

Full Length Research Paper

Job stress and coping strategies among early childhood teachers in Central Taiwan

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The purpose of this study was to explore the association between job stress and coping strategies in early childhood teachers in Central Taiwan. A quantitative approach was utilized, and data were collected from 314 participants. The results of the present study suggest that (1) early childhood teachers believed that their job stress was due to a lack of teaching autonomy and worked-related stressors. They perceived seeking social support as the most important coping strategy; (2) teachers reporting the most stress were those who were single, under the age of 25, and with less than 5 years teaching experience; (3) there was a significant relationship between job stress and coping strategies.

Key words: Job stress, coping strategies, early childhood teachers, Taiwan.

INTRODUCTION

In Taiwan, early childhood education is defined as education prior to elementary school. There are a variety of early childhood programs, including kindergartens, nursery schools and daycare centers, although kindergartens and nursery schools are the most popular. The kindergarten is an educational institution that serves children between the ages four and six. Nursery school is considered a social welfare institution that serves children from one month through six years of age.

Because there are different regulations for kindergartens and nursery schools, it is not easy to provide similar education and care quality for the children from age 2 to 6. In order to solve the problem, the officials of Ministry of Education (MOE) and Ministry of Interior (MOI) work together to find the solution, so the Law for Child Education and Care is drawn up, and it will be promulgated in 2012. It comprises 8 chapters and 60 articles. The future will more efficiently integrate education and care resources, train personnel and enable the ministry to better manage preschool education.

Research shows that working in childcare is a stressful experience. Stressors found in childcare centers include perceived workload; child behavior and guidance issues; conflict or poor communication between staff and/or supervisors; parent-related demands; low pay and long hours; low social status; unpaid overtime; limited resources;

and differences in philosophy, work ethic, skills and training between workers and directors (Kilgallon et al., 2008; Sancini et al., 2010).

In Taiwan, 66% of early childhood education institutions are privately founded, only less than 30% public kindergarten could receive support from the government. Moreover, private preschool teachers average 10.5 hours work a day with heavy workload. On average, beginning preschool teachers with bachelor's degrees receive only NT\$ 20,000 (about US\$571) per month, which is close to Taiwan's least statutory monthly wage, NT\$18,540 (about US\$530). Because of low salaries, poor working conditions, and heavy workload, the turnover among private preschool teachers in Taiwan is very high (Chen, 2003; Oul and Tseng, 2009; Wu, 2011). Many prospective teachers do not consider preschools as a long-term career choice, and those who do enter the field frequently leave.

In response to the Law of Childhood Education and Care and the integration kindergartens and nursery schools, the purpose of the study is to explore the relationship between job stress and coping strategies among early childhood teachers in Central Taiwan. To achieve the goals of the current study, the following issues are examined: (1) current job stress and coping strategies among early childhood teachers, (2) the effect

of different demographic variables on job stress and coping strategies, and (3) the relationship between job stress and coping strategies among early childhood teachers.

Theoretical background

Job stress and coping strategies

Stress refers to a relationship with the environment that an individual appraises as significant for his or her well-being and in which the demands tax or exceed available coping resources (Lazarus and Folkman, 1986). Teacher stress occurs when a teacher experiences negative emotions, such as anger, frustration, anxiety, depression, and nervousness, as a result of some aspect of his or her work (Kyriacou, 2001). Kyriacou and Sutcliffe (1978) made an explicit distinction between stressors that were mainly physical and those that were essentially psychological. Coping mechanisms can help individuals deal with stressful situations.

Most approaches to coping research followed the work of Folkman and Lazarus (1980), who defined coping as the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them. They can attempt to change the person-environment realities behind negative emotions or stress (problem-focused coping). They can also relate to internal elements and try to reduce a negative emotional state or change the appraisal of the demanding situation (emotion-focused coping).

Different coping strategies have different functions at different stages of coping with stress. In fact, we employ different combinations of strategies to cope with stress, such as emotion-focused and problem-focused coping (Brandtstadter, 1989). Studies have found that the most important non-contextual factor affecting coping strategies is social support (Devonport and Lane, 2006; Pakenham et al., 2004). Social support plays a role in positive coping with stress (Linley and Joseph, 2004; Pakenham et al., 2004), and active and adaptive coping strategies are associated with higher levels of social support (Devonport and Lane, 2006). Problem-focused coping strategies are used by individuals with high levels of social support, and emotion-focused coping strategies are employed by individuals with low levels of social support (Devonport and Lane, 2006). Social support may be even more important when employing certain coping strategies, such as seeking instrumental or emotional assistance (Bolger and Amarel, 2007; DeLongis and Holtzman, 2005; Pakenham and Bursnall, 2006; Shen, 2009).

