

The Organizational Commitment, Personality Traits and Teaching Efficacy of Junior High School Teachers: The Meditating Effect of Job Involvement

Dr. Hsingkuang Chi, Nanhua University, Taiwan

Dr. Hueryren Yeh, Shih Chien University, Kaohsiung Campus, Taiwan

Shu-min Choum, Yuanchang Junior High School Yunlin County & Nanhua University, Taiwan

ABSTRACT

The purpose of the research was to explore the relationship between job involvement, personality traits, organizational commitment and teaching efficacy. In addition, the study examined the mediating effect of job involvement on organizational commitment and teaching efficacy among junior high school teachers in Yunlin County, Taiwan. The study also investigated the moderating effects of personality traits on job involvement and teaching efficacy. The questionnaire was used as the main instrument to collect data. 349 junior high school teachers in Yunlin County, Taiwan expressed their willingness to participate in the study through the telephone inquiry. The numbers of valid questionnaires were 290. The effective response rate was 83.1%. The findings of the research were summarized as follows:(1) Job involvement has a significant and positive influence on teaching efficacy; (2) personality traits have a significant and positive influence on teaching efficacy; (3) organizational commitment has a significant and positive influence on job involvement; (4) organizational commitment has a significant and positive influence on teaching efficacy; (5) job involvement has a mediating effect between organizational commitment and teaching efficacy; (6) personality traits have no moderation effect between job involvement and teaching efficacy.

Keywords: *Job Involvement, Personality Traits, Organizational Commitment, Teaching Efficacy, Mediating Effect, Moderating Effect*

INTRODUCTION

A teaching job is not as easy as people think, even in teaching, administration and consultation. Only teachers can understand the difficulty that a teacher encounters. Traditionally, authoritarian education and corporal punishment are a major way to educate students in Taiwan. These educational methods shaped teaching and discipline styles to teach students for many people when they became a teacher in Taiwan. However, this kind of concept and method does not go with the trend nowadays. Therefore, under the Educational Fundamental Act, the Ministry of Education in Taiwan has stipulated that teachers cannot implement the corporal punishment, i.e., Zero corporal punishment on campus. In addition, teachers have to obey the Counsel and Discipline Act to administrate students. Under this regulation, teachers cannot use the traditional method to discipline students when they make a mistake. Moreover, if teachers can receive effective supports from the school administrators properly, their coherence, sense of belonging and job involvement will be increased. Hence, to explore whether organizational commitment will impact job involvement is the first motivation of this study. If teachers have a strong sense of identification to education goals of the school, they will have higher willingness to

stay in school and teach with full of their strength. The educational quality and effectiveness will be improved. On the contrary, if teachers have no sense of identification, they will have an intention to quit and lack of work motivation so that teaching efficacy will be impacted. So, to examine whether organizational commitment will impact teaching efficacy is the second motivation of this study.

Although there is a certain effectiveness of the Secondary Education Reform in Taiwan during the past decade, such as the loosen control of the educational regulations and the provision of diverse entrance, the entrance examination stress still remains heavily to influence teaching efficacy of teachers and effectiveness of the educational policy (Chiang & Kao, 2011; Chuang & Chin, 2010; Yung, 2010). No matter it is before or after educational reform, the entrance examination is always the largest burdens for students, teachers and parents. This phenomenon is most obvious in the junior high school in Taiwan. Teachers in the junior high school have to bear the responsibility for students to take the high school entrance examination, and students' parents have high expectations for the junior high school teachers to help their children in entering an ideal high school. Consequently, the School Parents Organization often uses the performance of the high school entrance examination to evaluate the teaching efficacy and intervenes in the autonomy of teachers (Liu, 2011; Chen, 2011; Wang, 2010; Huang, 2008). It will produce pressures for teachers and influence their job involvement and teaching efficacy. Accordingly, to investigate whether organizational commitment will mediate the relationship between job involvement and teaching efficacy of teachers is the third motivation of the study. Robbins (1992) considered that when a person enters an organization he or she will perceive the working environment according to his or her own value, attitude and personality so as to affect his or her motivation and learning attitude and further impact his or her behavioral performance. In addition to the teaching environment, the unstable working conditions may also influence personality traits and teaching efficacy of teachers. So, by understanding personality traits and individual attributes of teachers, the school administrators can help teachers to have a positive attitude in handling teaching affairs and build a positive view of life. As a result, it not only increases teaching efficacy and benefits the relationship between teachers and students but also enhances teachers' well-being (Wei & Luo, 2012; Liu & Huang, 2008; Liu, 2011; Yen & Hsu, 2012). Thus, to verify whether personal traits will moderate the relationship between job involvement and teaching efficacy is the fourth motivation of the study.

