

The Relationship between Job Stress Risk Factors and Workplace Well-Being with the Moderating Effects of Job Burnout: A Study of Substitute Educators for Early Childhood Education in Taiwan

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Abstract

Nowadays, the employees' well-being has been an increasingly relevant and necessary consideration in the workplace. However, little attention has been paid to the well-being of substitute educators in preschool. Working in early childhood education is stressful, and certain types of stress negatively affect physical and mental health. The participants in this study are substitute educators for early education in Taiwan. The substitute educators of preschools in the working environment are not stable and peaceful. In addition to engaging in the same teaching programs as the formal teachers, substitute teachers have to work for additional administrative assignments in schools. Furthermore, they were often viewed as the marginal role in the workplace, enduring discrimination from the unfriendly organization. Their working environment is full of pressure, contradictions, and conflicts. Substitute teachers often endure negative emotions and need to suppress their true feelings. Thus, the aim of this research is to examine the relationship among preschool substitute teachers' well-being (Y), job stress risk factors (X), and burnout (Mo). Data was collected from a survey of 102 substitute educators at both public and private preschools in Taiwan. Among the six stress risk factors, good control, managerial support, colleague support, roles, and change were positively related to well-being, while the other two factors, demand and unfriendly relationship have a negative impact on workplace well-being. In addition, job burnout has a significant moderating effect on the relationship between job stress risk factor and well-being. Suggestions are provided for substitute educators' well-being improvement.

Keywords: job stress risk factors, workplace well-being, job burnout

Introduction

Background

Nowadays, early learning for the development of social skills is important because it helps form the basis of life and contributes to the psychological and academic development of children (McClelland & Morrison, 2003). UK Essays (2015) published an essay which indicated that in the stage of early childhood, brain plays a role of absorbing stimulation from the environment and learning accordingly. Hence, adapting and reacting from the environment is one of the early preparation for child education. Preschool children see and act correspondently from social, emotional, cognitive, gross and motor skills in different environments. Those signals make preschoolers willing to learn more by getting close to new things. Recognizing the importance of early childhood education and its impact on personal life or children's social development is crucial (Lynch & Simpson, 2010).

In the actual education scene of the preschool, the formal teachers often have to request a long or short leave of absence due to illness, personal affairs, marriage, parturition, serves in the army, attend a meeting, participate in a workshop, advanced studies and other factors. It is necessary to arrange substitute teachers to replace the formal teachers of the leave and take over their duties for the time being. However, although substitute teacher and formal teacher are both teachers, substitute teachers do not receive the same respect as the formal teachers from the social community. Substitute teachers in schools are the relatively weak group but they take an indispensable part of the education environment. They are like the fire-fighting team in the educational sector, always ready to replace the vacant leave of the teacher's position, complete the school's mandate and contribute to education.

Purpose of the Research

At present, the situation of low birth rate in Taiwan is becoming more and more serious, and the government's financial constraints are seriously affecting the employment of teachers which lead to the number of substitute teachers keep rising. In other words, the government control plays an important role on the supply and demand of teachers (Hendrick, 2011). The public kindergarten teachers in this environmental context, they have to experience recruitment and assessment of preschool teachers every year, and interact or get along with different children, teachers, other colleagues and parents, ultimately brought about negative emotions.

The substitute educators of preschools are extremely challenging in the working environment. In addition to engage in the same teaching as the formal teacher,

substitute teachers have to work for additional administrative assignments in the school. This kind of situation can be described as equal pay for multiple works. In addition, they were often considered as the marginal role in the workplace, enduring discrimination from the organization and outsiders. Furthermore, because of the perception of the image of teachers in the society, the teachers must always suppress their true feelings. Whether it is real or intangible payback, the working environment presents so much pressure, contradictions, conflicts, substitute teachers must endure a lot of negative emotion. Thus, the aim of this research project is to examine the relationship among preschool substitute teachers' well-being, job stress risk factors, and burnout.

Research Questions

1. Is there any significant relationship between job stress risk factors and well-being?
2. Does burnout have a significant moderating effect on the relationship between job stress risk factors and well-being?

