

## The Moderating Role of Personality in HRM - from the Influence of Job Stress on Job Burnout Perspective

**Yi-Hua Hsieh**

*Assistant Professor, Department of Accounting, Tamkang University, Taipei, Taiwan  
e-mail: hua@mail.tku.edu.tw*

**Mei-Ling Wang**

*Associate Professor, Department of Business Administration, Tamkang University, Taiwan  
E-mail: magwang@mail.tku.edu.tw*

**[Abstract]** This paper aimed to explore the relationship between auditors' job stress and job burnout, and the moderating role of the locus of control from a job-demand perspective. Questionnaires were collected from accounting firms in Taiwan with high workload and employee turnover. Regressions were used to examine the influences of six dimensions of job stress on three dimensions of job burnout. Hierarchical regression analysis was used to test the moderating effect of internal/external locus of control between job stress and job burnout. Results show that auditors' job stress positively influences job burnout; internal/external locus of control reveals a moderating effect between job stress and job burnout. These findings suggest that improvement of job stress and decrease of job burnout are the priorities in human resource management. Moreover, in comparison to the external locus of control, people with an internal locus of control experience lower positive influence of job stress on job burnout. These empirical findings affect the decision-making for the field of the human resource management and organizational behavior.

**[Keywords]** personality; locus of control; job stress; job burnout; human resource management

### Introduction

During the past decade, there has been a growing interest in the literature on job stress from both theoretical and empirical perspectives (Fried, 1993). The experience of stress at work has been singled out as an important area of investigation because of its potential effect on the health and performance of employees. Much research (Fernet, et al., 2010; Maslach & Jackson, 1981) indicates that these individual symptoms of stress had positive association with job burnout. Today, the current and on-going organizational downsizing hints that companies increasingly put pressure on employees to perform. Therefore, job stress and burnout is an important and inevitable issue in organizational studies at present.

There is increasing empirical evidence that personality trait affects individuals' attitudes and behaviors (Abu-Elanain, 2008; Hsu, 2011; Tasa, et al., 2011). The role of personality trait in work-related behaviors and values has received renewed interest over the past decade (Adler, 1996; Costa, 1996; Hough, 1998; Judge, et al., 1999; Salgado, 1997; Schneider, 1996; Twenge & Campbell, 2008). Personality trait refers to cognitive and behavioral patterns that show stability over time and across situations. It has been shown to be a valid predictor of behavior in work settings (Anderson, 1977). According to the viewpoint of stress interaction, the influences of stress on individuals varies because of individual personality. Therefore, the employees' personality trait is an important factor for stress management.

In international labor trend analysis of 2010 by the Council of Labor Affairs, Executive Yuan suggested that Taiwan labor's working hours were the second longest in the world (2,170 hours a year, 8.34 hours a day). According to a questionnaire survey of the Health Promotion Division, Department of Health, Taipei City Government, on employees' physical and psychological states in 2010, over 30% of the subjects worked for more than 48 hours every week, which was higher than the legal working-hour regulation. This study suggested that by recognizing influences of job stress and burnout on employees in Taiwan, as well as the moderating effect of personality traits, stress management could be performed effectively, and employees' job efficiency and physical and mental health would be also improved

thoroughly (Ganster & Schaubroeck, 1991).

Job demand refers to the degree to which an employee has to work fast and hard, has a great deal to do, and has too little time. Higher job demands can be captured as psychological stressors. The auditor in an accounting firm is considered a very stressful profession in many countries. The job is typically characterized by heavy workloads, many deadlines, and, often, excessive time pressures. Auditors are also often faced with conflicting demands. They are under pressure to produce quality work and, yet, are often under serious budget constraints to accomplish the work in less time. Other job stress may include extensive business travel and frequently changing work locations. Consequently, fairly high stress levels may be natural and unavoidable at times.

Based on the above, this study aims to explore auditors' job stress and job burnout in accounting firms in Taiwan and tries to find the moderating effect of personality traits between job stress and job burnout. This study first collected literature on job stress, job burnout, and personality trait, according to the definition of internal/external locus of control and the viewpoint of stress interaction, and reorganized the relationships to develop some hypotheses. By questionnaire survey, the study analyzed the returned data using regression analysis. Empirical data suggest that the difference of personality traits reveals a moderating effect on the relationship between job stress and job burnout. Employees with high internal locus of control are more confident about dealing with frustration and job stress, and they can effectively control their own behavior, which it will avoid job burnout. Consequently, individuals will differ in the ways they respond to an identical event depending upon individual personality. Events that are very stressful to one individual may not be stressful to another. Through these empirical data, we re-demonstrate the moderating role of personality in organization study. It is hoped that the empirical findings serves as references for the organization regarding management decisions, and, further, that employees could perform better in the workplace.

## Theoretical Background

### *Job Stress*

If job stress is not handled appropriately, low job satisfaction, poor work performance, and negative health effects may occur (Chen & Silverthorne, 2008; Hayes & Weathington, 2007). Based upon earlier stress studies, Ivancevich and Matteson (1987) developed a model and an instrument for the study of managerial and white collar stress that include role conflict, role ambiguity, quantitative overload, qualitative overload, time pressure, responsibility for others, career progress, job scope, politics, human resource development, rewards, participation, underutilization, supervisory style, and organization structure. Lee and Ashforth (1996) indicated that the job stress includes workload, work pressure, role ambiguity, conflict, and stress. Brewer and Clippard (2002) identified that job stress includes task-based and role-based factors.