LITERATURE REVIEW

Organizational Commitment

Organizational commitment is a working attitude of employees who have a sense of identification to accomplish organizational goals and wish to maintain good relationship with members within the organization (Robbins, 2001). It is the relative affiliated level of an individual feeling on an organization (Mowday, Porter, & Steers, 1979). Reyes and Pounder (1990) proposed that teachers' commitment is a teacher's psychological identification on school goals and values and willingness to become a member of an organization to work considerably harder more than an individual benefit. Alexander (1996) also stressed that the willingness to remain will result in loyalty to the school. The vigorous development of an organization depends on whether the organizational members can unite together to produce high cohesiveness and whether they are willing to make their best effort for the organization. The philosophy is as the same as a school organization. Thereby, the consensus on the educational philosophy, the willingness to support educational vision and the involvement in teaching job are directly related to the teaching efficacy. Especially, if teachers are willing to devote themselves to teaching job and remain in

the same school, the performance of the school will be increased, and the educational goals can be attained.

In the retrospection of researches, organizational commitment can be classified into effort commitment on work attitude, affective commitment in an organization and retention commitment to an organization. According to these classifications, many researchers have proposed relative research hypotheses and models to explore its applications. For instance, some researchers indicated that organizational commitment is positively related to teaching efficacy (Lin & Lin, 2012). Intention to retention has the lowest correlation with teaching efficacy (Chen & Li, 2012). Job involvement is highly related to teaching efficacy, and the higher the job involvement is, the higher the teaching efficacy is (Wu & Chung, 2011; Yen & Hsu, 2012). When employees' organizational commitment is high, they will commit to the organizational goals and values more and increase their job involvement to improve job effectiveness and productivity (Lin, et al., 2010). Huang and Shen (2012) also concluded that job involvement of the junior high school teachers will completely mediate the relationship between job values and teaching efficacy. The results of Liu (2008)'s research on the junior vocational high school in Kaoshiung County in Taiwan discovered that organizational commitment will directly affect teaching efficacy, and organizational trust will indirectly influence teaching efficacy through the mediation of organizational commitment. Therefore, the study took above research findings as the basis to explore the relationships of job involvement between organizational commitment and teaching efficacy and proposed the hypotheses as follows:

H1: *Organizational commitment will positively affect teaching efficacy.*

H2: *Organizational commitment will positively affect job involvement.*

H3: *Job involvement will mediate the relationship between organizational commitment and teaching efficacy.*

Job Involvement

Job involvement is an individual identification and engagement level for a job (Rabinowitz & Hall, 1977; Keller, 1997) or to what extent a person views a job as an important component in his or her life (Paullay, Alliger, & Stone-Romero, 1994), i.e., Work centrality. Lodahl and Kejner (1965) suggested that job involvement has multi-work attitudes, which means the importance of work in a person's self-image. Robbins (2001) considered that job involvement is an identification level for a job from a person's psychological viewpoint. Chang (2010) assumed that job involvement contains work values and work attitudes, which are often affected by individual factors; when a person perceives job satisfaction, he or she will engage more in his or her job to increase job performance. Job involvement can also summarize as (1) job involvement is an individual entity, which will be influenced by the socialization forming in the early stage of one's life that will internalize into a personal work attitude to interfere job performance. That is, individual characteristics, including age, education, marital status, gender, personality traits, length of service and inhabited area will affect job involvement (Brown & Leigh, 1996; Boyd & Webb, 1982; Rabinowitz & Hall, 1977), (2) job involvement is an attitude which will be induced by working situation. The influences of the working environment are greater than personality traits. The situational factors include the opportunity to participate in decision making (Rabinowitz & Hall, 1977; Dimitriades, 2007; Wu & Chung, 2011), leadership behavior (Rabinowitz & Hall, 1977; Ye & Wu, 2010; Lee & Chu, 2012), job autonomy (Li, Chang, Lai, & Lee, 2008; Lin, 2010; Wu & Chung, 2011), and service level (Dimitriades, 2007; Chen & Liu, 2012; Hsu, Su, & Huang, 2012), and (3) job involvement will be interfered by the interaction of personality traits and organizational situation. In other words, job

involvement will be affected by the interactive effects of an individual personality traits and work conditions. The factors comprise of job satisfaction, absenteeism rate, job performance, and achievement (Dimitriades, 2007; Lee, et al., 2009; Rizwan, Khan, & Saboor, 2011; Chen & Liu, 2012). In synthesizing the definitions and theories on above, the study considered that job involvement will influence job intention and work commitment through interactive effects of individual personality traits and organizational situation. Therefore, the study proposed the hypothesis four as follows:

H4: Personality traits will moderate the relationship between job involvement and teaching efficacy.

