The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction: Evidence from Thailand

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## Abstract

The present study examined the contributions of mindfulness meditation practice on job burnout, a choice of stress coping styles, and job satisfaction. The online survey data were obtained from 93 meditation practitioners and 54 non-practitioners in Thailand (total n = 147). Results from partial least squares regression suggested that respondents who had regularly practiced mindfulness meditation tended to report lower burnout. In addition, they tended to adopt more problem-focused coping and less emotion-focused coping in order to deal with work-related stress. The author also found that regular mindfulness meditation practice also contributed indirectly to higher job satisfaction.

Keywords: mindfulness meditation, burnout, coping, job satisfaction, Thailand

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# INTRODUCTION

s employees are considered valuable assets of a company, maintaining satisfied workforce can A contribute significantly to superior organizational performance (Edwards, Bell, Arthur, & Decuir, 2008). However, today's intense business competition and increased hectic life style of people, especially in emerging economies have made employees more prone to stress (Hung, Fisher, Gapp, & Carter, 2012). Higher workloads, longer work hours, and work-family conflict tend to be factors that create tremendous pressure for employees and can significantly reduce their work productivity and commitment to an organization (Perrone, Ægisdóttir, Webb, & Blalock, 2006). When experiencing stress, employees tend to come up with various strategies to help them alleviate the threat they encounter (Luria & Toriman, 2009). However, it has been suggested that a choice of inappropriate coping strategy may not lead to desirable outcomes (Lewin & Sager, 2008). Maladaptive coping not only makes it difficult for employees to eliminate stress, but can also lead to subsequent psychological problem. In particular, one serious consequence of prolonging stress exposure without a proper remedy or intervention is burnout (Haar, 2006). Burnout can have negative impact on well-being and work performance of employees (Maslach, Leiter, & Jackson, 2012). It is also one of the key reasons that make employees become dissatisfied with their job and decide to leave an organization (Cullen, Silverstein, & Foley, 2008).

In literature, the topics about job burnout and how employees cope with stress have been in a spotlight for decades. Extant studies have examined various causes of burnout such as job

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characteristics and social and organizational supports, which are outside the control of employees. In this study, the author proposes that mindfulness meditation (MM) practice can be considered an intervention that can help employees themselves deal effectively with stress and burnout at work. Although the benefits of MM on stress reduction have received more attention in the area of psychology, its contribution to organizations has not been widely explored. Thus, the objective of this study is twofold. The first objective is to investigate the effect of burnout on job satisfaction, and whether different stress coping strategies can predict the level of burnout differently. Specifically, the current study was conducted using samples of employees in Thailand. The second objective is to investigate whether MM practice can determine the choice of stress coping strategies, the level of burnout, as well as job satisfaction.

#### LITERATURE REVIEW

### **Mindfulness Meditation**

Mindfulness meditation is originally rooted in Buddhist traditional practice that has emerged for centuries (Wallace, 2006). Chavan (2007: 248) defined this meditation as 'the development of insight into the reality of mind and body.' The heart of MM practice consists of two aspects: mindfulness and non-judgmental orientation (Kabat-Zinn, 1990). First, MM practice requires maintaining moment-to-moment awareness. In training, practitioners are consistently mindful to their thought, emotion, body movement, as well as sensory and perceptual stimuli, that is salient at the present moment (Brown & Ryan, 2003). MM can be practiced in many ways. The most common practice is to observe the natural inhalation and exhalation of breath, while also repeating mantra silently in between breaths. MM can also be practiced with body movement. In walking, for example, practitioners are required to focus attention on the movement of their leg in each step.

Another key characteristic of MM is non-judgmental orientation toward the flow of one's experience (Kabat-Zinn, 1990). MM does not require practitioners to ignore distractions during the practice. Rather, every sensation or emotion that practitioners are experiencing, whether it is favorable or unfavorable, must be acknowledged non-judgmentally (Kabat-Zinn, 1990). This practice is based on Buddhism wisdom regarding the law of *Annitya* – everything is impermanent and unstable; it arises and eventually ceases by its own (Goenka, 2006). In training, practitioners are required to pay close attention to the transitory nature of their body, sensations, and emotions, without manipulation, interference, or elaboration. Sustaining the observation over prolonged periods of time allows practitioners to gain insight about the true nature of phenomena pertaining to the body and mind (Chavan, 2007).

Scholars have suggested that the major characteristic of MM that leads to various physical and mental benefits is the quality of mindfulness that practitioners have developed (Brown, Ryan, & Creswell, 2007). In psychology, mindfulness has been theorized to produce many positive effects on human functioning and behavior (Cahn & Polich, 2006; Jha, Krompinger, & Baime, 2007). Specifically, the clarity of mind is considered one of the major benefits of MM. When people observe their body and mind's operations passively without coloring them by judgments, they let go of habitual thought patterns and cognitive interpretations of life experience, which in turn allow them to see the reality as it is instead of as they think it should be (Brown & Ryan, 2003). For this reason, MM has been found to enhance cognitive flexibility (Moore & Malinowski, 2009) and promote the development of other cognitive capabilities (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010). The quality of mindfulness also leads to a better mood clarity and emotion control (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). Studies have also found that mindfulness training can help people improve physical and mental health (Majumdar, Grossman, Dietz-Waschkowski, Kersig, & Walach, 2002).

