THE CONTRIBUTIONS OF MINDFULNESS MEDITATION ON JOB BURNOUT AND JOB SATISFACTION

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ABSTRACT

This study examined the contributions of mindfulness mediation on burnout and job satisfaction. The data were obtained from 93 mediation practitioners and 54 non-practitioners in Thailand. Results suggested that respondents who had regularly practiced mindfulness mediation tended to report lower burnout. Mindfulness mediation also contributed indirectly to higher job satisfaction.

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

INTRODUCTION

As employees are considered valuable assets of a company, maintaining satisfied workforce can 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. 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 (Shepherd, Tashchian, & Ridnour, 2011). When experiencing stress, employees tend to come up with various strategies to help them alleviate the threat they encounter (Luria & Torjman, 2009). However, it has been suggested 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. Burnout can have negatively impact on wellbeing and work performance of employees (Maslach, Leiter, & Jackson, 2012; Tourigny, Baba, & Xiaoyun, 2010). It is also one of the key reasons that make employees become dissatisfy 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 characteristics (Hua & Cheng, 2010) and social and organizational supports (Sawang, 2010). However, most of the studies tended to focus on factors related to work environment which are outside the control of employees. In this study, the author proposes that mindfulness meditation

practice can be considered an intervention which can help employees themselves deal effectively with stress at work. Although the benefits of mindfulness meditation on stress reduction have received more attention in the area of psychology (Astin, 1997; Zeidan, Johnson, Diamond, David, & Goolkasian, 2010), its contribution to organizations has not been widely explored.

LITERATURE REVIEW AND HYPOTHESES

Mindfulness Meditation

Mindfulness meditation (MM) is originally rooted in Buddhist traditional practice that has emerged for centuries (Wallace, 2006). Chavan (2007: p.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; Moore & Malinowski, 2009). 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 prolong 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 *et al.*, 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).

Mindfulness Meditation 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 wellbeing, 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 metal and physical health can be more satisfy with their job because wellbeing makes them more productive in their work (Drydakis, 2011; Wright, Cropanzano, & Bonett, 2007). Mindfulness training has also been found to enhance the quality of relationship with other peoples (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:

H1: Mindfulness meditation 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: p.20). Maslach and Jackson (1981) suggested that burnout syndrome comprises of three interrelated components: emotional exhaustion, depersonalization, and diminished personal accomplishments. First, emotional exhaustion usually occurs when employees perceive that job-related demands are beyond their resources to handle. This aspect is particularly regarded as a core characteristic of burnout (Hobfoll, 2001). Second, depersonalization happens when employees perceive that they are unable to control critical aspects of their job. Third, diminished personal accomplishment happens when employees feel that they don't have enough competence to perform their works.

To date, two theoretical models of burnout that has been widely cited in the literature include the Conservation of Resources (COR) Theory (Hobfoll, 1989) and the Job Demands-Resources (JDR) 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 with related to work environments and job characteristics (e.g., high workloads, tight schedule, and role ambiguity) that require employees to exert physical or mental effort (Shepherd *et al.*, 2011). Resources can be viewed in terms of tangible and intangible factors that are considered valuable for individual (e.g., job security, family, and health), as well as job-related factors that enable employees to accomplish goals or to address job demands (e.g., competence, time, support). Hobfoll and Freedy (1993) suggested that job demands tend to diminish resources over time (e.g., high workloads limit the time to spend with a family or to take care of one's health. 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 usually leads to mental and health problems (Tourigny *et al.*, 2010). In organizations, job burnout can also cause negative effect on various job outcomes which can reduce job satisfaction (Lewin & Sager, 2008). In particular, Cordes and Dougherty (1993) suggested that the consequences of burnout include physical and emotional aspect, interpersonal aspect, attitudinal aspect, and behavioral aspect. For example, burnout has been found to reduce job motivation, commitment, and productivity (Maslach & Leiter, 2008). Specifically, Thomas and Lankau (2009: pp. 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 towards customers, coworkers, 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).