Personality Traits

Allport (1961) proposed that personality is a dynamic organization inside of an individual psychological system which can decide the uniqueness of his or her thinking and behavior. Helmreich (1984) also commented that personality has a long-lasting feature which is not easily affected by the external interferences. Personality traits hold specific components in an organizational structure and have dynamic features, which will react differently to the changes of the environment (Lin & Chiu, 1999). So, different personality traits can cause different thinking and influence an individual to make different decisions (Chu, 2003). However, due to different classifications and scopes of the trait theory, such as Allport (1937)'s common and individual traits, Cattell (1943)'s 16 personality factors, Rotter (1966)'s internal-external locus of control, and McCrae and Costa (2003)'s big five personality traits, researchers often used different research contents and methods to study personality traits so as to incur different viewpoints. Some researchers attempted to apply the concepts of personality traits to understand the essences and occurrences of job involvement. Brown and Leigh (1996) induced the antecedents of job involvement, including personality traits, job characteristics, managers' behavior and role perception. Boyd and Webb (1982) identified that personal characteristics will impact job involvement. Rabinowitz and Hall (1977) also asserted the level of job involvement will be different because the differences of individual characteristics and job involvement will be significantly affected by personality traits.

Moreover, internal locus control (ILOC) and external locus control (ELOC) is a kind of stable personality traits, which can be distinguished from the perspective of one's belief. Internal locus of controllers believe they can control destiny and regard that success is from hard working while failure is an individual responsibility; external locus of controllers do not believe success or failure is related to ability or effort (Kren, 1992; Chi, Yeh, & Chen, 2010). Internal locus of controllers are more voluntary, independent and active while externals are more fatalistic, dependent and inactive; when internal locus of controllers encounter difficulty they will take a positive way to improve the consequence while external locus of controllers encounter difficulty they will take a negative way to persuade themselves that the consequence is caused by others (Hammer & Vardi, 1981). ILOC and ELOC are two important factors to influence an individual job satisfaction, job involvement and turnover intention (Lauver & Kristof-Brown, 2002). ILOC will influence job performance, and the interactive effects of ELOC and customer orientation can cause negative job performance (Chi, et al., 2010). Personality traits and teaching efficacy are positively related (Liu, 2007; Lo, 2010). To summarize personality traits researches on above, the study inferred that the differences of teachers' personality can incur different effects on job engagement and further influence teaching efficacy. Therefore, the study proposed the hypothesis five as follows:

H5: Personality traits will positively and significantly to influence teaching efficacy.

Teaching Efficacy

Teachers play an important role to decide whether teaching will succeed or fail during the whole teaching process, and the core performance of teaching efficacy relies on effective teaching methods in teaching context. So, it is useful to clarify each factor that affects teaching efficacy in the process of teaching in order to apply effective methods to make students have better learning or behavioral performance. Lin (2004) maintained that teaching efficacy is an empowerment that gives teachers' power to take decisions and acquire new knowledge to improve students' learning results. Chu (2003) argued that teaching efficacy can induce students' learning motivation and help them to produce growth ability. Marsh and Bailey (1991) suggested that the evaluation of teaching effectiveness contains multidimensional constructs, including learning/value, instructor enthusiasm, organization/clarity, group interaction, individual rapport, breadth of coverage, examinations/grading, assignments/readings and workload/difficulty. McHaney and Impey (1992) proposed strategies for analyzing and evaluating teaching effectiveness containing (1) lesson design and development, (2) alternative strategies for teaching concepts, (3) alternative strategies for teaching generalizations, (4) alternative problem-solving strategies, (5) analysis and evaluation of teaching effectiveness through a microteaching lesson presentation, (6) a developmental performance rating scale for evaluating course assignment products, and (7) analysis and evaluation of the clinical teaching experience. In addition, Chan, et al. (2008) found that organizational commitment is positively related to teaching efficacy. When teachers identify with goals, beliefs, and values of the school they express high teaching effectiveness (Yen & Hsu, 2012; Chen & Li, 2012). Lin et al. (2010) also indicated that when preschool teachers have higher organizational commitment, their job involvement will be higher. When teachers engage more efforts in teaching job, they will have better teaching performance (Huang & Shen, 2012). Accordingly, the study tendered the hypothesis six as follows:

H6: Job involvement will positively and significantly influence teaching efficacy.