Job stress and coping strategies among early childhood teachers in Taiwan

According to the policy for early childhood education in

Taiwan, the primary purposes of early childhood education are to ensure that children develop normally and healthily, acquire good living habits, have full life experiences, continually improve their ethical and moral concepts and become sociable individuals (MOE, 2011).

Despite these governmental and educational goals, Taiwanese parents are their children's primary providers of financial support and the opportunities for ensuring academic achievement. Parents tend to put extreme pressure on their children to encourage them to excel academically. Parents put even more pressure on teachers, they prefer formal teaching pedagogy (teaching through subjects) in preschool education (Hsieh, 2008).

Moreover, the marketing management of the education sector increasingly relies on strategies, methods and tools that the business world has long employed (Vrontis et al., 2007). When it comes to preschool management, parents' needs and wants should be considered by school administrators in order to generate competitive strategies that attract parents' attention and satisfy their expectations. Teachers must adhere to parents' expectations. Consequently, teachers have limited autonomy in deciding what needs to be taught, and they experience tremendous pressure from parents and fellow teachers.

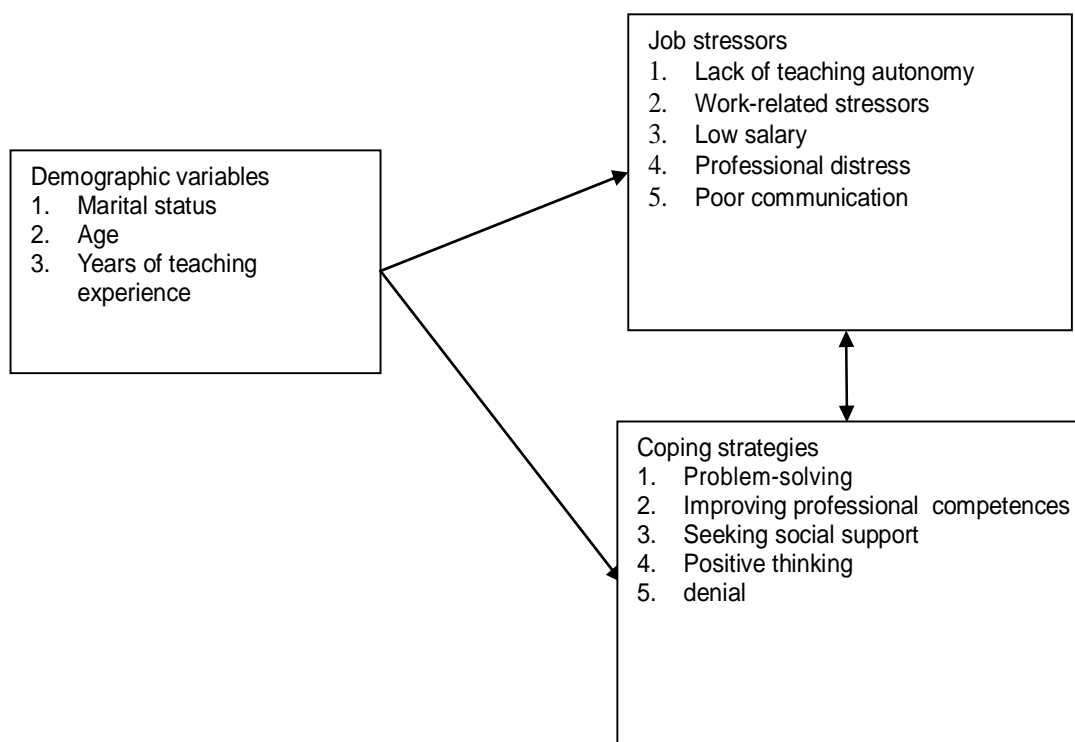
The responsibilities of early childhood education teachers include caring for children under the age of six while also working on their cognitive, physical and social development by teaching important concepts and skills. Because children demonstrate less reception to reason, less self-discipline, less emotional stability, and less interest in school matters, it is more difficult to teach kindergartners than it is to teach older children (Wong et al., 2007).