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# MM and job satisfaction

To the knowledge of the author, no study has investigated the association between practicing MM and job satisfaction. Considering the contributions of mindfulness in terms of physical, psychological, and emotional well-being, these benefits can play the key role in helping employees develop optimistic attitude about their jobs. In psychology, studies have found that people who participated in the mindfulness-based stress reduction training tended to report improvement in overall life satisfaction measure (Brown & Ryan, 2003; Shapiro, Astin, Bishop, & Cordova, 2005). Specifically, employees with better mental and physical health can be more satisfied with their job because well-being makes them more productive in their work (Drydakis, 2011). Mindfulness training has also been found to enhance the quality of relationship with other people (Shapiro, Schwartz, & Bonner, 1998). For this reason, practicing MM can help employees develop better interpersonal relationship with co-workers, which subsequently results in higher job satisfaction (Pseekos, Bullock-Yowell, & Dahlen, 2011). Giving all these supports, the first hypothesis is presented:

Hypothesis 1: MM is positively associated with job satisfaction.

# Job burnout

Job burnout is defined as 'a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform' (Maslach, Jackson, & Leiter, 1996: 20). Two theoretical models of burnout that has been widely cited in the literature include the Conservation of Resources Theory (Hobfoll, 1989) and the Job Demands–Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). These models emphasize the importance of job demands and resources in explaining stress in organizations (Schaufeli, Bakker, & Van Rhenen, 2009). Job demands are factors related to work environments and job characteristics that require employees to exert physical or mental effort (Shepherd, Tashchian, & Ridnour, 2011). Resources can be viewed in terms of tangible and intangible factors that are considered valuable for individual, as well as job-related factors that enable employees to accomplish goals or to address job demands. Hobfoll and Freedy (1993) suggested that job demands tend to diminish resources over time. Burnout usually occurs as employees feel that they do not have sufficient resources to deal with demands in their works (Thomas & Lankau, 2009). As employees consistently expose to job demands without adequate resource replenishment, they are likely to suffer from emotional exhaustion (Hobfoll, 2001).

# Job burnout and job satisfaction

Research has shown that job burnout can cause negative effect on various job outcomes, which can reduce job satisfaction (Bakker, van Emmerik, & Euwema, 2006; Lewin & Sager, 2008). For example, burnout has been found to reduce job motivation, commitment, and productivity (Maslach & Leiter, 2008). Specifically, Thomas and Lankau (2009: 418–419) mentioned that 'in response to depleted resources, individuals will conserve resources and may not invest as much in their job performance or be as committed to the organization.' Burnout also affects interpersonal relationship with others within and outside an organization (Singh, Suar, & Leiter, 2012). Studies suggested that burnout causes employees to develop a negative attitude toward customers, co-workers, managers, and organization (Hollet-Haudebert, Mulki, & Fournier, 2011). It also deteriorates relationship with family members, which can lead to intensifying work–family conflict (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Therefore, the following hypothesis is presented:

Hypothesis 2: Job burnout is negatively associated with job satisfaction.

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## MM and job burnout

The regular practice of MM can help people alleviate burnout associated with their works. In research, a number of studies have found that people who practice MM tended to experienced less stress (Shapiro et al., 2005; Zeidan et al., 2010). Specifically, the quality of being attentive to the present moment is the key benefit of MM that allows people to manage stress effectively (Brown & Ryan, 2003). It has been suggested that the majority of human's sufferings normally arise from fear of the unknown future and sorrow over the unchangeable past (Goenka, 2006). When human's mind is caught in this time travel trap, the controllable present is usually ignored. This prolonged uncontrollable thought can lead to rumination and subsequently creates stress (Michael, Halligan, Clark, & Ehlers, 2007). On the other hand, because practicing MM requires practitioners to stay focused on their moment-to-moment experience, people who have practiced MM for a long time are less likely to allow their mind to wander away from the present state. Therefore, they are able to focus effectively on tasks at hand without being distracted by stressful events at work (Brown & Ryan, 2004).

In addition, the non-judgmental aspect of MM is another factor that contributes positively to how employees perceive stress. According to the law of *Annitya*, MM is based on the wisdom that people tend to experience unnecessary suffering when they 'attach to anything within the impermanent flux of human experience' (Sole-Leris, 1986; Emavardhana & Tori, 1997: 194). While practitioners are paying close attention to the self during the practice, they are encouraged to maintain equanimity despite experiencing uncomfortable feelings or unfavorable sensations. Experienced practitioners usually found that when their mind neither attached to nor elaborated on those unpleasant experiences, but acknowledged them as they are, at a certain point, these experiences appeared to attenuate and cease by their own (Pagis, 2010). In real-life application, this training can significantly help people remain calm whenever they encounter stressful situations (Goenka, 2006). In fact, practicing MM does not make people develop immunity against stress or unpleasant feelings (Kabat-Zinn, 1990), but the trained mind that truly understands the impermanent nature of things allows them to let go of stressful events easily. Therefore, the author proposes:

Hypothesis 3: MM is negatively associated with job burnout.

### Coping strategy

Coping is defined as 'an individual's response to stressful situations involving important, potentially negative, consequences' (Lazarus & Folkman, 1984). Research usually focuses on two types of coping: problem-focused coping and emotional-focused coping. Problem-focused coping tend to confront and deal directly with stressors (Latack & Havlovic, 1992: 491). They tend to select strategies such as planning, soliciting information, arguing, and increasing effort in order to reduce the intensity of stressor (Anshel, Sutarso, & Jubenville, 2009). On the other hand, people who employ emotion-focused coping tend to reduce or eliminate emotional distress associated with a problem instead of attempting to solve it. They also tend to avoid sources of a problem by choosing strategies such as distancing, isolation, wishful thinking, denial, withdrawal, or escapism (Lazarus, 1999).