RESEARCH METHODOLOGY

Research Framework

As shown in Figure 1, the study proposed the research framework to explore the relationships among organizational commitment, job involvement, personality traits and teaching efficacy. Organizational commitment, job involvement, and personality traits are independent variables. Teaching efficacy is dependent variable. Job involvement is a mediating variable, and personality traits are the moderating variable.

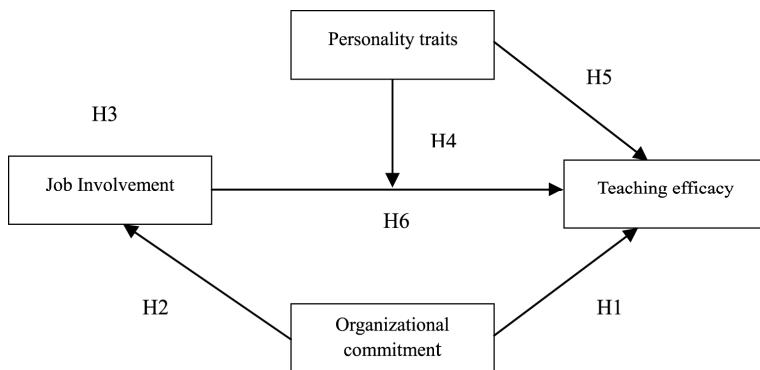


Figure 1: Research framework

Questionnaire Design and Sample

The questionnaire has 66 question items and divides into five parts, including job involvement, personality traits, organizational commitment, teaching efficacy and individual information. They were measured by a 7-point Likert scale with 1-very strong disagree/7-very strongly agree and used SPSS12.0 to implement data analysis. The survey adopted convenient sampling to collect data from teachers who worked in the public junior high school in Yulin, Taiwan during the 2011 spring semester. Totally, 349 copies of questionnaires were dispatched and 318 were returned. After deleting 28 invalid samples, 290 copies of questionnaires were valid. The effective response rate is 83.1%.

Sample Characteristics

The sample characteristics are described as follows: The majority of samples are female, which occupies 64.8%. 62.8% are married while 37.2% are unmarried. In the perspective of duty, 62.1% are homeroom teachers, and administrative teachers (deans or directors) are 21.4%. 16.6% are full-time teachers. In length of service, 6-10 years is 39.7%, above 16 years is 22.8%, less than 5 years is 21.0%, and 11-15 years is 16.6%, which is the lowest population. In the school size, the largest is 48.6% (more than 31 classes), the medium is 34.1% (16-30 classes), and the smallest is 17.2% (fewer than 15 classes).

RESEARCH RESULTS

Reliability Analysis

The study adopted Cronbach's α to measure the internal consistency of the questionnaire. The results showed that Cronbach's α is 0.864, 0.769, 0.919 and 0.926 in respectively to job involvement, personality trait, organizational commitment, and teaching efficacy. Cronbach's α of all dimensions are above 0.7. It demonstrated that the measurement items of the questionnaire have a high internal consistency.

Pearson Correlation Analysis

The study used Pearson's analysis to explore the correlation between each dimension. The results showed all dimensions are positively related. Organizational commitment is positively related to teaching efficacy ($r=0.571$, $p<0.001$). Organizational commitment is positively related to job involvement ($r=0.596$, $p<0.001$). Personality traits are positively related to teaching efficacy ($r=0.292$, $p<0.001$). Job involvement is positively related to teaching efficacy ($r=0.704$, $p<0.001$).

Regression Analysis

Organizational commitment is significantly and positively affected to teaching efficacy ($R^2=0.326$, $Adj.R^2=0.324$, $\beta=0.571$, $F=139.462$, $p<0.001$). It shows that organizational commitment has a significant influence power to teaching efficacy. H1 is sustained. Organizational commitment is significantly and positively affected to job involvement ($R^2=0.355$, $Adj.R^2=0.353$, $\beta=0.596$, $F=158.836$, $p<0.001$). The result tells that organizational commitment has a significant influence power to job involvement. H2 is supported. Personality traits are significantly and positively affected to teaching efficacy ($R^2=0.085$, $Adj.R^2=0.082$, $\beta=0.292$, $F=26.800$, $p<0.001$). H5 is supported. Job involvement is significantly and positively related to teaching efficacy ($R^2=0.496$, $Adj.R^2=0.494$, $\beta=0.704$, $F=283.002$, $p<0.001$). H6 is supported.