Because of these challenges, early childhood education teachers must manage a heavy teaching workload while also coping with teaching autonomy, parental pressures, rapid changes in curricular demands, disruptive classroom behavior, pressures from bureaucrats and administrators, the development of scholastic programs for future education, interpersonal relationships, and low salaries and low social status (Chen, 2003; Oul and Tseng, 2009).

On the other hand, Chen (2003) identified four coping strategies preschool teachers adopt when experiencing problematic situations and job stresses: asking for help, compromising, attempting to solve problems, and self-accommodation. In addition, Oul and Tseng (2009) also found that early childhood teachers most frequently used reasoning, mood regulation, improving professional competences, searching for support and deny to overcoming job stress.

Most Taiwanese preschool teachers are female and research suggests that men and women cope with stress in different ways. According to Taylor et al. (2000), women's behavioral responses to stress are more likely to be marked by a pattern of "tend and befriend."

In conclusion, problem solving, improving professional competences, seeking social support, positive thinking



Test of difference → Correlation analysis ↔

Figure 1. Research framework.

and deny were adopted by preschool teachers in Taiwan.

METHODS

The purpose of this study was to explore the relationship between job stress and coping strategies among early childhood teachers in Central Taiwan. The research framework is shown in Figure 1.

To achieve the goals of the current study, the following issues are examined: (1) current job stress and coping strategies among early childhood teachers, (2) the effect of different demographic variables on job stress and coping strategies, and (3) the relationship between job stress and coping strategies among early childhood teachers.

Development of instruments

Inventory of job stress factors

This inventory was designed by the author for the purpose of the present study. It includes a literature review and interview questions for early childhood teachers, and it assesses factors that relate to job stress in early childhood teachers. The inventory consists of 20 items, including stress from lack of teaching autonomy (for example, needing more status and respect, lacking opportunities for improvement, making decisions, there is too little flexibility in my working arrangements), work-related stressors (having to do more than one thing at a time, my working hours are excessive,

I have to teach too many pupils), low salary, professional distress (do you feel in control of your job? We do not receive appropriate training in this school), and poor communication (do you get on well with your pupils, colleagues and principals). Participants are asked to use a five-point scale to rate how stressful they perceive each task to be (1 = *I fully disagree* and 5 = *I fully agree*).

Inventory of coping strategies factors

This inventory was also designed by the author. It consists of 22 coping strategies used by early childhood teachers to deal with job stress, including problem solving (for example, I get motivation to work hard, since I am made to feel responsible for the organization; use of self-management skills such as preparation, planning and organizational skills), improving professional competences (to participate in in-service education and redesign of teaching programs), seeking social support (communication with staff and getting feedback; My superiors understand my personal problems with sympathy), positive thinking (assure yourself things get better) and denial (postponing certain tasks; do not think about it). Participants are asked to rate the coping strategies that they use (1 = *I never use this strategy* and 5 = *I always use this strategy*).

Procedure

After a draft of the questionnaire was compiled, 10 experts and 30 early childhood teachers assessed the appropriateness of each item.

Table 1. Factor analysis of the stress scale.

Subscale	Categories of factors	Explained variance (%)	Cumulative explained variance (%)	Cronbach's α of each category	Cronbach's α of subscale
Job stress	Lack of teaching autonomy	19.18	19.18	.89	.92
	Worked-related stressors	14.65	33.83	.87	
	Low salary	13.88	47.71	.83	
	Professional distress	11.53	59.24	.81	
	Poor communication	11.40	70.64	.81	

Table 2. Factor analysis of the coping strategies scale.

Subscale	Categories of factors	Explained variance (%)	Cumulative explained variance (%)	Cronbach's α of each category	Cronbach's α of subscale
Coping strategies	Problem-solving	18.03	18.03	.89	.85
	Improving professional competences	16.93	34.95	.89	
	Seeking social support	12.90	47.85	.81	
	Positive thinking	11.92	59.76	.85	
	Denial	10.06	69.82	.79	

A pretest of the questionnaire was administered in April of 2010. Of the 150 copies distributed, 148 were returned (99%), and 145 valid responses were obtained (98%).