### Coping strategies, burnout, and job satisfaction

Studies found that problem-focused coping tended to reduce psychological symptoms such as anxiety and depression, whereas emotion-focused coping tended to increase them (Penley, Tomaka, & Wiebe, 2002). Accordingly, employees who harbor problem-focused coping are more likely to

experience lower job burnout and higher job satisfaction than those who rely on emotion-focused coping. Although using emotion-focused coping can buffer employees from experiencing stress at work, it does not eliminate the underlying causes associated with a problem; they still have to experience stress once the problem resurfaces. On the other hand, the attempt to take constructive and direct approaches to solve the problem allows employees to develop problem-solving skills that can benefit them whenever future problems arise. Importantly, success in dealing with problems also enhances confidence that they can perform well under stressful situations (Hua & Cheng, 2010). Therefore, these hypotheses are presented:

Hypothesis 4: Problem-focused coping will lead negatively to job burnout.

Hypothesis 5: Emotion-focused coping will lead positively to job burnout.

Hypothesis 6: Problem-focused coping will lead positively to job satisfaction.

Hypothesis 7: Emotion-focused coping will lead negatively to job satisfaction.

In addition to the direct link, studies have shown that the effect of coping strategies on job satisfaction can also be mediated through job burnout. For example, a research by Boyd, Lewin, and Sager (2009) on professional salesperson found that the positive effect of problem-focused coping and the negative effect of problem-focused coping on job satisfaction were mediated by emotional exhaustion. Therefore:

Hypothesis 8: Job burnout will mediate the positive relationship between problem-focused coping and job satisfaction.

Hypothesis 9: Job burnout will mediate the negative relationship between emotion-focused coping and job satisfaction.

# MM and coping strategies

This study proposes that people who regularly practice MM can have a higher tendency to select problem-focused coping instead of emotion-focused coping. In particular, the quality of mindfulness is considered a key factor that prevents individuals from using avoidance strategies. For example, a study by Feldman et al. (2007) reported that people with a high level of mindfulness tended to engage more in problem analysis and plan rehearsal; they tended to engage less in stagnant deliberation, outcome fantasy, as well as other unhealthy efforts to escape or avoid thoughts and emotions. MM has also been showed to reduce the likelihood of using substances when experiencing stress (Bowen, Witkiewitz, Dillworth, & Marlatt, 2007). Regularly practicing MM also improves conscientiousness trait as mindfulness has been reported to reduce impulsive reaction. For example, a study by Agrawal and Bedi (2002), conducted in the police department in India, found that MM training significantly improve police officers' sense of responsibility, integrity, mental control, and a sense of duty. Therefore:

Hypothesis 10: MM is positively associated with problem-focused coping.

Hypothesis 11: MM is negatively associated with emotion-focused coping.

Scholars have suggested that the choice of coping strategy also depends on whether individuals believe that they have a potential to deal successfully with the situation (Ntoumanis, Edmunds, & Duda, 2009).

For this reason, the choice of coping can depend on the level of self-efficacy (Jenaro, Flores, & Arias, 2007). General self-efficacy is defined as 'individuals' perception of their ability to perform across a variety of different situations' (Judge, Erez, & Bono, 1998: 170). When facing problems, people with high efficacy belief are more likely to try their best to deal with them because they believe that they have high potential to succeed (Trevelyan, 2011).

People who regularly practice MM can have a high tendency to develop general self-efficacy. The key contribution of MM that enhances the efficacy belief lies in the clarity of mind and emotions that practitioners have developed during the training (Feldman et al., 2007). Bandura (1997) argued that the extent to which people effectively evaluate their self-efficacy can be influenced by the level of stress they are experiencing. Gundlach, Martinko, and Douglas (2003) also suggested that negative emotions can tamper with the ability of individuals to makes positive attribution between their potentials and performance. As a result, the benefits from MM training, which allow people to manage their thought processes and control their emotions, can subsequently facilitate the development of the efficacy belief that they can deal successfully with challenges and difficulties. This capability, in turn, motivate them to engage more in problem-focused coping and less in emotion-focused coping. Therefore, the following hypotheses are presented:

Hypothesis 12: General self-efficacy mediates the positive relationship between MM and problemfocused coping.

Hypothesis 13: General self-efficacy mediates the negative relationship between MM and emotion-focused coping.

## METHODOLOGY

#### Research context, sample, and procedure

The data for this study were collected from respondents in Thailand. Thailand provides an appropriate research context since it is a Buddhist country where meditation is commonly known to many people. The data were collected using online self-administered questionnaire hosted by Survey Monkey. The announcements of the study were posted in several major Buddhist web sites in Thailand. This method of data collection was preferred as it offered the convenience to gain access to the communities of MM practitioners. These web sites offer discussion boards for members/visitors to discuss various topics, including meditation practices. The visitors of these web sites are diverse and not just limited to religious purposes. This provided the opportunity to collect data from both MM practitioners and non-practitioners. Visitors of the web sites were informed about the objectives and contributions of the study and were given the link to enter the online survey. The participation was conducted in a voluntary basis with no monetary compensation. However, the author promised 10 Thai Baht donation to the charity fund for each survey completed.