Literature Review

Workplace Well-Being

In the academic research journals, the workplace well-being gradually becomes a common topic (Cooper & Marshall, 1978; Danna & Griffin, 1999; Smith, Kaminstein & Makadok, 1995; Warr, 1990). In recent years, changes in the working environment, staff pressure on employees often affect the performance of individuals, therefore, the research topic of well-being increased significantly. Some scholars believe that the employees' well-being in the workplace refers to psychological well-being, including emotional happiness, job satisfaction, inspiration, burnout and anxiety and other factors (Daniels, 2000; Holman, 2002; Warr, 1994). Researchers who have worked hard in the field of workplace well-being in recent years have gradually found that only when employees are happy at work can lead the company to the higher competitiveness. The constructing of well-being has become a key issue in helping companies improve their internal staff competitiveness.

Researchers have conducted extensive research on teachers' well-being and organizational and social stress issues such as classroom management issues, management effort, and lack of managerial and team support (Borg & Riding, 1991; Burke & Greenglass, 1995; Greenglass et al., 1997; Kokkinos, 2007; Smith & Bourke, 1992).

Based on the above discussion, the workplace well-being of teachers in this study refers to the psychological satisfaction and the experience of pre-school educators that show their feelings of happiness in the kindergarten when they interact with chairman, director, colleagues, parents and children.

Stress Risk Factors

Work-related stress describes workers who are aware of their work requirements beyond their abilities and their physical, psychological and emotional responses (such as time, instructions and support) to do the job. It happens when they are aware that they cannot cope with the important situation they are dealing with. According to a number of factors, a worker's reaction to work stress may be positive or negative for worker well-being. In the vast majority of cases, people adapt to stress and are able to continue to perform their normal job responsibilities. Although the stress itself is not a disease, it may lead to poor physical and mental health if it becomes excessive and lasting (Workplace Health and Safety Queensland, 2014).

In 2004, the UK Health and Safety Executive (HSE) proposed six key work-related stressors in the management standards' approach to work-related stress (Mackay et al., 2004). Workplace Health and Safety Queensland (2014) published an article that discusses the overview of job stress risk factors. The researchers sorted out the overview as follows:

Demands

Employees are able to cope with the demands of their jobs. While workers need challenging tasks to maintain their interest and motivation, and to develop new skills, it is important that demands do not exceed their ability to cope.

Control

Employees indicate that they are able to have a say about the way they do their work. If the job demands are high, the support from colleagues or supervisors is low, it will cause a low level of job control and may increase the likelihood of employee pressure.

Support

The colleagues and supervisors had sufficient information and support. The support provided by supervisors and colleagues can ease the pressure response that people may face in terms of job demands and think they cannot control them.

Relationships

Employees pointed out they are not subjected to unacceptable behavior, such as bullying in the workplace. The relationship with the boss, peers and subordinates can have a positive or negative impact on the worker's feeling. No matter where the team works together, there may be some conflicts will bring about now and then.

Role

Employees are aware of the roles and responsibilities of employees. A character conflict occurs when a worker is required to perform a role that violates his or her personal values or whose job is incompatible.

Change

Employees indicate that the organization organizes them when they are constantly experiencing change. Change is an unavoidable aspect of organizational life and is essential to the future. However, poor management of the change process may lead to anxieties and uncertainty about the workforce or the employment situation.

Job Burnout

Many domestic and foreign scholars have participated in the study of burnout. Kristensen and some scholars of National Institute of Occupational Health in Danish have developed Copenhagen Burn Inventory (CBI), which is currently the most commonly used measurement of job burnout (Kristensen et al., 2005). In this study, burnout was considered to be physical and psychological fatigue and exhaustion. The questionnaire was designed to measure three aspects of personal burnout, work-related burnout and client-related burnout, which is used in different areas.

Karakelle & Canpolat (2008) indicated that teachers with high burnout symptoms often strive to produce a variety of problem-solving methods that have a sentience of their careers that they cannot control them and experience burnout. In the field of early childhood education, job burnout is more likely to occur because the views and expectations of substitute teachers are beyond the original working characteristics of the current environment, coupled with low wages and social status.

Job burnout in this study refers to the fact that substitute educators are unable to load work stress and frustration because of heavy workload, which leads to personal physical and mental fatigue, and gradually lose the enthusiasm and motivation of teaching. Ultimately, substitute teachers have the intention to leave the job.