In research, Shepherd et al (2011) found that high emotional exhaustion significantly reduce job satisfaction of a large sample of salespeople throughout the United States. A study by Tourigny et al (2010) found negative relationships between the three aspects of burnout and job satisfaction among nurses from China and Japan. Cullen et al (2008) also found similar results in their samples of workers in food processing industry. Therefore, the following hypothesis is presented:

H2: Job burnout is negative associated with job satisfaction.

Mindfulness Meditation 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). This has made mindfulness training program become one of major stress reduction interventions in many countries. In particular, the quality of being attentive to the present moment is the key benefit of MM which 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 focus on their moment-to-moment experience, people who had 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 nonjudgmental 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" (Emavardhana & Tori, 1997: p.194; Sole-Leris, 1986). 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 elaborate 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:

H3: Mindfulness meditation is negative associated with job burnout.

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 old (S.D. = 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 7 held doctoral degree (5%). The average job experience is 9 years (S.D. = 6.91). For work position, 33 of them were supervisors (22%) and 144 were subordinates (78%).

For MM practice, 93 reported that they had regularly practiced MM (63%) and 54 reported did not practice at all (37%). The majority of MM practitioners reported that they meditated by observing breath. On average, time spent on the practice was 1 hours (S.D. = 1.88); the average days per week was 3 days (S.D. = 3.03); and the average years was 3 years (S.D. = 3.51).

Measurements

MM was measured using three indicators: the numbers 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 one hour); 2 (about one hour) … 7 (about six hours); and 8: (more than six hours). The number of days ranged from 1 to 7. The number of years ranged from 1 (less than one year); 2 (about one year)… 10 (about nine years); and 11 (more than ten 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.

Burnout was adopted from the Maslach Burnout Inventory-General Survey (Maslach *et al.*, 1996). It consists of three subscales: emotional exhaustion, cynicism, and professional efficacy. Only emotional exhaustion (4 items) and cynicism (5 items) were used. Sample items include "*I feel used up at the end of a work day.*", "*I doubt the significance of my work.*" Items were scored on a five-point rating scale ranging from 1 (never) to 5 (always).

Job satisfaction was adopted from Cammann et al (1983). Only one item "*All in all, I am satisfied with my job.*" was selected. It was scored on a five-point rating scale ranging from 1 (very dissatisfy) to 5 (very satisfy).

Control variables include job demands, supervisory support, coworker support, age, gender, education, job experience, and supervisory position. *Job demands*, *Supervisory social support*, and *Coworker social support* was adopted from Karasek et al (1998). Job demands was measured in terms of quantitative workload. The scale which contains 5 items that represent demanding aspects of the job. Sample items include "*My job requires working very hard.*", "*My job requires working very fast.*" Supervisor social support contains 5 items. Samples include "*supervisor pays attention.*", "*Supervisor is helpful.*" Coworker social support contains 5 items. Samples include "*coworkers are friendly.*", "*coworkers are helpful.*" All items were scored on a four-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); 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 techniques (Fornell & Larcker, 1981). PLS offers more flexibility compared to covariance-based SEM 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 SEM techniques (Chin & Newsted, 1999).

RESULTS

The analyses were performed in WarpPLS 3.0 (Kock, 2012). First, the estimation model was evaluated. The results, as well as the correlations between variables, were shown in TABLE 1. Reliability was tested by internal consistency measuring by Cronbach alphas (α). All variables had the values above the minimum requirement is .7 (Fornell & Larcker, 1981). The convergent validity of each item was evaluated using factor loadings. The results indicated that all loadings, except for one item for burnout, were greater than .7 (Hair et al, 2009). Convergent validity was assessed by the average variance extracted (AVE). The AVE for each construct was greater than 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 VIF Variance Inflation Factor (VIF) statistics. The VIFs ranged from 1.02 to 1.83, which were below the critical value of 3.3 as suggested by Petter et al (2007).