The total of 147 respondents completely filled the questionnaires. Because the author was unable to obtain the list of the respondents beforehand, the response rate could not be determined. The final samples included 99 female (67%) and 48 male (33%). All of them were Buddhists. The average age of the respondents was 37 years (SD = 8.64). For education background, 18 had below bachelor's degree (12%), 90 held bachelor's degree (61%), 32 held master's degree (22%), and seven held doctoral degree (5%). The average job experience was nine years (SD = 6.91). For work position, 33 of them were supervisors (22%). For MM practice, 93 reported that they had regularly practiced MM (63%) and 54 reported they did not practice at all (37%). On average, time spent on the practice was 1 hr (SD = 1.88); the average days per week was 3 days (SD = 3.03); and the average years was 3 years (SD = 3.51).

## Measurements

*MM* was measured using three indicators: the number of hours per day, days per week, and years of MM practice. Respondents were asked if they had regularly practiced MM until the present time. Those who answered yes to this question were then asked to describe how they meditated. Finally, they were asked to estimate the length in hours, days, and years that they had meditated. These variables were coded in ordinal scale. The number of hours ranged from 1 ='less than 1 hr,' 2 = 'about 1 hr' to 8 = 'more than 6 hr.' The number of days ranged from 1 to 7. The number of years ranged from 1 = 'less than 1 year,' 2 = 'about 1 year' to 11 = 'more than 10 years.' For those who did not practice MM, these three variables were coded as 0. These numbers were then used to construct a single reflective latent variable.

The measurements of coping strategy were adopted from Lazarus and Folkman (1984). *Problem-focused coping* consists of six items. All items were scored on a 5-point rating scale ranging from 1 = 'never' to 5 = 'always.' *Burnout* was adopted from the Maslach Burnout Inventory-General Survey (Maslach, Jackson, & Leiter, 1996). Only emotional exhaustion (4 items) and cynicism (5 items) were used. Items were scored on a 5-point rating scale ranging from 1 = 'never' to 5 = 'always.' *Job satisfaction* was adopted from Cammann, Fichman, Jenkins, and Klesh (1983). Only one item '*All in all, I am satisfied with my job.*' was selected. It was scored on a 5-point rating scale ranging from 1 = 'very dissatisfied' to 5 = 'very satisfied.'

Control variables include job demands, age, gender, education, job experience, and supervisory position. *Job demands* was measured in terms of quantitative workload. The scale was adopted from Karasek, Brisson, Kawakami, Houtman, Bongers, and Amick (1998), which contains 5 items that represent demanding aspects of the job. Items were scored on a 4-point frequency scale, ranging from 1 ='strongly agree' to 5 ='strongly disagree.' *Age* was measured in years. *Gender* was measured as a dummy variable where female were coded 0 and male 1. *Education* ranged from 1 ='below bachelor's degree,' 2 ='bachelor's degree,' 3 ='master's degree' to 4 ='doctoral degree.' *Job experience* was measured in the number of years that respondents had worked for their organization. Finally, *supervisory position* was coded as a dummy variable; those who had subordinates directly reported to them were coded as 1, and 0 otherwise.

## Estimation technique

Partial least squares (PLS) regression was used to analyze the data. PLS is a variance-based structural equation modeling and second-generation data analysis technique (Fornell & Larcker, 1981). PLS offers more flexibility compared to covariance-based structural equation modeling techniques because it does not require data to be normally distributed (Fornell & Bookstein, 1982). Other advantage of PLS is that it allows smaller sample sizes compared to other structural equation modeling techniques (Chin & Newsted, 1999).

## RESULTS

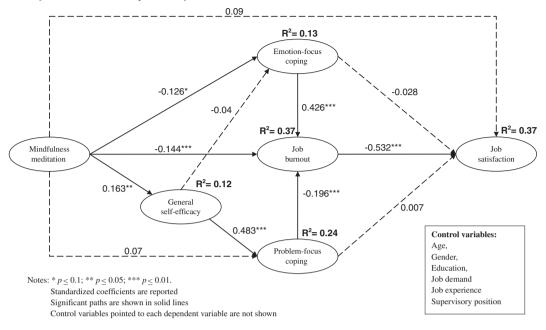
The analyses were performed in WarpPLS 3.0 beta (Kock, 2012). First, the estimation model was evaluated. The results, as well as the correlations between variables, are shown in Table 1. Reliability was tested by internal consistency measuring by Cronbach's  $\alpha$ . All variables had the values above the minimum requirement of 0.7 (Fornell & Larcker, 1981). The convergent validity of each item was evaluated using factor loadings. The results indicated that all loadings were >0.5, which was recommended by Hair, Black, Babin, and Anderson (2009). Convergent validity was assessed by the average variance extracted. The average variance extracted for each construct was greater than