Job Stress Risk Factor and Well-Being

Occupational stress has a great impact on psychological well-being and is seriously taking into account the health consequences of this stress (Fletcher, 1991). Well-being refers to an individual's overall evaluation of one's quality of life (Brinkman, 2002); in the literature of stress, researchers have found that work-related stress to be negatively correlated with well-being (Fortes-Ferreira et al., 2006; Schabracq et al., 2003). Hence, reducing the negative impact of job stress has become an important issue.

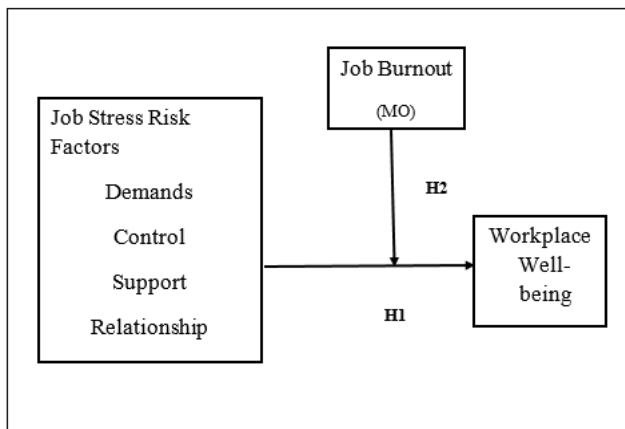
In early childhood education, the working setting is characterized by unusual and long working hours, working pressure, and work overload. When a female employee faces this tense situation, she may be able to become nervous and worried, which in turn negative emotions that lead to dissatisfaction and ultimately reduce the well-being.

Research Method

Research Framework

According to the research hypothesis, this study examined the relationship between job stress risk factors (X) and well-being (Y). The moderating effect of job burnout (M) on the correlation between job stress factors and well-being was analyzed as well.

The variable *Job Stress Risk Factors* includes six stressors, namely demands, control, managers' and peer support, change, relationships, and roles. The research framework of this study is shown in Figure. 3.1.



Research Hypothesis

Hypothesis 1. The stress risk factor of substitute educators has a significant effect on their well-being.

Hypothesis 1-1. Good control is positively related to workplace well-being.

Hypothesis 1-2. Managerial support is positively related to workplace well-being.

Hypothesis 1-3. Colleague support is positively related to workplace well-being.

Hypothesis 1-4. The Role is positively related to workplace well-being.

Hypothesis 1-5. Change is positively related to workplace well-being.

Hypothesis 1-6. Demand has a negative impact on workplace well-being.

Hypothesis 1-7. The unfriendly relationship has a negative impact on workplace well-being.

Hypothesis 2. Burnout has a significant moderating effect on the relationship between job stress risk factor and workplace well-being.

Sampling and Data Collection

The research sample selected for this study are 102 full-time preschool substitute educators in Taiwan. " Substitute educators " in this study refers to two different kinds of positions in preschool, as substitute teachers and substitute educare givers. Researchers have chosen educators from regions all over Taiwan with different characteristics and background as participants in this study. This study was conducted by an online questionnaire. A convenient sampling technique was adopted for data collection. Researchers will distribute questionnaires to substitute educators through the researcher's personal network. Researchers send e-mails and post the online surveys to online communities and social networking websites such as Facebook and Line corporation for collecting information. The researchers also conducted snowball sampling to ask relatives and friends to help introduce other respondents who are currently working in kindergartens. In addition, respondents also provided assistance in forwarding the questionnaires. All questionnaires and responses are kept confidential and anonymous.

Research Instrument

The questionnaire is divided into four parts. The instrument consists of 3 variables with a total amount 88 questions. In addition to, there are 7 questions for demographics. The researchers decided to use the 5 point Likert scale for these 3 variables from part 1 to part 3 of the finished questionnaire to meet pertinent research demands. The respondents are asked to rate each item on the questionnaires from 1 to 5 (strongly agree to strongly disagree).

Job stress risk factor. The researchers used Health and Safety Executive Management Standards Indicator Tool to measure the effect, in order to understand whether employees understand their work in the organization, and whether they have working pressure. The index tool shows the acceptable reliability.