Mediating Effect Analysis

The study follows Baron and Kenny (1986) suggestions to examine the mediating effects. Model 1, organizational commitment is significantly and positively affected to job involvement ($\beta=0.384$, $p<0.001$). It satisfies the condition that the independent variable is significantly affected to mediating variable. Model 2, organizational commitment and job involvement are regressed with teaching efficacy. The results showed that organizational commitment is significantly and positively affected to teaching efficacy ($\beta=0.366$, $p<0.001$), and job involvement is positively related to teaching efficacy ($\beta=0.700$, $p<0.001$). Model 3, when the mediating variable (job involvement) is controlled, it shows that the organizational commitment ($\beta=0.151$) and job involvement ($\beta=0.561$) are significantly affected to teaching efficacy ($p<0.001$), and the regression coefficient of the organizational commitment reduces from 0.366 to 0.151 (see Table 1).

Table 1: Regression analysis of organizational commitment, job involvement and teaching efficacy

Variables	Model 1		Model 2		Model 3	
	JI	TE	TE	TE	TE	TE
OC	0.384***	0.366***			0.151***	
JI			0.700***		0.561***	
R ²	0.355	0.326	0.496		0.531	
Adj.R ²	0.353	0.324	0.494		0.528	
F-value	158.836	139.462	283.002		162.608	
p	0.000	0.000	0.000		0.000	

Note: 1. *: $p<0.05$, **: $p<0.01$, ***: $p<0.001$; 2. OC: Organizational commitment, JI: Job involvement, TE: Teaching efficacy

Pursuant to the verification of the mediation effect suggested by Baron and Kenny (1986), the job involvement has part of the mediation effect between the relationship of the organizational commitment and the teaching efficacy. The partial mediation effect is 0.215. Further, the study adopted Preacher and Hayes (2004)'s suggestion to test indirect effect and applied the Sobel test to investigate mediating effects. The result exhibited that z value is 8.3579, which is greater than 1.96 ($p<0.05$), and mediating effect is 0.2154 (see Table 2). It verified that job involvement did have mediating effect. Consequently, the study inferred that H3 is supported.

Table 2: Regression analysis of mediating effect verification

Variables	β	SE		t	p
		Direct effects			
IV to DV	0.366		0.031	11.809	0.000
DV to MV	0.384		0.031	12.603	0.000
MV to DV, under the control of DV	0.561		0.050	11.201	0.000
IV to DV, under the control of MV	0.151		0.323	4.668	0.000
Value	SE	LL95% CI	UL95% CI	z	p
Indirect effect and significance using the normal distribution					
Sobel	0.2154	0.0258	0.1649	0.2660	8.3579 0.000
Value	SE	LL95% CI	UL95% CI	Mean	
Bootstrap results for indirect effect					
Effect	0.2154	0.0273	0.1640	0.2730	2.147

Note: 1. IV: Independent variable, DV: Dependent variable, MV: Mediating variable

2. N= 290, Bootstrap sample size= 5000, LL= lower limit, CI= confidence interval, UL=upper limit

Moderating Effect Analysis

In order to avoid interfering from exogenous variables, the study controlled five demographic variables including gender, marriage, duty, length of service and school size in Model 1 (see Table 3). The explained variance is 0.7%. The study further added job involvement in Model 2. The result presented that job involvement is significantly and positively affected to teaching efficacy ($\beta = 0.709$, $p < 0.001$) and acquired an additional explanatory power ($\Delta R^2 = 0.488$, $p < 0.001$). Then, the study added ELOC in Model 3. The results exhibited that ELOC ($\beta = 0.089$, $p < 0.05$) and job involvement ($\beta = 0.719$, $p < 0.001$) are significantly and positively affected to teaching efficacy, and ELOC accounted for an additional explanatory power to teaching efficacy ($\Delta R^2 = 0.006$, $p < 0.001$). On the same token, the study added ILOC in Model 4. It showed that ILOC is significantly and positively affected to ILOC ($\beta = 0.123$, $p < 0.05$) and job involvement ($\beta = 0.632$, $p < 0.001$) and ILOC increased an additional explanatory power to teaching efficacy ($\Delta R^2 = 0.008$, $p < 0.001$). In model 5, the study added the interactive effect variables. The result disclosed that ELOC has no moderation effect between job involvement and teaching efficacy ($\beta = -0.027$, $p > 0.05$). In Model 6, the study added the interactive effect variables. The result indicated that ILOC has no moderation effect between job involvement and teaching efficacy ($\beta = 0.055$, $p > 0.05$). H4 is not supported.