		1	2	2	4		,	7	0	0	10	11	
Variables	α	I	2	3	4	5	6	/	8	9	10	11	12
1. Mindfulness meditation	0.755	(0.820)											
2. Job burnout	0.926	-0.217**	(0.795)										
3. Problem-focused coping	0.829	0.026	-0.251**	(0.735)									
4. Emotion-focused coping	0.792	-0.138	0.519**	-0.098	(0.702)								
5. General self-efficacy	0.899	0.160	-0.143	0.456**	-0.009	(0.730)							
6. Job satisfaction	_	0.182*	-0.573**	0.182*	-0.321**	0.149	(1.000)						
7. Job demands	0.839	-0.033	0.264**	-0.003	0.181*	-0.017	-0.123	(0.781)					
8. Age	_	0.112	-0.209**	0.091	-0.262**	-0.035	0.196*	-0.015	(1.000)				
9. Gender	_	0.101	-0.021	0.083	0.093	0.262**	-0.070	0.076	-0.136	(1.000)			
10. Education	-	-0.106	-0.069	-0.058	-0.097	0.079	0.048	0.004	0.063	-0.168*	(1.000)		
11. Job experience	_	-0.002	-0.132	0.158	-0.160	0.049	0.231**	0.041	0.632**	-0.100	0.036	(1.000)	
12. Supervisory position	-	-0.010	-0.124	0.042	-0.107	0.060	0.136	0.097	0.301**	0.182*	0.109	0.123	(1.000)

TABLE 1	l. <b>C</b> o	RRELATION	MATRIX	BETWEEN	VARIABLES,	INTERNAL	CONSISTENCY,	, AND CONVERGEN	t validity
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Note. Average variance extracted of latent variables are shown in the parentheses. \* $p \le .05$ ; \*\* $p \le .01$ .

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Results from the Partial Least Squares analysis

FIGURE 1. RESULTS FROM THE PARTIAL LEAST SQUARES ANALYSIS

correlations between the constructs, suggesting that the convergent validity was satisfactory (Fornell & Larcker, 1981). Finally, the test for multicollinearity among the variables was performed using the variance inflation factor statistics. The variance inflation factors ranged from 1.12 to 2.05, which were below the critical value of 3.3, as suggested by Petter, Straub, and Rai (2007).

Analysis results from the structural model are presented in Figure 1. Control variables are pointed to each of the main variables. Only significant paths are shown in solid lines. The standardized coefficient and *t*-values were calculated using a bootstrap resampling procedure with 100 subsamples (Efron, Rogosa, & Tibshirani, 2004).

Hypothesis 2 proposed the positive relationship between burnout and job satisfaction, which was strongly supported by the model. The relationship was also statistically significant at 1% level ( $\beta = -0.532$ ;  $p \le .01$ ). Hypothesis 3 suggested that people who regularly practiced MM reduced burnout. The result also strongly supported this hypothesis at 1% level ( $\beta = -0.144$ ;  $p \le .01$ ).

Hypothesis 4 proposed the negative relationship between problem-focused coping and burnout. The result strongly supported the hypothesis at 1% level ( $\beta = -0.196$ ;  $p \le .01$ ). Hypothesis 5 proposed the positive relationship between emotion-focused coping and burnout. This hypothesis was also strongly supported at 1% level ( $\beta = 0.426$ ;  $p \le .01$ ). Hypothesis 6 predicted the direct and positive relationship between problem-focused coping and job satisfaction, while Hypothesis 7 predicted the negative relationship for emotion-focused coping. Although the signs of the relationships came out as expected, they were not statistically significant at below 10% level. Therefore, Hypotheses 6 and 7 were not supported. To test the mediating effect of both problem-focused coping and emotion-focused coping on job satisfaction as predicted in WarpPLS 3.0. The result suggested the positive indirect effect of problem-focused coping on job satisfaction at the 1% significant level ( $\beta = 0.104$ ;  $p \le .01$ ). The negative indirect effect between emotion-focused

coping and job satisfaction was also confirmed at 1% significant level ( $\beta = -0.226$ ;  $p \le .01$ ). Therefore, Hypotheses 8 and 9 were supported.

Hypotheses 10 and 11 predicted that people who regularly practiced MM tended to employ more problem-focused coping strategies and less emotion-focused coping strategies, respectively. The results suggested that although regular practice of MM was positively associated with problem-focused coping, it was not statistically significant at 10% level ( $\beta = 0.07$ ; p = .25). Therefore, Hypothesis 10 was not supported. However, the result suggested the negative relationship between regular practice of MM and emotion-focused coping at the 10% significant level ( $\beta = -0.126$ ;  $p \le .1$ ). Therefore, Hypothesis 11 was supported.

Hypotheses 12 and 13 tested the mediating effect of practicing MM and coping strategies through general self-efficacy. The result showed the significant relationship between MM practice and general self-efficacy at 5% level ( $\beta = 0.163$ ;  $p \le .05$ ). In addition, there was a significant and positive relationship between general self-efficacy and problem-focused coping ( $\beta = 0.483$ ;  $p \le .01$ ). In the tests of the indirect effect, the results revealed the positive indirect link from practicing MM to problem-focused coping at 10% significant level ( $\beta = 0.104$ ;  $p \le .1$ ). However, there was no indirect relationship between practicing MM and problem-focused coping ( $\beta = 0.07$ ; p = .49). Therefore, Hypothesis 12 was supported while Hypothesis 13 was not.

Back to Hypothesis 1, which predicted the positive relationship between practicing meditation and job satisfaction. Although the results showed the positive relationship between the variables, the statistical significant level was marginally above 10% ( $\beta = 0.09$ ; p = .11). To check for the possibility of the indirect relationship, the calculation of the total indirect effect from MM to job satisfaction was performed through every mediating links. According to Alwin and Hauser (1975), the sum of the direct and indirect effects represents the total effect of the focal variable on the dependent variable. The result, which was calculated in WarpPLS 3.0, revealed the positive total indirect relationship that was statistically significant at 1% level ( $\beta = 0.194$ ;  $p \le .01$ ). Therefore, Hypothesis 1 was supported in terms of the indirect link.