Validity analysis

A t-test was conducted on the highest scoring group (the top 27%) and the lowest scoring group (the bottom 27%), and the critical value (CR; t-value) of each item was derived. Items with a CR of less than 3.0 and with a correlation coefficient (r-value) of less than .30 were deleted. A Kaiser-Meyer-Olkin (KMO) value of greater than .70 was used to test whether or not the factors were suitable. The KMO values of the job stress scale and the coping strategies scale were .90 and .88, respectively. These factors reached significance levels using Bartlett's test; hence, they were suitable for further factor analysis. Principal axis factoring and a varimax solution were used to maximize interpretation after comparing the results from various other methods of factor analysis and factor solutions. Results of the factor analysis indicated that all of the job stress and coping strategies scale categories had good explanatory power (Tables 1 and 2).

Reliability analysis

As shown in Tables 1 and 2, the Cronbach's α of the job stress and the coping strategies scales were .92 and .85, respectively. Both values were \geq .85, indicating that both scales had good reliability. The reliability values of the categories of the two subscales all ranged between .79 and .89. Thus, the questionnaire demonstrated good reliability and was therefore suitable for use in formal surveys.

Sample

The samples for the study were early childhood teachers who

were selected through random sampling technique. The selection cuts across the classes in the 40 Central Taiwan preschools and also rural and urban areas in terms of school location. Anonymous questionnaires were distributed to 330 early childhood teachers, and 95% (N = 314) of the questionnaires were returned and usable. There were 125 married participants (39.8%), and 189 participants (60.2%) were single, divorced, or widowed. Participants were grouped into the following three age categories: under 25 years (91 participants, 29%), 26 to 35 years (178 participants, 56.73%), and 36 to 45 years (44 participants, 14%). The following four categories were also formed in reference to the participants' years of teaching experience: fewer than 5 years (152 participants, 48.4%), 6 to 10 years (92 participants, 29.3%), 11 to 15 years (46 participants, 14.6%), and more than 16 years (24 participants, 7.6%).

RESULTS

Analysis of job stress and coping strategies among early childhood teachers

The results in Table 3 indicate that the overall mean stress score was 3.75, and scores for each stress category ranged from 2.17 to 4.11. As the table shows, lack of teaching autonomy received the highest rating. With the exception of poor communication, which had a mean of 2.17, all stress categories had means in excess of 3.00. Thus, using the five-point scale, early childhood teachers' overall stress and each category of stress were slightly above the midpoint.

Findings presented in Table 4 reveal that the mean score for early childhood teacher coping strategies was 2.51, and scores for individual categories of coping strategies were lower the midlevel of 3.00 (except for the

Table 3. Analysis of overall job stress for each category.

Category	Number of items	Mean	SD
Lack of teaching autonomy	6	4.11	0.58
Worked-related stressors	5	4.10	0.66
Low salary	4	3.74	0.76
Professional distress	4	3.99	0.64
Poor communication	3	2.17	0.88
Overall job stress	22	3.75	0.40

Table 4. Analysis of overall coping strategies for each category.

Category	Number of items	Mean	SD
Problem-solving	6	2.48	0.99
Improving professional competences	4	2.22	1.01
Seeking social support	4	3.27	1.03
Positive thinking	3	1.87	0.70
Denial	3	1.97	0.86
Overall coping strategies	20	2.51	0.75

category of seeking social support, which had a mean of 3.27). On a five-point scale, early childhood teachers' overall coping strategies were slightly below the midpoint. Seeking social support received the highest rating, followed by problem solving, improving professional competences, denial and positive thinking.

The effects of demographic variables on job stress and coping strategies

The demographic variables analyzed in this study included marital status, age, and years of teaching experience. The effects of each variable were analyzed using *t*-tests and one-way ANOVAs.

Table 5 presents the mean scores on each measure for single and married teachers; the *t*-values associated with the differences in scores are also listed. Results reveal that the mean scores for single teachers in the categories of lack of teaching autonomy, work-related stressors, poor communication and overall job stress were higher than those of married teachers. Analyses of age categories revealed that those younger than 25 years felt the most stress due to lack of teaching autonomy, work-related stressors and overall job stress.

Analyses of years of experience as an early childhood teacher indicate that those with fewer than 5 years of experience experienced significantly more stress than the other groups in the categories of lack of teaching autonomy, work-related stressors, poor communication and overall job stress.