Although scholars did not propose the same ideas about job stress, the covered content was similar. This study treated the accounting job as the study scope. Auditors, in recent years, besides encountering the change of related regulations, are responsible for the clients and other stakeholders. Due to public opinion and a complicated accounting environment, auditors undertake more and more pressures. According to auditors' occupational characteristics, this study adopted six dimensions of job stress organized by George and Jones (2002): Role Conflict, Role Ambiguity, Overload, Underload, Promotions and Challenging Assignments, and Economic Well-being and Job Security.

Role conflict occurs when expected behaviors or tasks are at odds with each other. Auditors should not only meet clients' demands, but should, also, follow related regulations. In addition, some auditors might be both directors and subordinates. The conflict of roles is frequent. Role ambiguity is the uncertainty that occurs when workers are not sure about what is expected of them and how they should perform their jobs. There is no complete regulation for auditors, since clients' industries, auditing time allowed, and directors' or clients' demands are different. Thus, inexperienced auditors usually do not know how to practice the job and their roles are ambiguous. Furthermore, since auditing environment changes constantly, without absorbing new information or flexibility, auditors' roles would be ambiguous.

Overload is the condition of having too many tasks to perform. Auditors, from January to May every year, due to frequent work overtime and overload, always undertake too much work. Underload is not having enough work to do. Being assigned with more difficult tasks indicates that the auditors are affirmed. On the contrary, when they are assigned simple tasks, it seems that they lack ability. Therefore, underloading results in employees' frustration and is, also, one of the stresses for auditors in accounting firms.

Promotions and challenging assignments can be a source of stress for workers who are not sure that they can perform effectively or have low self-efficacy. For auditors, after the rush season, it would include the chance for wage adjustment or promotion. If they are not satisfied, they will have stress and negative emotion. On the contrary, if their wage is adjusted or they are promoted, indicating more difficult tasks, their competency will be another issue. The above can be stress sources, as well.

Workers' economic well-being and job security are also powerful sources of stress. When job-related income is very low or threatened by layoffs and downsizing, a lack of job security, or pay cuts, the well-being of workers and their families is put in jeopardy. During rush season, most auditors work overtime. However, for the concern of merit, they usually do not report the real overtime. Their contribution does not meet the incomes where it might result in reduction of economic welfare.

### ***Job Burnout***

Job burnout is defined as a syndrome when a person is over-extended to the breaking point where the person is exhausted mentally and physically by the demands of the job (Lee & Ashforth, 1996). Researchers have found a relationship between occupations with high levels of job-related stress and negative health consequences, such as somatic diseases, exhaustion, and depression (Cieslad, Korczynska, Strelau, & Kaczmarek, 2008; Henkens & Leenders, 2010; Janssen, et al., 2010; Karasek & Theorell, 1990; Kuppens, et al., 2008; Leiter & Maslach, 1988).

Today, the most commonly accepted definition of burnout is the three-component conceptualization used by Maslach and colleagues (Maslach, 1982; Maslach & Jackson, 1981). These are emotional exhaustion, depersonalization or dehumanization, and diminished personal accomplishment. So far, empirical research concerning burnout has received little attention in the business management for non-western countries. The primary aim in this paper is to fill the research gap by examining auditors in Taiwan's accounting firms, a very high-turnover industry.

In the scale developed by Maslach (1982), the people (e.g., medical personnel, social workers, and lawyers) who help others as subjects have to spend a long time on contacting others. MBI-HSS The Maslach Burnout Inventory – Human Services Survey was developed as the tool to measure job burnout. Maslach then revised the scale and developed the scale called The Maslach Burnout Inventory – General Survey (MBI-GS, Maslach & Jackson, 1986), which was suitable for ordinary industries. MBI-GS includes three dimensions, as shown below:

1. Exhaustion: include emotional and physical burnout.
2. Cynicism: mean the indifference to jobs.
3. Professional Efficacy Decrease: reduction of expected sense of achievement or self-competency.

Since auditing is not a job requiring long-term contact with others, this study measured auditors' job burnout by MBI-GS.

### ***Personality Trait***

Personality trait refers to cognitive and behavioral patterns that show stability over time and across situations. It is reasonable to expect that personality trait influences personal values and attitudes, as most recent empirical research has demonstrated (Boone & Hendriks, 2009; Bozionelos, 2004; Kauer, et al., 2007). Locus of control is one of the personality traits which have received a lot attention in the organizational literature. Locus of control is defined as the degree to which an individual generally perceives events to be under the control of powerful others (external locus) as opposed to under his/her own control (internal locus) (Rotter, 1966). Individuals with a high internal locus of control see themselves to be in control of aspects of their workplace. Previous studies have found an internal locus of

control to be positively linked to desired job outcomes, such as, job satisfaction, organizational commitment, and job performance (Judge & Bono, 2001; Spector, 1988). Internal individuals recognize their share of responsibility in their successes and failures, whereas external individuals feel powerless and attribute what happens to them to factors over which they have no control (Aube, et al., 2007).

The role of personality trait in work-related behaviors and values has received renewed interest over the past decade (Adler, 1996; Schneider, 1996; Selart, 2005). Researchers have investigated the relationship between personality trait and job satisfaction, but few have examined the relationship among personality trait, job stress, and job burnout. Based on viewpoint of stress interaction and job demand, in the paper, besides the relationship between job stress and job burnout, we also try to focus on the moderate effect of personality trait on the job stress and burnout for auditors.