Job burnout. The Copenhagen Burnout Inventory (CBI), is a National Institute of Occupational Health (2005) questionnaire used in the study. The original scale consisted of 19 items and three dimensions, namely personal burnout, work-related burnout and client-related burnout. The original scale through 5 point Likert scale to measure the effect, and Cronbach value for full scale is 0.85-0.87. This study also used this scale, but only use sub dimensions which associated with the work-related burnout.

Well-being. A Previous study (Parker and Hyett, 2011) reported and organized a new workplace well-being questionnaire (WWQ), pointed out that these 4 factors constitute a lot of variation among 31 items (Hyett & Parker, 2015). This study also utilized 5 point Likert scale to gauge the preschool teachers' workplace well-being.

Findings and Discussion

Pearson Correlation Analysis

In this study, a correlation analysis was performed to examine the relationship between all variables. Table 4.1 presents correlations among the independent variables of all the dimensions of job stress risk factors, the dependent variable of workplace well-being and the moderating variable of burnout.

In the findings it can be seen that as stated in Hypothesis 1, for the independent variables, job stress risk factors ($r = .206$, $p < .05$), control ($r = .289$, $p < .01$), managerial support ($r = .758$, $p < .01$), colleague support ($r = .274$, $p < .01$), roles ($r = .198$, $p < .05$) and change ($r = .579$, $p < .01$) have significant and positive relationship with workplace well-being. Hence, this gives evidence that in most cases, people adapt to stressful situations and are capable of continuing to carry out their normal work responsibilities. However, demands ($r = -.464$, $p < .01$) and relationship ($r = -.250$, $p < .05$) have negative impact on workplace well-being. As Hypothesis 2, for the moderating variables, burnout ($r = -.446$, $p < .01$) also have significant and negative relationship with the dependent variable. People respond to work-related stressors in different ways.

According to the statistical result on the relationship between job stress risk factors and workplace well-being, it showed that a substitute educator's reaction to work-related stressors will be positive or negative for teacher workplace well-being.

Table 4.1

Correlations for Job Stress Risk Factors, Burnout and Well-being

Variables	1	2	3	4	5	6	7	8	9	10	11
1 Well-being	-										
2 Burnout	.446**	-									
3 JS_D	.464**	.779**	-								
4 JS_Control	.289**	.090	.066	-							
5 JS_MS	.758**	.387**	.343**	.411**	-						
6 JS_CS	.274**	.239*	.118	.448**	.479**	-					
7 JS_Re	.250*	.556**	.622**	.271**	.156	.165	-				
8 JS_Role	.198*	.069	.083	.480**	.395**	.456**	.064	-			
9 JS_Change	.579**	.382**	.438**	.064	.522**	.037	.388**	.049	-		
10 JS	.206*	.363**	.516**	.732**	.471**	.470**	.538**	.623**	.017	-	
11 M	.173	.657**	.618**	.180	.163	.138	.516**	.064	.168	.422**	-

N=102

* $p < .05$, ** $p < .01$

Note: JS=Job Stress Risk factors, D=Demands, MS=Managerial Support, CS=Colleague Support, Re=Relationships

Linear Regression Analysis

According to correlation analysis, H1 was accepted, which indicated job stress risk factors positively related to workplace well-being. The researcher applied regression analysis to explore the relationship between dimensions of job stress risk factors and workplace well-being again in this section. Moreover, hierarchical regression was employed to examine the moderating effect of the moderators, burnout.

Dimensions of Job Stress Risk Factors

From Table 4.2, β value of control, managerial support, colleague support, role and change were positive numbers and all p values were less than 0.05, which pointed out that those five dimensions all have the positive and significant effect on the workplace well-being (control $\beta = 0.289$, $p < 0.05$; managerial support $\beta = 0.758$, $p < 0.001$; colleague support $\beta = 0.274$, $p < 0.01$; role $\beta = 0.198$, $p < 0.05$; change $\beta = 0.579$, $p < 0.001$). However, β value of demands and relationship were negatively related to workplace well-being (demands $\beta = -0.464$, $p < 0.001$; relationship $\beta = -0.250$, $p < 0.05$). In summary, among the six stress risk factors, good control, managerial support, colleague support, roles, and change were positively related to workplace well-being, while the other two factors, demand and unfriendly relationship have a negative impact on workplace well-being. Therefore, Hypothesis 1 was accepted.