However, results in Table 6 reveal that married teachers' scores in the categories of problem solving, positive thinking and overall coping strategies were higher than

those of single teachers. In terms of age, it was found that no significantly different mean scores were obtained on the coping strategies scale.

Analyses of the number years of teaching experience revealed that those with fewer than 5 years of experience scored higher in using denial as a coping strategy in comparison to those who had been teaching for more than 16 years.

Analysis of the relationship between job stress and coping strategies

Table 7 presents the results for product-moment correlations between job stress and coping strategies. Each job stress category was negatively and significantly associated with each coping strategies category, with the exception of low salary with problem solving, improving professional competences and denial coping strategies. The denial coping was found positively related with stresses. The results in relation to the effects of problem solving, improving professional competences, seeking social support, positive thinking were effective in reducing adverse effects of job stress. Finding also revealed the person with high denial coping also observed to with high job stress.

DISCUSSION

The results of this study suggest that early childhood teachers believe their job-related stress derives primarily from a lack of teaching autonomy and other worked-related stressors. These findings are consistent with previous

Table 5. The Effects of different demographic variables on job stress.

Category	Lack of teaching autonomy			Work-related stressors			Low salary			Professional distress			Poor communication			Overall job stress		
	M	SD	t	M	SD	t	M	SD	t	M	SD	t	M	SD	t	M	SD	t
Marital status																		
single	25.21	3.31	2.27*	21.32	3.38	3.90***	15.60	3.52	0.45	16.26	2.73	1.81	6.87	2.76	3.12**	83.81	9.51	2.06*
married	24.31	3.51		19.88	3.08		14.90	2.72		15.74	2.56		5.94	2.34		81.71	2.30	
Age	M	SD	F	M	SD	F	M	SD	F	M	SD	F	M	SD	F	M	SD	F
(1) younger than 25 years	26.32	3.07	6.49**	21.70	2.86	5.42**	15.14	3.59	2.95	16.45	2.46	1.37	6.68	2.62	0.49	85.82	8.87	4.65**
		(1>3, 1>2)			(1>3)													(1>3)
(2) 26–35 years	24.54	3.59		20.51	3.26		15.26	3.02		15.78	2.59		6.51	2.63		82.59	8.83	
(3) 36–45 years	24.12	3.16		19.76	3.34		14.32	2.81		16.04	2.40		6.20	2.70		80.92	8.12	
Years of teaching experience	M	SD	F	M	SD	F	M	SD	F	M	SD	F	M	SD	F	M	SD	F
(1) fewer than 5 years	25.92	3.14	5.26***	22.0	2.57	5.37***	15.75	3.05	3.96**	16.88	2.66	3.31**	7.03	2.74	4.01**	86.41	8.43	0.81***
		(1>3)			(1>4)			(n. s.)			(n. s.)			(1>2)			(1>4, 1>3)	
(2) 6–10 years	25.65	4.25		21.13	2.68		15.59	3.21		16.61	2.28		6.05	2.46		85.04	9.50	
(3) 11–15 years	25.08	3.28		20.80	3.45		15.45	2.44		16.11	2.54		6.07	2.39		83.49	8.68	
(4) more than 16 years	23.93	3.19		19.77	3.29		14.37	3.04		15.51	2.50		5.79	2.52		80.61	8.11	

* $p < .05$ ** $p < .01$ *** $p < .001$

investigations (Chen, 2003; Hsieh, 2008; Oul and Tseng, 2009), which found that early childhood teachers must manage lesson plans, creativity, intellectual activity, physical activity, basic needs and student evaluations. Moreover, Taiwanese parents greatly emphasize their children's acquisition of academic skills and put even more pressure on teachers by demanding that they teach everything covered in the textbooks. If the private sector is to survive in the preschool market, their providers will need to conform to parental preferences. Consequently, parental beliefs can affect the delivery of preschool education (Vrontis et al., 2007). Teachers must follow parents'

expectations and use textbooks as the basis for teaching. Therefore, they have limited autonomy in deciding what should be taught. Given these demands and restrictions, teachers feel tremendous pressure from parents and colleagues.

Groups of teachers that experience the most stress are those who are single, 25 or younger and with fewer than five years of teaching experience. Newer teachers encounter many problems, including relationships with others, teaching skills, classroom management and parent education. As a result, they require help from more experienced teachers.