## Hypotheses Development

### *The Effect of Job Stress on Job Burnout*

Job stress is very prevalent in an achievement-oriented society and is associated with job tension, job dissatisfaction, and various physical and psychological strain symptoms (French & Caplan, 1972). Job stress is also cited as a key factor leading to burnout of employees (Day, et al., 2009; Maslach & Leiter, 1997).

Past studies have also discussed the correlation of factors between job stress and job burnout. Role conflict was noted to reduce work performance and may result in absenteeism and increased turnover. A significantly positive correlation has also been reported between role conflict and burnout (Ivancevich & Matteson, 1987; Kahn, et al., 1964; Maslach, et al., 1996; Moore, 2000). Outcomes of ambiguity's role are said to be the same as those identified as symptoms of burnout. Work overload has been determined to be positively correlated with burnout. Stress may be created if job assignments are not personally challenging (Ivancevich & Matteson, 1987; Moore, 2000). Based on the above, although the results are inconsistent, scholars' empirical studies, overall, tend to indicate that the job stresses were important variables of job burnout. These variables have been shown to be related to each other across a variety of occupations, including public service lawyers (Jackson, et al., 1987), nurses (Leiter & Maslach, 1988), teachers (Schwab & Iwanicki, 1982), and female human service professionals (Brookings, et al., 1985). In fact, auditor is a high job demand occupation, but few researchers have investigated this field in the past. This study intended to explore content of job stress and job burnout for auditor and the influence of job stress on job burnout; thus, H1 is proposed as follows.

*H1: For auditors, job stress positively influences job burnout.*

### *Moderating Effects of Locus of Control between Job Stress and Job Burnout*

In the popular emphasis on contingency theories of management, one area that has been the topic of considerable research is individual difference contingencies that moderate the relationship between characteristics of the job situation and worker responses (White, 1978). Much research focuses on the relationship between job stress and job burnout. However, there is a substantial variance in job stress-burnout relationship that remains unexplained. This is significant because it indicates that there are other individual variables and organizational conditions that facilitate or constrain the influence of job stress on burnout and influence the relationship between job stress and burnout. The theory of internal/external locus of control is originated from Rotter's (1953) social-learning theory. Internal/external locus of control is a continuous variable. A person's personality trait cannot be entirely referred to internal or external locus of control. Hence, we try to use locus of control as moderator in order to examine its impact on the relationship between job stress and job burnout.

A person's response to stress will be somewhat moderated by various individual personality characteristics (Ilies, et al., 2011). Events that are very stressful to one individual may not be stressful to another. Therefore, individuals vary in the amount of stress they can tolerate without showing signs of job-related tension (Ivancevich & Matteson, 1987). The conservation of resource theory (Hobfoll &

Freedy, 1993) postulates that burnout occurs not only when there is an actual loss in resources, but even if employees only perceive threats to their resources (Halbesleben & Buckley, 2004). Employees' perceptions of the work environment may be important to our understanding of burnout. Therefore, it is very important for managers to understand employees' various personality traits.

Many researchers (Chen & Silverthorne, 2008; Hoogh & Hartog, 2009; Kahn & Byosiene, 1992; Organ & Greene, 1974; Piedmont, 1993; Szymanski, et al., 1996) found that personality trait plays an important role in the experience of job-related distress. They argued that people with a higher internal locus of control are more likely to take initiative and show a wider set of work behaviors than are specified by the job. Spector (1988) found that an internal locus of control was positively correlated with job satisfaction, commitment, and influence at work. Taylor (1982) noted that individuals perceiving an internal locus of control tend to view themselves as having more control over and personal responsibility for the direction of their lives than do externals, who are likely to feel themselves powerless to control events. Organ and Greene (1974) found that internals not only report less role ambiguity than externals, but they also report higher levels of job satisfaction.

According to the view of stress interaction, the influences of stress on individuals vary because of individual personality traits. This suggests that individuals' unique traits can be the moderating variables between environmental characteristics and reactions and influence a person's reactions toward the stimulus. By interaction-oriented model, this study probed the effects of different personality traits between job stress and job burnout. This study treated job stress as an independent variable and regarded job burnout as a dependent variable and auditors as subjects in order to find the moderating effect of internal/external locus of control. Thus, H2 is proposed as follows.

*H2: Internal/external locus of control is a moderator between job stress and job burnout.*

## Method

### *Sample*

According to the Taiwan Auditing Association Republic of China, currently, there are 854 accounting firms. In order to lead to a more effective questionnaire survey, the subjects were contacted by phone to learn auditors' intention, and the questionnaires were mailed to the accounting firms. Stamped addressed envelopes were attached for questionnaire return. The questionnaires were distributed in October 2009, and the return was accomplished by the end of May 2010. We issued 800 and received 476 questionnaires. After eliminating 90 questionnaires with some blank responses and incomplete basic information, we acquired 386 valid questionnaires, a valid response rate of 48%. Subjects' basic information included types of accounting firms, locations of the accounting firms, auditors' gender, position, age, seniority, educational level, and marital status, with or without children, and success or failure in accounting examinations in Taiwan.