Table 3: Regression analysis of job involvement, personality traits and teaching efficacy

	Model 1 TE	Model 2 TE	Model 3 TE	Model 4 TE	Model 5 TE	Model 6 TE
Control variables						
Gender	0.065	-0.039	-0.035	-0.027	-0.034	-0.024
Marriage	-0.063	-0.026	-0.036	-0.025	-0.034	-0.026
Duty	0.022	0.013	0.009	0.021	0.008	0.017
Length of service	-0.118	-0.104 ^a	-0.098	-0.093	-0.098	-0.096
School size	0.107	0.014	0.007	0.008	0.007	0.003
Dependent variables						
Job involvement		0.709 ^c	0.719 ^c	0.632 ^c	0.723 ^c	0.639 ^c
Moderating variable						
PT-ELOC			0.089 ^a			0.09 ^a
PT-ILOC				0.123 ^a		0.137 ^a
Interactive effect						
Job involvement*ELOC					-0.027	
Job involvement*ILOC						0.05
<i>N</i>	290	290	290	290	290	290
MAX VIF	1.526	1.528	1.541	1.529	1.549	1.744
<i>F</i> -value	1.405	48.223 ^c	42.444 ^c	42.720 ^c	37.112 ^c	37.640 ^c
<i>R</i> ²	0.024	0.506	0.513	0.515	0.514	0.517
<i>ADJ R</i> ²	0.007	0.495	0.501	0.503	0.500	.0504

Note: 1. $a=p<0.005$; $b=p<0.01$; $c=p<0.001$; 2. TE: Teaching efficacy, PT-ELOC Personality traits-external locus of control, PT-ILOC: Personality traits-internal locus of control

CONCLUSION AND SUGGESTION

The results of the study showed that job involvement, personality traits and organizational commitment are significantly and positively affected to teaching efficacy. Job involvement has mediating effect between organizational commitment and teaching efficacy. That is, organizational commitment will affect teaching efficacy through the effect of job involvement. Therefore, school administrators must devote to organizational commitment to teachers, so they will identify with organizational goals, beliefs, and values to strive for their job and like to be an organizational member to develop their expertise in teaching. In that case, teachers will overpass individual interests and like to stay in the school to spend more time and energy in their teaching. As a result, their teaching efficacy will increase, and students will have better performance. On the other hand, personality traits did not have moderating effects between job involvement and teaching efficacy. The study inferred that teachers always consider the duty of teaching is to “propagate the doctrine”, “impart professional knowledge” and “resolve doubts” to students in their education work. They will naturally identify with the educational goals and visions of the school so as to make their best effort in teaching job. Therefore, they will express diligence, concentration, earnest and responsibility for their work, so they will not be affected by internal-external locus of control, and the interactive effects of personality traits and job involvement will not influence teaching efficacy. That is to say that school authorities should provide supports and concerns to teachers. By doing so, they will recognize the organization and promote job involvement to develop expertise and obtain happiness from their job. Additionally, school authorities need to listen to teachers’ opinions when making important decisions, so they will consent to the educational goals and share core values of the school. Then, teachers will be more willing to exert their strength to dedicate and commit to the organization and remain in the school. If the teachers have high intention to stay, their teaching efficacy will enhance, and the school affairs will be easy to promote. Lastly, the study only selected the samples from the public junior high school in Yulin, Taiwan. It may cause difficulty to generalize the study results because of the regional limitation. So, the study suggests prospective researchers can expand research samples from other locations in order to make a broader research. Moreover, many factors can influence teaching efficacy. Future researchers can further examine background variables and relative independent variables such as work pressure, work value, emotional intelligence, job satisfaction and leadership behavior to make their study more completely.

REFERENCES

- Alexander, K. T. (1996). Conceptualizing and measuring commitment to high school teaching. *The Journal of Educational Research*, 89(5), 295-304.
- Allport, G. W. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart & Winston.
- Boyd, D. P., & R. J. Webb (1982). The coronary costs of choosing a small business career. *American Journal of Small Business*, 6(4), 3-9.
- Brown, S. P., & Leigh , T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368.
- Cattell, R. B. (1943). The description of personality: Basic trait into clusters. *Journal of Abnormal and Social Psychology*, 38, 476-506.
- Chan, W.Y., Lau, S., Nie, Y. Y., Lim, S., & Hogan, D. (2008). Organizational and personal predictors of teacher commitment: The mediating role of teacher efficacy and identification with school. *American Educational Research Journal*, 45(3), 597-630.

