job satisfaction. The more sense of freedom school gives teachers, the higher job satisfaction, and the lower burnout teachers will have.

## 6. Conclusion

The findings of this study are as follows:

(1) School climate, involvement in curriculum reform are the direct factors that positively influence teachers' job satisfaction.

(2) Teachers' job satisfaction is the important intermediate variable, which influences professional commitment, teacher autonomy, and teacher burnout.

(3) School climate effectively promotes teachers' professional commitment. Teachers' involvement in curriculum reform not only improves teachers' autonomous development, but also decreases teachers' burnout.

### References:

1. Abu-Saad, I. & Hendrix, V. (1995). *Organizational Climate and Teachers' Job Satisfaction in a Multi-Cultural Milieu: The Case of the Bedouin Arab Schools in Israel*. *International Journal of Educational Development*, 15(2). 141-153
2. Amundson, N.E.(1994). *Perspectives for Assessing Career Development*. *Journal of Employment Counseling*, 31, 147-153
3. Bogler, R. (1999). *The Relationship between Principals Leadership Style, Teacher Professionalism and Teachers' Satisfaction*. Paper presented at the annual meeting of the American Educational Research Association, Montreal
4. Bogler, R. (2002). *Two Profiles of Schoolteachers: a Discriminant Analysis of Job Satisfaction*. *Teaching and Teacher Education*, 18, 665-673
5. Catherine, S. & Steve, D. (2000). *An Updated Look at Depressive Symptoms and Job Satisfaction in First-year Women Teachers*. *Journal of Occupational and Organizational Psychology*, 73(3), 363-371
6. Chapman, D. W, & Lowther, M. A. (1982). *Teachers' Satisfaction with Teaching*. *Journal of Educational Research*, 75, 241-247
7. Dinham, S, & Scott, C. (1998). *A Three Domain Model of Teacher and School Executive Career Satisfaction*. *Journal of Educational Administration*, 36(4). 362-378
8. Evans, L. (1997). *Addressing Problems of Conceptualization and Construct Validity in Researching Teachers' Job Satisfaction*. *Educational Research*, 39(3). 319-331
9. Evans, L. (1997). *Understanding Teacher Morale and Job Satisfaction*. *Teaching and Teacher Education*, 13(8). 831-845
10. Hendrix, W. H., Summers, T. P., Leap, T. L., & Steel, R. P. (1995). *Antecedents and Organizational Effectiveness Outcomes of Employee Stress and Health*. In R. Crandall & P. L. Perrewé (Eds.), *Occupational Stress: A Handbook* (73-92). Washington, DC: Taylor & Francis
11. Hirsch, E., Koppich, J. E., & Knapp, M. S. (1998). *What States are Doing to Improve the Quality of Teaching: A Brief Review of Current Patterns and Trends*. Seattle: The Center for the Study of Teaching and Policy, University of Washington
12. Holdaway, E. A. (1978). *Facet and Overall Satisfaction of Teachers*. *Educational Administration Quarterly*, 14(1). 30-47
13. Holdaway, E.A. (1978). *Teacher Satisfaction: An Alberta Report*. Edmonton: University of Alberta
14. Hoppock, R. (1935). *Job Satisfaction*. New York: Harper & Bros. 127
15. Horowitz, T. and Zak, I. (1979). *Recruiting Patterns, Attrition and Persistence in Teaching*. Jerusalem, Israel, The Szold Institute, Publication No. 585
16. Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). *Toward an Understanding of the Burnout Phenomenon*. *Journal of Applied Psychology*, 71(4). 630-640
17. Lawler, E.E., Hall, D.T. & Oldham, G.R. (1974). *Organizational Climate: Relationship to Organizational Structure, Processes, and Performance*. *Organizational Behavior and Human Performance* 11, 139-155
18. Koh, W.L., Steers, R.M., & Terborg, J.R. (1995). *The Effects of Transformational Leadership on Teacher Attitudes and Student Performance in Singapore*. *Journal of Organizational Behavior*, 16, 319-333