### *Measures*

**Job stress.** The concept of job stress in this study is based on George and Jones (2002) who proposed that it includes the following six dimensions: role conflict, role ambiguity, overload, underload, promotions, and challenging assignments, economic well-being and job security. The first part of survey measures the job stress of auditors. The measurement was based on a Likert 7-point scale, where 1 was "strongly disagree" and 7 was "strongly agree." The higher the scores were, the more the job stress was perceived by the participants.

**Job burnout.** The concept of job burnout in this study is based on Maslach and Jackson (1986), who proposed that it includes the following three dimensions: exhaustion, cynicism, and professional efficacy decrease. The second of survey measures job burnout of auditors. The measurement was based on a Likert 7-point scale, where 1 was "strongly disagree" and 7 was "strongly agree." The higher the scores were, the more the job burnout was perceived by the participants.

**Personality trait.** The concept of personality trait in this study is based on Spector (1988), who proposed that internal locus of control individuals recognize their share of responsibility in their successes

and failures, whereas external locus of control individuals feel powerless and attribute what happens to them to factors over which they have no control. The third part of survey measures the locus of control of auditors. There are sixteen questions modified from WLCS of Spector (1988). (The Work Locus of Control Scale) The measurement was based on a Likert 7-point scale, where 1 was “strongly disagree” and 7 was “strongly agree.” A higher score indicates that the participants are most likely to have internal locus of control and vice versa. A participant who gets a higher score indicates he/she has a high internal locus of control; that is to say, he/she has low external locus of control.

## Results

### *Descriptive Statistics*

The outcome indicates that auditors’ job stress is mainly from overload (4.23), followed by economic well-being and job security (3.82), role ambiguity (3.64), promotions and challenging assignments (3.62), role conflict (3.56), and underload (3.41). The outcome indicates that auditors’ job burnout is mainly from exhaustion (4.68), followed by cynicism (4.21), and professional efficacy decrease (3.49). This study divided personality trait into internal or external locus of control. The third part of the survey measures the locus of control of auditors. There are sixteen questions modified from WLCS of Spector (1988). A higher score indicates that the participants are most likely to have a high internal locus of control. Overall, the sample mean was 4.85. It suggests that most of participants had internal locus of control. The descriptive statistics are shown in Table 1.

Table 1  
*Descriptive Statistics of Variables*

Variable	M	SD
Role Conflict	3.56	1.08
Role ambiguity	3.64	0.78
Overload	4.23	0.96
Underload	3.41	0.76
Promotions and challenging assignments	3.62	0.85
Economic well-being and job security	3.82	0.93
Exhaustion	4.68	1.16
Cynicism	4.21	1.11
Professional efficacy decrease	3.49	0.76
Locus of control	4.85	0.90

N = 386; Likert 7

Table 2 summarizes the correlation analysis of job stress, job burnout, and internal/external locus of control. There was significant, positive correlation between job stress and job burnout (0.74\*\*\*), and there was significant, negative correlation between job stress and personality trait (-0.38\*\*\*). It indicates that the lower the scores of locus of control, the higher the job stress would be. In other words, the participants with higher internal locus of control had weaker perception of job stress; the participants with higher external locus of control had stronger perceptions of job stress. The significant negative correlation between job burnout and personality trait (-0.28\*\*\*), indicates that a lower internal locus of control leads to higher job burnout. In other words, people with high external locus of control tend to have stronger perceptions of job burnout.

Table 2  
Results of Correlation Coefficients Analysis

	Job stress	Job burnout	Locus of control
Job stress	1		
Job burnout	0.74***	1	
Locus of control	-0.38***	-0.28***	1

\*p<0.1 \*\*p<0.05 \*\*\*p<0.01

Correlation analysis on six dimensions of job stress and three dimensions of job burnout was conducted, as shown in Table 3.

Table 3  
Results of Correlation Coefficients Analysis

Variable	1	2	3	4	5	6	7	8	9	10
1. Role conflict	1									
2. Role ambiguity	0.42***	1								
3. Overload	0.43***	0.44***	1							
4. Underload	0.36***	0.43***	0.18**	1						
5. Promotions and challenging assignments	0.32***	0.62***	0.35***	0.45***	1					
6. Economic well-being and job security	0.33***	0.33***	0.56***	0.27***	0.28***	1				
7. Exhaustion	0.46***	0.40***	0.68***	0.26***	0.37***	0.50***	1			
8. Cynicism	0.51***	0.43***	0.54***	0.43***	0.41***	0.49***	0.79***	1		
9. Professional efficacy decrease	0.14	0.48***	0.18**	0.34***	0.56***	0.22***	0.15**	0.19***	1	
10. Locus of control	-0.08	-0.40***	-0.24***	-0.20***	-0.37***	-0.24***	-0.23***	-0.18**	-0.39***	1

\*p<0.1 \*\*p<0.05 \*\*\*p<0.01

### The Effect of Job Stress on Job Burnout

Simple regression analysis was first conducted by treating job stress as an independent variable and job burnout as a dependent variable, as shown in Table 4.

Table 4  
Simple Regression Analysis Result of Job Stress on Job Burnout

Variable	Job burnout	
	$\beta$	t
Intercept	0.38	1.27
Job stress	1.23***	15.28
$R^2$	0.55***	
Adj. $R^2$	0.55***	

\*p<0.1 \*\*p<0.05 \*\*\*p<0.01

$R^2$  was 0.55, adjusted  $R^2$  was 0.55, and D-W was 1.719, indicating that there was no self-correlation among residuals.  $\beta$  was 1.23 and  $t$  was 15.28 ( $p < 0.01$ ), indicating that there was significant and positive influences of job stress on job burnout. More job stress meant the perceived job burnout would be greater. Therefore, H1 was supported.