Finally, the significant relationships between control variables and key dependent variables were reported as the following: job demands was associated positively with burnout ( $\beta = 0.192$ ;  $p \le .01$ ) and emotion-focused coping ( $\beta = 0.178$ ;  $p \le .01$ ). For gender, male tended to have lower job satisfaction than female ( $\beta = -0.103$ ;  $p \le .1$ ). For age, younger respondents tended to engage more in emotion-focused coping than older respondents ( $\beta = -0.194$ ;  $p \le .1$ ). For education, highly educated respondents tended to engage less in problem-focused coping than lower educated respondents. Finally, job satisfaction tended to be determined positively by job experience ( $\beta = 0.19$ ;  $p \le .05$ ) and supervisory position ( $\beta = 0.091$ ;  $p \le .01$ ).

#### DISCUSSION

The results from this study provide extra contribution to research related to employees' burnout, its outcome on job satisfaction, and how to deal effectively with it. The survey of employees in Thailand also provides additional evidence to existing research, which were largely conducted in Western countries. In particular, the author found a strong support that burnout significantly erode employees' job satisfaction. Burnout, in turn, was experienced by employees as a result of high job demands. These results are in line with findings documented in previous studies (Tourigny, Baba, & Xiaoyun, 2010; Shepherd, Tashchian, & Ridnour, 2011). Moreover, this study found extra evidence that the level of burnout was also determined by the choice of coping strategies that employees usually adopted. Results revealed a strong support that employees who usually used problem-focused coping to target and to alter the sources of problems tended to experience less burnout; on the other hand,

employees who usually used emotion-focused coping to avoid facing the problem directly tended to experience more burnout. These results support the argument suggesting that emotion-focused coping may be considered a maladaptive coping strategy (Connor-Smith & Flachsbart, 2007; Lewin & Sager, 2008).

Importantly, this study has added to previous studies by proposing that regular MM practice can help employees alleviate burnout and enhance their productive coping style. First, the result strongly supported the prediction about the benefit of MM on reducing burnout. Despite being affected by high job demands, employees who reported that they had regularly practiced MM tended to report lower burnout compared to those who did not. For the contribution of MM on the choice of coping strategies, the author also found some supporting evidence that employees who had regularly practiced MM tended to adopt more problem-focused coping and less emotion-focused coping. In particular, the benefit of MM on the choice of problem-focused coping was mediated by general self-efficacy. This indirect link is in line with the argument that clear mind and emotions promote positive thinking, including a belief about one's own capability to deal with difficulties and challenges (Gundlach, Martinko, & Douglas, 2003). Finally, this study found that regular MM practice also led indirectly to higher job satisfaction. Specifically, lower burnout and higher tendency to engage in effective stress coping styles accounted for this contribution in the model.

Overall, the results from this study are consistent with the job demand-resource perspective (Hobfoll, 1989; Demerouti et al., 2001). Based on the theory, the benefits gained from practicing MM can be considered another critical resource that allows employees to deal effectively with high job demands and workloads in the workplace. The trained mind that helps employees remain calm when facing with problems or unfavorable encounters at work and stay focused on their task is therefore an essential capability for the successful stress management in the organization.

### Practical implication

As employees are considered valuable assets for an organization, maintaining a satisfied workforce can significantly make organization more competitive in business. However, it is difficult for employees to be satisfied with their job when they consistently experience stress at work. This situation can be severe, especially when they are unable to manage stress appropriately. The present study shed more light on one particular type of practice that can help employees deal effectively with stress and burnout. In particular, practicing MM is crucial for employees to overcome work-related stress as it can enhance the development of cognitive and emotional capabilities that are necessary for them to deal with problems and stressful events in the workplace. Considering the role of mindfulness on promoting various psychological outcomes and performance (Feldman et al., 2007), a policy to help employees improve the quality of mindfulness can be beneficial to both employees and organizations. In fact, Brown and Ryan (2003) argued that although mindfulness is an ability commonly possessed by every human, people tend to differ in their propensity or willingness to develop or exercise this capability. As practicing MM aims to substantiate this capability, it can tremendously benefit organizations because it can enhance employees' potential in various areas that are crucial for superior organizational performance.

Therefore, the author suggests that MM training should be considered one of employee development programs in organizations. MM is not limited to specific religion. Although the practice is rooted in Buddhism, it has been widely trained to people from various cultures and religions, without referring to the religion of origin or sectarianism (Goenka, 2006). In addition, MM training does not require substantial investment. Practice of MM is not limited to specific settings and can be performed even in daily activities. Importantly, the author also suggests that the MM training program should be conducted on a continuous basis since the benefits of MM practice can take time to develop.

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#### Limitations and suggestions for future research

There are some limitations that the author needs to mention. First, the samples which were obtained on a voluntary and anonymous basis through religion web sites made it impossible for the author to identify other key characteristics of the respondents beforehand. There is also a possibility that the respondents obtained from this method of sampling may not truly represent the entire target population. Finally, the small sample size can also limit the generalized power of the results to the larger scope. In particular, these limitations happened owing to the difficulty to obtain the large number of respondents who have regularly practiced MM. Therefore, it is necessary for future studies to be conducted in a larger scale, if possible, to confirm the benefits of MM on workplace outcomes.