At the same time, the current study also reveals

that early childhood teachers in Taiwan typically seek social support and employ problem-solving strategies to cope with job stress. These findings are consistent with previous investigations suggesting that preschool teachers ask for help, attempt to solve problems and search for support to overcome job stress (Chen, 2003; Oul and Tseng, 2009). In addition, social support plays a role in positive coping with stress (Linley and Joseph, 2004; Pakenham et al., 2004), and active and adaptive coping strategies are associated with higher levels of social support (Devonport and Lane, 2006). Generally speaking, women's responses to stress are characterized by patterns

Table 6. The effects of different demographic variables on coping strategies.

Category	Problem-solving			Improving professional competences			Seeking social support			Positive thinking			Denial			Overall coping strategies			
	M	SD	t	M	SD	t	M	SD	t	M	SD	t	M	SD	t	M	SD	t	
Marital status																			
	single	13.37	6.13	-3.79***	8.81	3.93	0.19	12.75	3.88	1.16	6.70	2.74	-4.17***	5.38	2.69	1.74	47.22	14.15	-2.93**
married	15.90	5.56		8.89	4.21		13.30	4.42		8.02	2.73		6.10	2.39		52.22	15.76		
Age																			
	(1) younger than 25 years	15.70	5.24	2.39	9.09	3.89	1.11	13.45	4.04	0.55	7.95	2.94	2.13	5.92	2.76	0.48	52.11	14.89	1.99
	(2) 26–35 years	14.89	6.09		8.97	3.99		12.98	4.19		7.42	2.69		5.97	2.50		50.22	14.81	
	(3) 36–45 years	13.34	6.32		8.05	4.46		12.77	3.93		6.93	2.93		5.55	2.60		46.64	15.67	
	Years of teaching experience																		
(1) fewer than 5 years	13.00	6.79	2.82*	8.71	4.81	3.49*	12.50	3.79	0.56	6.42	2.75	3.72*	6.77	1.89	4.2**	45.13	14.82	3.76*	
		(n.s.)			(4>1)						(n.s.)			(1>4)					
(2) 6–10 years	13.46	6.13		7.17	2.51		12.54	4.03		6.74	2.92		5.63	2.29		45.84	15.30		
(3) 11–15 years	14.76	5.25		8.96	4.43		13.17	5.11		7.41	2.60		5.67	2.59		49.67	13.02		
(4) more than 16 years	15.81	5.71		9.34	3.93		13.28	4.31		7.95	2.65		4.50	2.67		52.70	15.85		

*p<.05 **p<.01 ***p<.001.

Table 7. Product-moment correlations between stress and coping strategies.

Categories of factors	Lack of teaching autonomy	Work-related stressors	Low salary	Professional distress	Poor communication
Problem-solving	-.13*	-.21***	-.08	-.13*	-.14*
Improve professional competences	-.18***	-.15**	-.10	-.21***	-.26***
Seeking social support	-.24***	-.22***	-.12*	-.18**	-.16**
Positive thinking	-.25***	-.24***	-.18***	-.22***	-.28***
Denial	.78**	.62***	.40***	.54***	.72***

*p<.05 **p<.01 ***p<.001.

of caring for offspring under stressful circumstances, joining social groups to reduce vulnerability, and contributing to the development of (particularly female) social groupings to exchange resources

and responsibilities (Taylor et al., 2000).

In some instances, newer teachers are unable to cope with job stressors. The results of the current study suggest that younger teachers adopt denial

as a coping strategy when faced with such stressors. Married and experienced teachers tend to adopt positive strategies (for example, problem-solving, improving professional

competences and positive thinking) to deal with job stress.

CONCLUSIONS AND RECOMMENDATIONS

The results of this study suggest that early childhood education teachers experience mild to slightly high levels of job-related stress. Of the five categories of job stress, lack of teaching autonomy and work-related stressors were found to be the greatest sources of pressure. It can therefore be argued that the Taiwanese government and education authorities must develop policies to solve the problem of teacher stress. For instance, they might encourage teachers to attend in-service trainings and reduce working hours of early childhood education teachers.

Teacher in-service education is the best way to improve professional competences. In-service education is to encourage preschool teachers to have a continuous growth in child care, nurturing and teaching. It refers to a series of courses, programs and activities designed for teachers to improve the quality of their professional child care, nurturing and teaching. Through in-service education, teachers can engage in self-examination, learn new child care skills, gain the respect and confidence of parents and learn from other teachers.