### ***Influences of Dimensions of Job Stress on Dimensions of Job Burnout***

In order to probe into influences of dimensions of job stress on dimensions of job burnout, this study conducted multiple regression analysis three times by treating dimensions of job stress as independent variables and dimensions of job burnout as dependent variables, as shown in Table 5.

Table 5

*Multiple Regression Analysis Result of Dimensions of Job Stress on Dimensions of Job Burnout*

Variable	<u>Exhaustion</u>		<u>Cynicism</u>		<u>Professional efficacy decrease</u>	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Intercept	0.24	0.64	-0.29	-0.80	1.31	4.68
Role conflict	0.18***	2.70	0.24***	3.69	-0.08	1.69
Role ambiguity	-0.01	-0.13	0.02	0.14	0.24***	3.01
Overload	0.61***	7.54	0.31***	3.85	-0.08	1.22
Underload	0.06	0.69	0.29***	3.20	0.08	1.14
Promotions and challenging assignments	0.12	1.34	0.13	1.43	0.37***	5.36
Economic well-being and job security	0.16**	2.06	0.22***	2.83	0.08	1.32
$R^2$	0.52***		0.49***		0.36***	
Adj. $R^2$	0.51***		0.47***		0.34***	

\* $p < 0.1$  \*\* $p < 0.05$  \*\*\* $p < 0.01$

#### *1) Influences of dimensions of job stress on exhaustion of job burnout*

According to the analytical result,  $R^2$  was 0.52, adjusted  $R^2$  was 0.51 and  $F$  was 27.82 ( $p < 0.01$ ). This suggests that overall explained variance of regression model was significant. When D-W was 1.65, there was low self-correlation among residuals. Role conflict ( $\beta$  is 0.18\*\*\*), overload ( $\beta$  is 0.61\*\*\*), and economic well-being and job security ( $\beta$  is 0.16\*\*) of job stress significantly and positively influenced exhaustion; among them, overload was the most influential.

#### *2) Influences of dimensions of job stress on cynicism of job burnout*

According to analytical result,  $R^2$  was 0.49, adjusted  $R^2$  was 0.47 and  $F$  was 19.67 ( $p < 0.01$ ). This suggested that the overall explained variance of regression model was significant. When D-W was 1.60, there was low self-correlation among residuals. Role conflict ( $\beta$  is 0.24\*\*\*), overload ( $\beta$  is 0.31\*\*\*), underload ( $\beta$  is 0.29\*\*\*), and economic well-being and job security ( $\beta$  is 0.22\*\*\*) of job stress significantly and positively influenced cynicism; among them, overload was the most influential.

#### *3) Influences of dimensions of job stress on professional efficacy decrease of job burnout*

According to analytical result,  $R^2$  was 0.36, adjusted  $R^2$  was 0.34 and  $F$  was 10.83 ( $p < 0.01$ ). This suggested that overall explained variance of regression model was significant. When D-W was 2.12, there was low self-correlation among residuals. Role ambiguity ( $\beta$  is 0.24\*\*\*), and promotions and challenging



assignments ( $\beta$  is 0.37\*\*\*) of job stress significantly and positively influenced professional efficacy decrease; among them, promotions and challenging assignments was the most influential.

#### ***Moderating Effect of Internal/External Locus of Control between Job Stress and Job Burnout***

This study tried to find if internal/external locus of control functioned as moderator by hierarchical regression analysis. In Step 1, job burnout was treated as a dependent variable, and job stress and locus of control as independent variables for regression analysis. In Step 2, “product of job stress and internal/external locus of control” was treated as an independent variable for regression analysis. The result is listed in Table 6.

According to the regression analytical result in Step 1, job stress and internal/external locus of control significantly influenced job burnout. In other words, the more the job stress or external locus of control was, the more the perceived job burnout would be. From the regression analytical result in Step 2, the product of job stress and locus of control significantly influenced job burnout ( $\beta=0.12$ ,  $p<0.05$ ), while explained variance increased by 1.5%. Therefore, H2 (there is a moderating effect of internal/external locus of control between job stress and job burnout) was supported.

Table 6

*Hierarchical Regression Analysis on Internal/External Locus of Control as Moderator between Job Stress and Job Burnout*

<b>Dependent variable: job burnout</b>		
	<b><u>Step 1</u></b>	<b><u>Step 2</u></b>
	<b><math>\beta</math></b>	<b><math>\beta</math></b>
Independent variable		
Job stress	0.64***	0.65***
Locus of control	-0.20***	-0.22***
Job stress * Locus of control		-0.12**
$R^2$	0.57	0.585
$\Delta R^2$		0.015
F	73.44***	51.54***

\* $p<0.1$  \*\* $p<0.05$  \*\*\* $p<0.01$

In order to further observe the moderating roles of degrees of internal/external locus of control between job stress and job burnout, this study plotted the questionnaire data into a diagram, as shown in Figure 2, where X coordinate is job stress, Y coordinate is job burnout, dotted line is the employees with high internal locus of control, and solid line refers to employees with low internal locus of control (those with high external locus of control). According to the figure, because the slope of dotted line is smoother than one of solid line, in comparison to employees with low internal locus of control, those with high internal locus of control have insignificant job burnout caused by job stress. In other words, employees with high internal locus of control intend to actively change the environment, and they are concerned about their competence. Therefore, they are happy, active, emotionally stable, and autonomic.