Second, because the survey data were collected in a cross-sectional basis, the author was unable to investigate whether lower burnout or the choice of coping strategies actually resulted from practicing MM or merely from other uncontrolled characteristics of the respondents such as certain personality traits. Therefore, future longitudinal studies that measure these outcome factors before and after MM practice is needed in order to provide evidence on its effects.

The third limitation is the use of subjective measurements of the key variables in the study. It can be possible that these subjective measurements may not be the accurate representations of the constructs. Furthermore, scholars have criticized that using subjective measurements could make the results susceptible to common method bias (van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). Keeping the possibility of this problem in mind, however, the author carefully followed the methods suggested by Podsakoff, MacKenzie, Jeong-Yeon, and Podsakoff (2003) and Spector (2006) to reduce the potential impacts of common method bias in the survey (such as separate presentation and introduction of distinct constructs in the questionnaire).

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#### REFERENCES

Agrawal, R. K., & Bedi, K. (2002). Transforming the self: Exploring effects of vipassana on Delhi police trainees. *Journal of Human Values*, 8(1), 45–56.

- Alwin, D. E., & Hauser, R. M. (1975). Decomposition of effects in path analysis. *American Sociological Review*, 40(1), 37–47.
- Anshel, M. H., Sutarso, T., & Jubenville, C. (2009). Racial and gender differences on sources of acute stress and coping style among competitive athletes. *Journal of Social Psychology*, 149(2), 159–178.
- Bakker, A. B., van Emmerik, H., & Euwema, M. C. (2006). Crossover of burnout and engagement in work teams. Work & Occupations, 33(4), 464–489.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.

- Bowen, S., Witkiewitz, K., Dillworth, T. M., & Marlatt, G. A. (2007). The role of thought suppression in the relationship between mindfulness meditation and alcohol use. *Addictive Behaviors*, *32*(10), 2324–2328.
- Boyd, N. G., Lewin, J. E., & Sager, J. K. (2009). A model of stress and coping and their influence on individual and organizational outcomes. *Journal of Vocational Behavior*, 75(2), 197–211.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological wellbeing. *Journal of Personality and Social Psychology*, 84(4), 822–848.
- Brown, K. W., & Ryan, R. M. (2004). Perils and promise in defining and measuring mindfulness: Observations from experience. *Clinical Psychology: Science and Practice*, 11(3), 242–248.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211–237.

#### JOURNAL OF MANAGEMENT & ORGANIZATION

- Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132(2), 180-211.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler, P. H. Mirvis & C. Cammann (Eds.), Assessing organizational change: A guide to methods, measures, and practices (pp. 71–138). New York, NY: Wiley.
- Chavan, D. V. (2007). Vipassana: The Buddha's tool to probe mind and body. In R. Banerjee & B. K. Chakrabarti (Eds.), *Progress in brain research* vol. 168 (pp. 247–253). Amsterdam, The Netherlands: Elsevier.
- Chin, W. W., & Newsted, P. R. (1999). Structural equation modeling analysis with small samples using partial least squares. In R. Hoyle (Ed.), *Statistical strategies for small sample research* (pp. 307–341). Thousand Oaks, CA: Sage.
- Connor-Smith, J. K., & Flachsbart, C. (2007). Relations between personality and coping: A meta-analysis. Journal of Personality & Social Psychology, 93(6), 1080–1107.
- Cullen, J., Silverstein, B., & Foley, M. (2008). Linking biomechanical workload and organizational practices to burnout and satisfaction. *Journal of Business & Psychology*, 23(1/2), 63-71.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Drydakis, N. (2011). Health-impaired employees' job satisfaction: New evidence from Athens, Greece. Applied Economics Letters, 19(8), 789–793.
- Edwards, B. D., Bell, S. T., Arthur, J. W., & Decuir, A. D. (2008). Relationships between facets of job satisfaction and task and contextual performance. *Applied Psychology: An International Review*, 57(3), 441–465.
- Efron, B., Rogosa, D., & Tibshirani, R. (2004). Resampling methods of estimation. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 13216–13220). New York, NY: Elsevier.
- Emavardhana, T., & Tori, C. D. (1997). Changes in self-concept, ego defense mechanisms, and religiosity following seven-day vipassana meditation retreats. *Journal for the Scientific Study of Religion*, 36(2), 194–206.
- Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J.-P. (2007). Mindfulness and emotion regulation: The development and initial validation of the cognitive and affective mindfulness scale-revised (CAMS-R). *Journal* of Psychopathology and Behavioral Assessment, 29(3), 177–190.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4), 440–452.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Goenka, S. N. (2006). Peace within oneself for peace in the world. Dhammagiri, Igatpuri: Vipassana Research Institute.
- Gundlach, M. J., Martinko, M. J., & Douglas, S. C. (2003). Emotional intelligence, causal reasoning, and the selfefficacy development process. *International Journal of Organizational Analysis*, 11(3), 229–246.
- Haar, J. M. (2006). The downside of coping: Work-family conflict, employee burnout and the moderating effects of coping strategies. *Journal of Management & Organization*, 12(2), 146–159.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337–421.
- Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout.
  In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115–129). Washington, DC: Taylor & Francis.
- Hollet-Haudebert, S., Mulki, J. P., & Fournier, C. (2011). Neglected burnout dimensions: Effect of depersonalization and personal nonaccomplishment on organizational commitment of salespeople. *Journal of Personal Selling & Sales Management*, 31(4), 411–428.
- Hua, H.-H. S., & Cheng, C.-W. (2010). Job stress, coping strategies, and burnout among hotel industry supervisors in Taiwan. *The International Journal of Human Resource Management*, 21(8), 1337–1350.
- Hung, J.-Y., Fisher, R., Gapp, R., & Carter, G. (2012). Work-related stress impacts on the commitment of urban transit drivers. *Journal of Management & Organization*, 18(2), 220–230.