In Taiwan, most of early childhood education institutions are privately founded and private preschool teachers average 10.5 h work a day with heavy workload. The government must develop policies to reduce working hours to 40 h per week.

In sum, a decrease in preschool teachers' work-related stressors was seen to be the most effective action that could be taken by preschools or the government to reduce teacher stress. The government in Taiwan will need to take action to address this if teacher stress is to be reduced.

REFERENCES

- Bolger N, Amarel D (2007). Effects of social support visibility on adjustment to stress: Experimental evidence. *J. Pers. Soc. Psychol.* 92:458-475.
- Brandtstadter J (1989). Personal self-regulation of development: Cross-sequential analyses of development-related control beliefs and emotions. *Dev. Psychol.* 25:96-108.
- Chen KT (2003). Research on the preschool teachers' perceived problems and coping strategy. *J. Child Care* 1:185-213.
- DeLongis A, Holtzman S (2005). Coping in context: The role of stress, social support, and personality in coping. *J. Pers.* 73:1-24.
- Devonport TJ, Lane AM (2006). Relationships between self-efficacy, coping and student retention. *Soc. Behav. Pers.* 34:127-138.
- Folkman SY, Lazarus RS (1980). An analysis of coping in a middle-aged community sample. *J. Health Soc. Behav.* 21:219-239.
- Hsieh CY (2008). Parental choice of preschool in Taiwan (Doctoral dissertation). Retrieved December 1, 2011, from http://opus.bath.ac.uk/12267/1/Hsieh_PHD.pdf
- Kilgallon P, Maloney C, Lock G (2008). Early childhood teachers' sustainment in the classroom. *Aust. J. Teach. Educ.* 33(2):41-54.
- Kyriacou C (2001). Teacher stress: Directions for future research. *Educ. Rev.* 53(1):27-35.
- Kyriacou C, Sutcliffe J (1978). A model of teacher stress. *Educ. Stud.* 4:1-6.
- Lazarus RS, Folkman S (1986). Cognitive theories of stress and the issue of circularity. In: Appley MH, Trumbull R (eds) *Dynamics of stress. Physiological, psychological, and social perspectives*, New York, Plenum. pp. 63-80.
- Linley P A, Joseph S (2004). Positive change following trauma and adversity: A review. *J. Trauma. Stress* 17:11-21.
- Ministry of Education (MOE), Taiwan (2011). Early childhood education law. Retrieved October 12, 2011, from http://www.edu.tw/secretary/content.aspx?site_content_sn=21121
- Oul HM, Tseng YF (2009). A study on the relationship between occupational stress and coping strategies of preschool teachers. *Early Child. Educ. Res.* 1:141-178.
- Pakenham KI, Bursnall S (2006). Relations between social support, appraisal and coping and both positive and negative outcomes for children of a parent with multiple sclerosis and comparisons with children of healthy parents. *Clin. Rehabil.* 20:709-723.
- Pakenham KI, Sofronoff K, Samios C (2004). Finding meaning in parenting a child with Asperger syndrome: Correlates of making sense and benefit finding. *Res. Dev. Disabil.* 25:245-264.
- Sancini A, Tomei F, Schifano MP, Di Giorgio V, Caciari T, Fiaschetti M, Tomei G (2010). Stress characteristics in different work conditions: Is it possible to identify specificity of risk factors by the questionnaire method? *Eur. J. Inflamm.* 8(2):117-123.
- Shen Y (2009). Relationships between self-efficacy, social support and stress coping strategies in Chinese primary and secondary school teachers. *Stress Health* 25(2):129-138.
- Taylor SE, Kemeny ME, Reed GM, Bower JE, Gruenewald TL (2000). Psychological resources, positive illusions, and health. *Am. Psychol.* 55:99-109.
- Vrontis D, Thrassou A, Melanthiou Y (2007). A contemporary higher education student choice model for developed countries. *J. Bus. Res.* 60:979-989.
- Wong KS, Cheuk WH, Rosen S (2007). Coping style, stress preparation, and depersonalization in beginning kindergarten teachers. *J. Res. Child. Educ.* 22(2):37-50.
- Wu YL (2011). Taiwanese Preschool Teacher Education Students' Attributions for Studying, Occupational Knowledge, and Initial Teaching Commitment. *World J. Educ.* 1(1):15-27.