When encountering the stress, in comparison to those with low internal locus of control, they are confident and can solve the problems by more practical adjustment. In severely competitive audit firms with over- working hours, employees with high internal locus of control have a strong motive to demonstrate prominent performance. Therefore, job burnout will be avoided effectively. On the contrary,

those with a low internal locus of control are unable to control the environment. They refuse to undertake their responsibilities and tend to encounter a sense of failure, which results in job burnout. To sum up, the relationship between job stress and job burnout will be significantly greater for an external locus of control individual than for an internal locus of control individual.

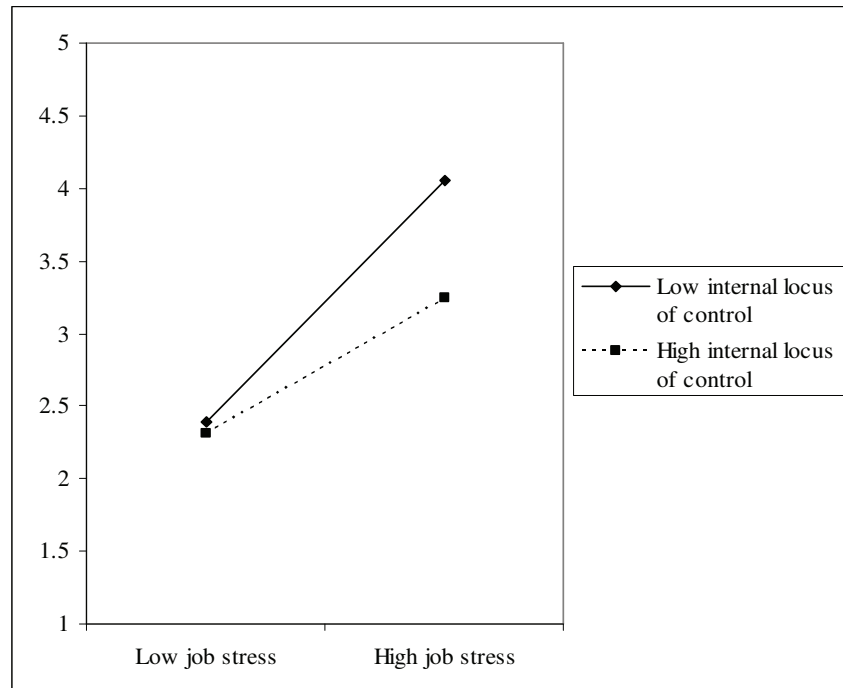


Figure 1. Moderating effect of internal locus of control

## Discussion

### *Conclusions and Implications*

Based on viewpoint of the stress interaction and job demand model, this study provides qualified support for an extended version of job stress and job burnout, and the moderating effect of locus of control in non-western countries. The results of this study extend our understanding of personality phenomena and contribute some inferences to management decisions. Auditors' job stress is mainly from overload. Research results show that from January to May each year, auditors in the accounting firms had overwork loads which should be finished before deadline. Auditors' job burnout is mainly from exhaustion. Research results point out that most auditors in accounting firms had emotional exhaustion, resulting in a lack of energy, frustration, and tension. Thus, they could not fulfill their jobs as expected.

The more the job stress is, the more the perceived job burnout would be. The finding meets the view of most of scholars (Day, et al., 2009; Maslach & Leiter, 1997; Moneta, 2011). However, past research mostly focused on occupations "with contact with people," such as medical personnel and teachers; this study treated "auditors in accounting firms," which were rarely mentioned by other scholars as subjects. As we know, the job of auditor is considered to have high job demand and is a stressful occupation in all countries. At this point, the relationship among auditors' job stress, burnout, and personality is certainly worthy of being discussed. It is one of the important contributions of this study.

About the influences of the six dimensions of job stress on three dimensions of job burnout, these findings include: role conflict, overload, economic well-being, and job security of job, stress positively and significantly influences exhaustion; role conflict, overload, underload, economic well-being, and job

security of job stress significantly and positively influence cynicism; role ambiguity, promotions, and challenging assignment of job stress significantly and positively influence professional efficacy decrease.

Internal/external locus of control is a moderator between job stress and job burnout. Findings of this study suggest that in comparison to external locus of control, people with internal locus of control had lower positive influence of job stress on job burnout. In other words, under the same job stress, people with internal locus of control would have less perceived job burnout than those with external locus of control. In other words, auditors with high internal locus of control are more likely to take actions to cope with job stress, and they have a higher ability than external locus of control auditors to release job stress in the workplace. Therefore, under the same level of stress, auditors with high internal locus of control always have a lower perception of job burnout.

Due to characteristics of occupation, physical, and psychological health of auditors in accounting firms has been negatively named. Without proper improvement in the accounting firms, auditors' job stress and job burnout will increase. Therefore, HR departments should first solve the problem of job stress. The findings of this study suggest that employees' job stress mainly refers to overload and overtime, which suggests that organizations should properly distribute and plan auditing in order to avoid overload during peak periods. It would reduce the problem that employees could not appropriately rest due to long-term overtime. In addition, quality control criteria can regulate the companies which should be competent in the cases undertaken, have sufficient time and manpower. If the enterprises can follow the criteria, they can avoid workload and overtime and solve long-term problem of job stress.