19. Kumara, U.A. and Koichi, F. (1989). *Employee Satisfaction and Job Climate: An Empirical Study of Japanese Manufacturing Employees*. Journal Business and Psychology 3, 315-329
20. Kirby, P.C., King, M.I., and Paradise, L.V. (1992). *Extraordinary Leaders in Education: Understanding Transformational Leadership*. Journal of Educational Research, Vol.85
21. Kreis, K., & Brockoff, D. Y. (1986). *Autonomy: A Component of Teacher Job Satisfaction*. Education, 107(1). 110–115
22. Mathieu, J. E. (1991). *A Cross-level Nonrecursive Model of the Antecedents of Organizational Commitment and Satisfaction*. Journal of Applied Psychology, 76, 607–618
23. Motowidlo, S. J. (1996). *Orientation toward the Job and Organization*. In K. R. Murphy (Ed.), *Individual Differences and Behavior in Organizations*. San Francisco: Jossey-Bass. 175-208
24. National Center for Education Statistics (1997). *Job Satisfaction among America's Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation*. Washington, DC: Office of Educational Research and Improvement, US Department of Education
25. Organ, D. W. (1990). *The Motivational Basis of Organizational Citizenship Behavior*. Research in Organizational Behavior, 12, 43-72
26. Pisciotta, J. (2000). *Teacher Attitudes in Texas Public and Private Schools*. Texas Public Policy Foundation. Retrieved May 2002, from www.tppf.org
27. Prince, Jeffrey P., Chartrand, Judy M., & Silver, Diane G. (2000). *Constructing a Quality Career Assessment Site*. Journal of Career Assessment. 8(1). 5567
28. Rodgers-Jenkinson, F. & Chapman, D.W. (1990). *Job Satisfaction of Elementary School Teachers*. International Review of Education, 36, 299-313
29. Repetti, R.L. & Cosmas, K. A. (1991). *The Quality of the Social Environment at Work and Job Satisfaction*. Journal of Applied Social psychology, 21, 840-854
30. Richard, V. & Joshua, H. (2000). *Private School Competition and Public School Teacher Salaries*. Journal of Labor Research, 21 (1), 161-169
31. Rinehart, J.S. and Short, P.M. (1993). *Job Satisfaction and Empowerment among Teacher Leaders, Reading Recovery Teachers, and Regular Classroom Teachers*. Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993). Eric no. ED362940
32. Sharma, S. & Sharma, D. (1989). *Organizational Climate, Job Satisfaction and Job Anxiety*. Psychological Studies, 34, 21-27
33. Steers, Richard M. & Susan R. Rhodes. (1978). *Major Influences on Employee Attendance: A Process Model*. Journal of Applied Psychology, Vol. 63, No. 4. 391-407
34. Smith, C. A., Organ, D. W. & Near, J. P. (1983). *Organizational Citizenship Behavior: Its Nature and Antecedents*. Journal of Applied Psychology, 68, 653-663
35. Sheinfeld, D. and Zalkind, S. (1987). *Does Civil-liberties Climate in Organizations Correlate with Job Satisfaction and Work Alienation*, Psychological Reports 60, 467-477
36. Smith, C. A., Organ, D. W., & Near, J. P. (1983). *Organizational Citizenship Behavior: It's Nature and Antecedents*. Journal of Applied Psychology , 68, 653-663
37. Towse, P., Kent, D., Osaki, F. & Kirua, N. (2004). *Non-graduate Teacher Recruitment and Retention: Some Factors Affecting Teacher Effectiveness in Tanzania*. Teaching and Teacher Education, 18, 637-652
38. Verdugo, Richard R., Greenberg, Nancy M., Henderson, Ronald D., Uribe, Oscar & Schneider, Jeffrey M. (1997). *School Governance Regimes and Teachers. Job Satisfaction: Bureaucracy, Legitimacy and Community*. Educational Administration Quarterly, Vol. 33. 38-66
39. Whaley, Kanada & Hegstrom, Timothy (1992). *Perceptions of School Principal Communication Effectiveness and Teacher Job Satisfaction on the Job*. Journal of Research and Development in Education, Vol. 25. 224-231
40. Wanous, J. P. & Lawler, E. E. (1972). *Measurement and Meaning of Job Satisfaction*. Journal of Applied Psychology, 56, 95–105
41. Watson, A., Hatton, N., Squires, D. and Soliman, I. (1991) *School Staffing and the Quality of Education: Teacher Adjustment and Satisfaction*. Teaching and Teacher Education, 7, 63-77.
42. Watson, A. J., Hatton, N. G., Squires, D. S., & Soliman, I. K. (1991). *School Staffing and the Quality of Education: Teacher Adjustment and Satisfaction*. Teaching and Teacher Education, 7, 63–77

(Edited by Junqing Zhang and Shan Chen)