Analysis results from the structural model were presented in FIGURE 1. Control variables were pointed to each of the main variables. Only significant paths were 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 (β=-.178; p≤.01). Hypothesis 3 suggested that people who regularly practiced MM reduced burnout. The result also strongly supported this hypothesis at 1% level (β=-.449; p≤.01).
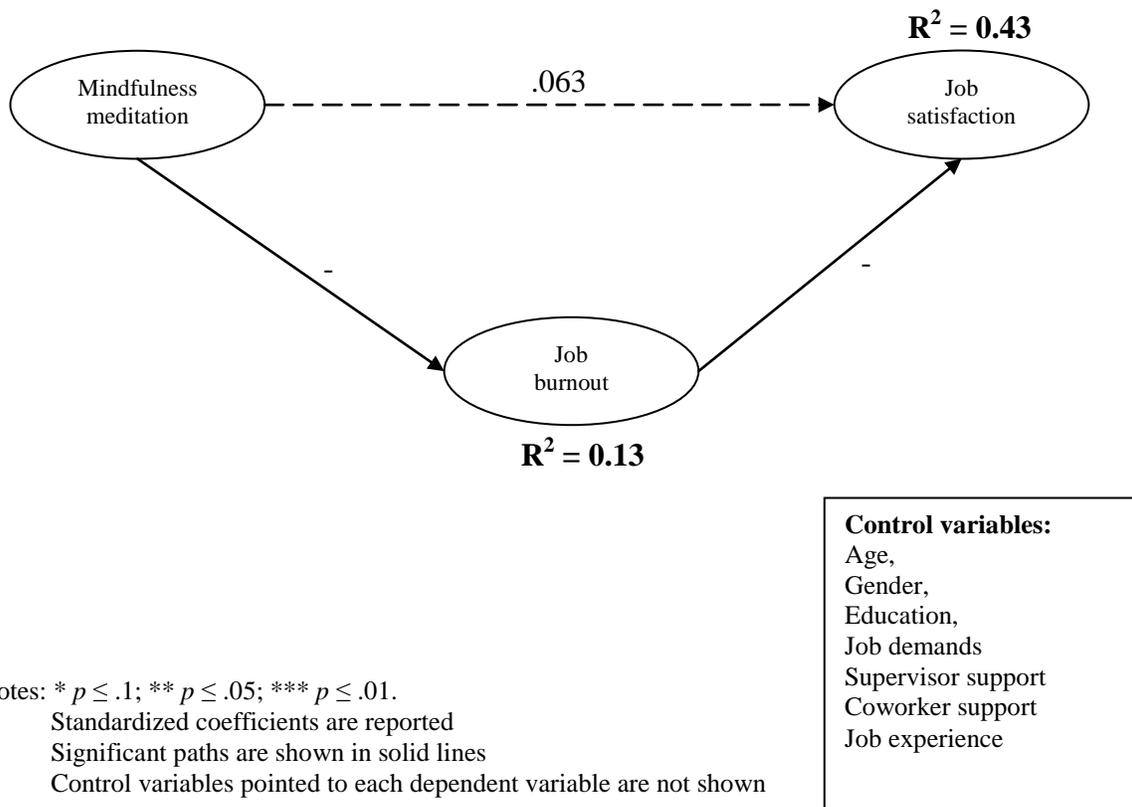
Back to Hypothesis 1 which predicted the positive relationship between practicing meditation and job satisfaction. Although the results showed the positive relationship between the variables, the significant level was not at or below 10% (β=.063; p=.17). To check for the possibility of the indirect relationship, the calculation of the indirect effect was performed in WarpPLS 3.0. The result showed the positive indirect relationship which was statistically significant at 1% level (β=.08; p≤.01). Therefore, Hypothesis 1 was supported in terms of the indirect link.

TABLE 1: Correlations matrix between variables, internal consistency, and convergent validity

Variables	α	1	2	3	4	5	6	7	8	9	10
1. Mindfulness meditation	.726	(.805)									
2. Job burnout	.908	-.197*	(.755)								
3. Job demands	.849	-.033	.285**	(.791)							
4. Supervisory social support	.937	.067	-.270**	-.005	(.919)						
5. Coworker social support	.921	-.064	-.246**	.061	.523**	(.900)					
6. Job satisfaction	-	.154	-.583**	-.148	.365**	.323	(1.00)				
7. Age	-	.094	-.219**	-.021	-.053	-.223	.194	(1.00)			
8. Gender	-	.070	-.032	.059	.027	.054	-.022	-.147	(1.00)		
9. Education	-	-.098	-.067	-.022	.058	-.082	.038	.069	-.186*	(1.00)	
10. Job experience	-	-.011	-.138	.042	-.015	-.113	.215**	.625**	-.137	.050	(1.00)

Notes: * $p \leq .05$; ** $p \leq .01$.