- Chang, Y. C. (2010). *A study of the relationship between junior high school teachers' zero corporal punishment perception, job stress and job involvement*. Unpublished master's thesis, National Yunlin University of Science and Technology, Taiwan.
- Chen, M. L., & Li, L. S. (2012). A study of the relationships among curriculum leadership, organizational commitment and teaching effectiveness of junior-high-school science and technology teachers. *Chinese Journal of Science Education*, 19(5), 409-434.
- Chen, S. H., & Liu, P. Y. (2012). Effects of internal marketing, organizational commitment, job involvement and job satisfaction on work performance: A study of the elderly care institutions in Taiwan. *Marketing Review*, 9(3), 277-301.
- Chen, W. T. (2011). A meta analysis of the relationship between job stress and coping strategies of teachers. *Bulletin of Educational Psychology*, 43(2), 439-455.
- Chi, H. K., Yeh, H. R., & Chen, Y. L. (2010). The moderating effect of locus of control on customer orientation and job performance of salespeople. *The Business Review*, Cambridge, 16(2), 142-148.
- Chiang, A. H., & Kao, C. P. (2011). The analysis of globalization trend and secondary education reform in Taiwan. In Q. J. Wu, C. S. Wu, & M. L. Li. (Eds), *Review and outlook of centennial education in Taiwan* (pp.81-104). Taipei, Taiwan: National Academy for Educational Research.
- Chu, C. L. (2003). *A study of the relationship between personality traits and teaching effectiveness of teachers in reward and non-reward kindergarten in Taiwan*. Unpublished doctoral dissertation, Spalding University, Kentucky.
- Chuang, Y. L., & Chin, J. M. (2010). Examining the feasibility of the twelve years basic education policy in Taiwan. *Taiwan Education Review*, 662, 2-9.
- Dimitriades, Z. S. (2007). The influence of service climate and job involvement on customer-oriented organizational citizenship behavior in Greek service organizations: a survey. *Employee Relations*, 29(5), 469-491.
- Hammer, T. H., & Vardi, P. (1981). Locus of control and career self-management among non-supervisory employees in industrial settings. *Journal of Vocational Behavior*, 18, 13-29.
- Helmreich, R. L. (1984). Cockpit management attitude. *Human Factors*, 26(5), 583-589.
- Hsu, S. W., Su, H.W, & Huang,C.S.(2012). A study of managers' charismatic leadership, employees' organizational citizenship behavior and service quality of international tourist hotels in Taiwan: Organizational culture as a moderator. *Commerce & Management Quarterly*, 13(4), 397-425.
- Hsu, S. W., & Yeh, H. T. (2007). A study of work values, work attitude and job performance of employees of international tourist hotels: Leadership style as a moderator. *Journal of Business Administration*, 87, 77-110.
- Huang, Y. W. (2008). Enlightenment of our country in the middle and primary schools' educational reform of U.S.A. *School Administration Research*, 54, 94-116.
- Huang, W. S., & Shen S. P. (2012). A study of the relationship among work values, job involvement, and teaching efficacy of junior high school teachers in Kaohsiung City. *Curriculum & Instruction Quarterly*, 15(4), 161-188.
- Keller, R.T.C. (1997). Job involvement and organizational commitment as longitudinal predictors of job performance: A study of scientists and engineers. *Journal of Applied Psychology*, 82(4), 539- 545.
- Kren, L. (1992). The moderating effects of locus of control on performance incentives and participation. *Human Relations*, 45(9), 991-1002.
- Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, 59, 454-470.
- Lee, H. W., Chin, J. T., & Chen, J. L. (2009). The effect of the perception of job stress of civil servant on job. *Journal of NPO Management*, 6, 21-30.
- Lee, S. M., & Chu, Z. X. (2012). The preliminary study on measurement and consequences of authentic leadership. *Journal of SHU-TE University*, 14(1), 341-366.
- Li, R. H., Chang, F. M., Lai, H. L., & Lee, R. P. (2008). A study of the professional commitment and work values among public health nurses in Taitung County, Taiwan. *Tzu Chi Nursing Journal*, 7(2), 79-92.
- Lin, C. H. (2004). *The study of organizational commitment and teaching effectiveness for special education teachers teaching*.