The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction

- Jenaro, C., Flores, N., & Arias, B. (2007). Burnout and coping in human service practitioners. *Professional Psychology: Research and Practice*, 38(1), 80-87.
- Jha, A., Krompinger, J., & Baime, M. (2007). Mindfulness training modifies subsystems of attention. Cognitive, Affective, & Behavioral Neuroscience, 7(2), 109-119.
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, 11(2–3), 167–187.
- Kabat-Zinn, J. (1990). Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. New York, NY: Delacorte Press.
- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The job content questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3(4), 322–355.
- Kock, N. (2012). WarpPLS 3.0 user manual. Laredo, TX: ScriptWarp Systems.
- Latack, J. C., & Havlovic, S. J. (1992). Coping with job stress: A conceptual evaluation framework for coping measures. *Journal of Organizational Behavior*, 13(5), 479–508.
- Lazarus, R. S. (1999). Stress and emotion: A new synthesis. New York, NY: Springer.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York, NY: Springer.
- Lewin, J. E., & Sager, J. K. (2008). Salesperson burnout: A test of the coping-mediational model of social support. Journal of Personal Selling & Sales Management, 28(3), 233–246.
- Luria, G., & Torjman, A. (2009). Resources and coping with stressful events. *Journal of Organizational Behavior*, 30(6), 685–707.
- Majumdar, M., Grossman, P., Dietz-Waschkowski, B., Kersig, S., & Walach, H. (2002). Does mindfulness meditation contribute to health? Outcome evaluation of a German sample. *The Journal of Alternative and Complementary Medicine*, 8(6), 719–730.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512.
- Maslach, C., Leiter, M. P., & Jackson, S. E. (2012). Making a significant difference with burnout interventions: Researcher and practitioner collaboration. *Journal of Organizational Behavior*, 33(2), 296–300.
- Michael, T., Halligan, S. L., Clark, D. M., & Ehlers, A. (2007). Rumination in posttraumatic stress disorder. Depression and Anxiety, 24(5), 307–317.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32(5), 689–725.
- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18(1), 176–186.
- Ntoumanis, N., Edmunds, J., & Duda, J. L. (2009). Understanding the coping process from a self-determination theory perspective. *British Journal of Health Psychology*, 14(2), 249-260.
- Pagis, M. (2010). From abstract concepts to experiential knowledge: Embodying enlightenment in a meditation center. *Qualitative Sociology*, 33(4), 469–489.
- Penley, J. A., Tomaka, J., & Wiebe, J. S. (2002). The association of coping to physical and psychological health outcomes: A metaanalytic review. *Journal of Behavioral Medicine*, 25(6), 551–603.
- Perrone, K. M., Ægisdóttir, S., Webb, L. K., & Blalock, R. H. (2006). Work-family interface: Commitment, conflict, coping, and satisfaction. *Journal of Career Development*, 32(3), 286–300.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS Quarterly*, 31(4), 623–656.
- Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon, L., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731.
- Pseekos, A. C., Bullock-Yowell, E., & Dahlen, E. R. (2011). Examining Holland's person-environment fit, workplace aggression, interpersonal conflict, and job satisfaction. *Journal of Employment Counseling*, 48(2), 63–71.

#### JOURNAL OF MANAGEMENT & ORGANIZATION

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893–917.

- Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal of Stress Management*, 12(2), 64–176.
- Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581–599.
- Shepherd, C. D., Tashchian, A., & Ridnour, R. E. (2011). An investigation of the job burnout syndrome in personal selling. *Journal of Personal Selling & Sales Management*, 31(4), 397-410.
- Singh, P., Suar, D., & Leiter, M. P. (2012). Antecedents, work-related consequences, and buffers of job burnout among Indian software developers. *Journal of Leadership & Organizational Studies*, 19(1), 83–104.
- Sole-Leris, A. (1986). Tranquillity & insight (an introduction to the oldest form of Buddhism). London, UK: Rider.
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? Organizational Research Methods, 9(2), 221-232.
- Thomas, C. H., & Lankau, M. J. (2009). Preventing burnout: The effects of LMX and mentoring on socialization, role stress, and burnout. *Human Resource Management*, 48(3), 417–432.
- Tourigny, L., Baba, V. V., & Xiaoyun, W. (2010). Burnout and depression among nurses in Japan and China: The moderating effects of job satisfaction and absence. *International Journal of Human Resource Management*, 21(15), 2741–2761.
- Trevelyan, R. (2011). Self-efficacy and effort in new venture development. *Journal of Management & Organization*, 17(1), 2–16.
- van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. J. (2012). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30–55.
- Wallace, B. A. (2006). The attention revolution: Unlocking the power of the focused mind. Boston, MA: Wisdom.
- Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition*, 19(2), 597–605.