As to job burnout, findings suggest that after working for a whole day, employees were exhausted. At work, they only intended to work quietly without being disturbed. However, auditing is brain-consuming team work. Exhaustion or preference for independent work would only harm the auditing. Therefore, improvement of job stress and decrease of employees' job burnout are the priorities; hence, emotional exhaustion can be avoided by reducing stress of "overload." The auditors would have positive evaluation on jobs. Furthermore, by decreasing the stress of "promotions and challenging assignments," employees would not be uncertain about their abilities.

Past researchers have found that job stress significantly and positively influenced job burnout. However, these samples were mostly teachers (Brewer & McMahan, 2003; Kokkinos, 2007) or medical personnel, and they rarely focused on auditors of accounting firms. In fact, auditors' occupational characteristics are worthy of further exploration. In addition, since personality trait can be the moderator between stress and stress reaction (Bartley & Roesch, 2011; Chen & Silverhorne, 2008; Hoogh & Hartog, 2009; Szalma, 2009), this study probed into influence of auditors' job stress on job burnout and treated internal/external locus of control as a moderator. The finding indicates that "personality trait reveals moderating effect between job stress and job burnout," which would allow companies to focus on both the main stress sources and reduce job stress and perceived job burnout according to employees' personality traits.

### References

- Abu-Elanain, H.M. (2008). Work locus of control and job performance in the UAE: the mediating role of individual and organizational factors. *The Business Review, Cambridge, 11*(1), 188-194.
- Adler, S. (1996). Personality and work behavior: Exploring the linkages. *Applied Psychology: An International Review, 45*, 207-224.
- Anderson, C.R. (1977). Locus of control, coping behaviors, and performance in a stress setting: a longitudinal study. *Journal of Applied Psychology, 62*, 446-451.
- Aube, C., Rousseau, V., & Morin, E.M. (2007). Perceived organizational support and organizational commitment-the moderating effect of locus of control and work autonomy. *Journal of Managerial Psychology, 22*(5), 479-495.
- Bartley, C.E., & Roesch, S.C. (2011). Coping with daily stress: the role of conscientiousness. *Personality and Individual Differences, 50*(1), 79-83.
- Boone, C., & Hendriks, W. (2009). Top management team diversity and firm performance: moderators of

- functional-background and locus of control diversity. *Management Science*, 55(2), 165-180.
- Bozionelos, N. (2004). The big five of personality and work involvement. *Journal of Managerial Psychology*, 19(1), 69-81.
- Brewer, E., & Clippard, L.F. (2002). Burnout and job satisfaction among student support services personnel. *Human Resource Development Quarterly*, 13(2), 169-186.
- Brewer, E.W., & McMahan, J. (2003). Job stress and burnout among industrial and technical teacher educators. *Journal of Vocational Educations Research*, 28(2), 125-140.
- Brookings, J.B., Bolton, B., Brown, C.E., & McEvoy, A. (1985). Self-reported job burnout among female human service professionals. *Journal of Occupational Behavior*, 6(2), 143-150.
- Chen, J.C., & Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadership & Organization Development Journal*, 29(7), 572-582.
- Cieslak, R., Korczynska, J., Strelau, J., & Kaczmarek, M. (2008). Burnout predictors among prison officers: the moderating effect of temperamental endurance. *Personality and Individual Differences*, 45(7), 666-672.
- Costa, P.T. (1996). Work and personality. *Applied Psychology: An International Review*, 45, 25-241.
- Day, A.L., Sibley, A., Scott, N., Tallon, J.M., & Ackroyd-Stolarz, S. (2009). Workplace risks and stressors as predictors of burnout: the moderating impact of job control and team efficacy. *Canadian Journal of Administrative Sciences*, 26(1), 7-22.
- Fernet, C., Gagne, M., & Austin, S. (2010). When does quality of relationships with coworkers predict burnout over time? The moderating role of work motivation. *Journal of Organizational Behavior*, 31, 1163-1180.
- French, J.P.R., & Caplan, R.D. (1972). Organizational stress and individual strain. *The Failure of Success*, 30-36.
- Fried, Y. (1993). Integrating domains of work stress and industrial relations: introduction and overview. *Journal of Organizational Behavior*, 14(5), 397-399.
- Ganster, D.C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management*, 17, 235-271.
- George, J.M., & Jones, G.R. (2002). *Understanding and managing organizational behavior*, 3<sup>rd</sup> ed. NJ: Prentice-Hall.
- Halbesleben, J.R.B., & Buckley, M.R. (2004). Burnout in organizational life. *Journal of Management*, 30(6), 859-879.
- Hayes, C.T., & Weathington, B.L. (2007). Optimism, stress, life satisfaction, and job burnout in restaurant managers. *The Journal of Psychology*, 141(6), 565-579.
- Henkens, K., & Leenders, M. (2010). Burnout and older workers' intentions to retire. *International Journal of Manpower*, 31(1), 306-321.
- Hsu, Y.R. (2011). Work-family conflict and job satisfaction in stressful working environments: the moderating roles of perceived supervisor support and internal locus of control. *International Journal of Manpower*, 32(2), 233-248.
- Hobfoll, S.E., & Freedy, J. (1993). *Conservation of resources: a general stress theory applied to burnout. Professional Burnout: Recent Development in Theory and Research*, Washington, DC: Taylor & Francis, pp. 115-135.
- Hoogh, A.H.B., & Hartog, D.N.D. (2009). Neuroticism and locus of control as moderators of the relationships of charismatic and autocratic leadership with burnout. *Journal of Applied Psychology*, 94(4), 1058-1085.
- Hough, L.M. (1998). The millennium for personality psychology: New horizons or good old days. *Applied Psychology: An International Review*, 47, 233-261.
- Ilies, R., Johnson, M.D., Judge, T.A., & Keeney, J. (2011). A within-individual study of interpersonal conflict as a work stressor: Dispositional and situational moderators. *Journal of Organizational Behavior*, 32, 44-64.
- Ivancevich, J.M., & Matteson, M.T. (1987). *Stress diagnostic survey: comments and psychometric properties of a multidimensional self-report inventory*. Houston, TX: University of Houston.