- Unpublished master's thesis, National Changhua University of Education, Taiwan.
- Lin, C. Y. (2010). Job satisfaction, organizational commitment and turnover intention: A comparison among elementary-secondary school teachers and other occupations. *Journal of Education Practice and Research*, 23(1), 1-30.
- Lin, C. Y., Ho, Y. T., Hsieh, Y. H., & Hsu, H. Y. (2010). The causal relationship between job characteristics and preschool teachers' job involvement: The meditational role of organizational commitment. *Formosan Education and Society*, 20, 105-143.
- Lin, N. P., & Chiu, H. C. (1999). A study of service quality: The effects and applications of service providers' personality traits. *Journal of Management*, 16(2), 175-200.
- Lin, Q. (2001). An evaluation of charter school. *Effectiveness Education*, 122(1), 166-176.
- Lin, T. Y., & Lin, C. C. (2012). The relations among organizational commitment, self-efficacy and knowledge sharing by teachers of Taichung City Elementary Schools. *Tunghai Educational Review*, 8, 74-101.
- Liu, H. C. (2011). A study of workplace well-being and job satisfaction of private kindergarten teachers. *Journal of Early Childhood Education and Care*, 6, 87-115.
- Liu, M. C. (2008). *A study of the relationship among organizational trust, organizational commitment, and teaching effectiveness: Take vocational high school teachers in the Kaohsiung area for example*. Unpublished master's thesis, National Kaohsiung University of Applied Sciences, Taiwan.
- Liu, T. M. (2007). *A study on junior high school teachers' personality traits, teaching styles, and teaching effectiveness*. Unpublished master's thesis, National Changhua University of Education, Taiwan.
- Liu, Y. H. (2011). Study of work stress of secondary and elementary school teachers. *School Administration Research*, 72, 77-98.
- Liu, Z. M., & Huang, D. H. (2008). A study on junior high school teachers' personality traits and teaching effectiveness. *The Journal of Taipei Municipal University of Education*, 9(2), 1-34.
- Lo, C. L. (2010). *A study of the relationship between kindergarten teachers' creative personalities and teaching effectiveness in central part of Taiwan*. Unpublished master's thesis, National Taichung University of Education, Taiwan.
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(1), 24-33.
- Marsh, H. W., & Bailey, M. (1991). *Multidimensional students' evaluations of teaching effectiveness: A profile analysis*, Australia. New South Wales: Geographic srce./country of publication, (ERIC Document Reproduction Service No. ED 350310).
- McCrae, R. R., Costa, P. T. (2003). *Personality in adulthood, a five-factor theory perspective* (2nd ed.). New York: Guilford Press.
- McHanney, J. H., & Impey, W. D. (1992). *Strategies for analyzing and evaluating teaching effectiveness using a clinical supervision model*. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, (ERIC Document Reproduction Service No. ED354 286).
- Mowday, R. T., Porter, L.W. & Steers, R. M. (1979). *Employee organization linkages: The psychology of commitment, absenteeism and turnover*. New York: Academic Press.
- Paullay, I. M., Alliger, G. M., & Stone- Romero, E. F. (1994). Construct validation of two instruments designed to measure job involvement and work centrality. *Journal of Applied Psychology*, 79, 224-28.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods*, 36(4), 717-731.
- Rabinowitz, S. & Hall, D. T. (1977). Organizational research on job involvement. *Psychological Bulletin*, 84(2), 255-288.
- Reyes, P. & Pounder, D. G. (1990). *Teachers commitment, job satisfaction, and school value orientation: A study of public and private*. University of Wisconsin, Madison.
- Rizwan, M. Khan, D. J., & Saboor, F. (2011). Relationship of job involvement with employee performance: Moderating role of attitude. *European Journal of Business and Management*, 3(8), 77 -85.
- Robbins, S. P. (1992). *Organizational behavior: Concepts, controversies, and applications* (6th ed). Englewood Cliffs, NJ: Prentice Hill

- Robbins, S. P. (2001). *Organizational behavior: Concepts, controversies, and applications* (9th ed). Englewood Cliffs, NJ : Prentice-Hall.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 33(1), 300-303.
- Wei, M. H., & Luo, Q. L. (2012). The initial research on the effect of teachers' creativity and creative characteristics to teaching efficacy-using the early childhood education as an example. *Gifted Education Quarterly*, 122, 17-23.
- Wu, H. T., & Chung, M. H. (2011). The causality among role perception, job involvement and professional growth. *Bulletin of Educational Psychology*, 43(2), 491-438.
- Ye, D. S., & Wu, M. L. (2010). A study on the relationships among the awareness of junior high school teachers in Kaohsiung County on the principal's situational leadership and organizational communication and the teacher's job involvement. *Journal of Cheng Shiu University Center for General Education*, 7, 79-112.
- Yung, C. S. (2010). The aftermath of 12-year compulsory education: Secondary education at the crossroad. *Bulletin of the National Institute of Education Materials*, 46, 1-26.