Table 4.2

Results of Regression Analysis for Job Stress Risk Factors (N=102)

	JS	Deman ds	Contr ol	Manager ial support	Colleag ue suppor t	Role	Unfriendl y Relations hip	Change
β	.206 *	- .464***	.289*	.758***	.274**	.198 *	-.250*	.579***
R ²	.042	.216	.084	.575	.075	.039	.063	.335
Adj R ²	.033	.208	.075	.571	.066	.029	.053	.329
ΔR^2	.042	.216	.084	.575	.075	.039	.063	.335
F	4.42 6*	27.507 ***	9.135 *	135.228 ***	8.112**	4.06 6*	6.695*	50.465 ***

Notes:

1. Dependent Variable: well-being
2. JS = Job stress risk factors

3. The dimensions of job stress risk factors include demands, control, managerial support, colleague support, role, relationship and change.

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

Moderating Effect of Burnout

This regression equation was conducted to examine Hypothesis 2. First of all, the researcher put the independent variable and moderator into the first step. Secondly, the interaction of two variables (independent variable x moderator) was placed into the second step. From Table 4.3, the result showed that there was a significant moderating effect of burnout ($\beta = -.223$). In other words, burnout is found to cause a weakening effect between job stress risk factors and workplace well-being. Hence, Hypothesis 2 was supported.

Table 4.3

Regression Analysis of Moderating Effect of Burnout on the Relationship between JS and Well-being (N=102)

	Model 1	Model 2
Variable	β	β
Step 1		
JS	.424***	.575***
Burnout	-.600***	-.591***
Step 2		
JS x Burnout		-.223*
R2	.355	.381
AdjR2	.342	.362
$\Delta R2$.355	.026
F	27.221***	20.069***

Notes: JS = Job stress risk factors

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

Conclusion

This study aims to explore the relationship among job stress risk factors, burnout and workplace well-being.

First, job stress risk factors are significantly related to workplace well-being. Job stress risk factors has six dimensions, including demands, control, managerial and colleague support, role, relationship and change. Based on the correlation and regression analysis in this study, among the six stress risk factors, good control,

managerial support, colleague support, roles, and change were positively related to well-being, while the other two factors, demand and unfriendly relationship have a negative impact on workplace well-being. All of the substitute educators has a certain ability to work, if their capacity is overload and the work demand is exceeded, they may experience work pressure. Besides, colleagues and supervisors can be important sources of support but they can also be potential sources of work stress. Relationships with bosses, colleagues and subordinates can have a positive or negative impact on the feelings of a teacher, and it is possible that wherever a group of people works together, conflict exists from time to time.

In other words, the results indicated that when substitute educators stay at the friendly working environment, the work pressure will reduce. Furthermore, when they understand their role, obtain the emotional support and positive feedback from the director, have a right of decision making and be respected to have a communication before and during a change process at work, their workplace well-being will increase.

Second, burnout has a significant moderating effect on the relationship between job stress risk factor and well-being. It will weaken the relationship between job stress risk factors and workplace well-being. Within the preschool educational working population, long term stress and burnout in the workplace can result in a negative overall mood, physical ill health, job dissatisfaction and reduced the workplace well-being.

Suggestions

Few domestic scholars and researchers engaged in research on the issue of substitute teachers, the quality and quantity of research are insufficient from the past and it is not a popular field of study in foreign countries. However, in this study, it is true that many related educational issues need to be addressed and resolved. First of all, the research sample can be included in the comparative analysis of substitute teachers of junior high school, elementary school and preschool. The future research can further collect the experience or process of substitute teachers in different educational stages, compares and analyze the status quo of education, emotional condition and the substitute experience, and explore whether there are different problems in different stages. Secondly, the researcher can explore the substitute teachers who has been admitted to the admission exam or who has changed their profession successfully and have the understanding of their successful experience of the coordinate and transformation process. Future research can further invite people who once were the substitute teachers with practical action, and willing to face their own career dilemma

in the past to rethink, criticize, question and change the action. Furthermore, those substitute teachers can analyze and share their opinions of their experience of coordinated and transformation to provide a large number of substitute teachers for improving the predicament and enhancing self-esteem and status as an important reference.

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