- Jackson, S.E., Turner, J.A., & Brief, A.P. (1987). Correlates of burnout among public service lawyers. *Journal of Occupational Behavior*, 8(4), 339-349.
- Janssen, O., Lam, C.K., & Huang, X. (2010). Emotional exhaustion and job performance: the moderating roles of distributive justice and positive affect. *Journal of Organizational Behavior*, 31, 787-809.
- Judge, T.A., & Bono, J.E. (2001). Relationships of core self-evaluations traits – self-esteem, generalized self-efficacy, locus of control, and emotional stability –with job satisfaction and job performance: a meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- Judge, T., Higgins, C., Thoresen, C., & Barrick, M. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621-652.
- Kahn, R.L., & Byosiere, P. (1992). *Stress in organizations, Handbook of Industrial and Organizational Psychology* 2<sup>nd</sup> ed. Palo Alto, CA: Consulting Psychologists Press.
- Kahn, R., Wolfe, D., Quinn, R., & Snoek, J. (1964). *Organizational stress: Studies in woke conflict and ambiguity*. New York: John Wiley & Sons.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Kauer, D., Prinzessin, T.C., & Schaffer, U. (2007). Effects of top management team characteristics on strategic decision making. *Management Decision*, 45(6), 942-967.
- Kokkinos, C.M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229-243.
- Kuppens, P., Realo, A., & Diener, E. (2008). The role of positive and negative emotions in life satisfaction judgment across nations. *Journal of Personality and Social Psychology*, 95, 66-75.
- Lee, R.T., & Ashforth, B.E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- Leiter, M.P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior*, 9, 297-308.
- Maslach, C. (1982). *Burnout: The cost of caring*. NJ: Prentice-Hall.
- Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C., & Jackson, S.E. (1986). *Maslach burnout inventory*, 2<sup>nd</sup> ed. CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M.P. (1996). *Maslach burnout inventory manual*, 3<sup>rd</sup> ed. CA: Consulting Psychologists Press.
- Maslach, C., & Leiter, M.P. (1997). *The truth about burnout*. San Francisco, CA: Jossey-Bass Publishers.
- Moneta, G.B. (2011). Need for achievement, burnout, and intention to leave: testing an occupational model in educational settings. *Personality and Individual Differences*, 50, 274-278.
- Moore, J. (2000). One road to turnover: an examination of work exhaustion in technology professionals. *MIS Quarterly*, 24, 141-157.
- Organ, D.W., & Greene, C.N. (1974). Role ambiguity, locus of control and work satisfaction. *Journal of Applied Psychology*, 59(1), 101-102.
- Piedmont, R.L. (1993). A longitudinal analysis of burnout in the health care setting: The role of personal dispositions. *Journal of Personality Assessment*, 61(3), 457-473.
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 33(1), 300-303.
- Salgado, J.F. (1997). The five-factor model of personality and job performance in the European Community. *Journal of Applied Psychology*, 82(1), 30-43.
- Schneider, B. (1996). Whither goes personality at work? Overview of the special issue on work and personality. *Applied Psychology: An International Review*, 45, 289-296.
- Schwab, R.L., & Iwanicki, E.F. (1982). Perceived role conflict, role ambiguity, and teacher burnout. *Educational Administration Quarterly*, 18, 60-74.
- Selart, M. (2005). Understanding the role of locus of control in consultative decision-making: a case study. *Management Decision*, 43(3), 397-412.

- Spector, P.E. (1988). Development of the work locus of control scale. *Journal of Occupational and Organizational Psychology*, 61(4), 335-340.
- Szalma, J.L. (2009). Individual differences in performance, workload, and stress in sustained attention: optimism and pessimism. *Personality and Individual Differences*, 47(5), 444-451.
- Szymanski, E.M., Hershenson, D.B., Ettenger, J.M., & Enright, M.S. (1996). *Career development interventions for people with disabilities*. Austin, TX: Pro-Ed.
- Tasa, K., Sears, G.J., & Schat, A.C.H. (2011). Personality and teamwork behavior in context: the cross-level moderating role of collective efficacy. *Journal of Organizational Behavior*, 32, 65-85.
- Taylor, K.M. (1982). An investigation of vocational indecision in college students: correlates and moderators. *Journal of Vocational Behavior*, 21, 318-329.
- Twenge, J.M., & Campbell, S.M. (2008). Generational differences in psychological traits and their impact on the workplace. *Journal of Managerial Psychology*, 23(8), 62-877.
- White, J.K. (1978). Generalizability of individual difference moderators of the participation in decision making employee response relationship. *Academy of Management Journal*, 21(1), 36-43.