Average variance extracted of latent variables are shown in the parentheses

FUGURE 1: Results from the Partial Least Squares analysis

$$R^2 = 0.43$$

Mindfulness meditation .063 → Job satisfaction

-          -

Job burnout

$$R^2 = 0.13$$

Control variables:
Age,
Gender,
Education,
Job demands
Supervisor support
Coworker support
Job experience

Notes: $* p \leq .1$; $** p \leq .05$; $*** p \leq .01$.
         Standardized coefficients are reported
         Significant paths are shown in solid lines
         Control variables pointed to each dependent variable are not shown

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 (Shepherd *et al.*, 2011; Tourigny *et al.*, 2010). 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-focus coping to target and to alter the sources of problems tended to experience less burnout; on the other hand, employees who usually used emotion-focus coping to avoid facing with the problem directly tended to experienced more burnout. These results support the argument suggesting that emotion-focus 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. 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. Second, this study found that regular MM practice also led indirectly to higher job satisfaction. Overall, the results from this study are consistent with the job demand-resource perspective (Demerouti *et al.*, 2001; Hobfoll, 1989). 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 focus 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 (Edwards *et al.*, 2008). Studies have shown that employees who are satisfied with their job tend to be more productive; they are less likely to absent from work or leave the organization (Westover, Westover, & Westover, 2010). 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 which can help employee deal effectively with stress and burnout. In particular, practicing MM is crucial for employees to overcome work-related stressors since it can enhance the development of cognitive and emotional capabilities which 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 (Brown *et al.*, 2007; 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. Since practicing MM aims to substantiate this capability, it can tremendously benefit organizations because it can enhance employees' potential in various areas which 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 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.

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 though 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. Lastly, the small sample size can also limit the generalized power of the results to the larger scope. In particular, these limitations happened due 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 et al (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).

REFERENCES

Alwin, D.E., & Hauser, R.M. (1975). Decomposition of effects in path analysis. *American Sociological Review, 40*(1), 37-47.

Astin, J.A. (1997). Stress Reduction through Mindfulness Meditation: Effects on Psychological Symptomatology, Sense of Control, and Spiritual Experiences. *Psychother Psychosom, 66*, 97-106.

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

Brown, K.W., & Ryan, R.M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *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.

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 Seashore, S.E., Lawler, E.E., Mirvis, P.H. & Cammann, C. (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 Banerjee, R. & Chakrabarti, B.K. (Eds.), *Progress in Brain Research* (Vol. 168, pp. 247-253): Elsevier.

Chin, W.W., & Newsted, P.R. (1999). Structural equation modeling analysis with small samples using partial least squares. In Hoyle, R. (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.

Cordes, C.L., & Dougherty, T.W. (1993). A Review and an Integration of Research on Job Burnout. *Academy of Management Review, 18*(4), 621–656.

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 Smelser, N.J. & Baltes, P.B. (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.

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 Schaufeli, W.B., Maslach, C. & Marek, T. (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.

Jha, A., Krompinger, J., & Baime, M. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience, 7*(2), 109-119.

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.

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. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior, 2*(2), 99-113.

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.

Pagis, M. (2010). From Abstract Concepts to Experiential Knowledge: Embodying Enlightenment in a Meditation Center. *Qualitative Sociology, 33*(4), 469-489.

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.

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.

Sawang, S. (2010). Moderation or Mediation? An Examination of the Role Perceived Managerial Support has on Job satisfaction and Psychological Strain. *Current Psychology, 29*(3), 247-256.

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.

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 Publications.

Westover, J.H., Westover, A.R., & Westover, L.A. (2010). Enhancing long-term worker productivity and performance: The connection of key work domains to job satisfaction and organizational commitment. *International Journal of Productivity and Performance Management, 59*(4), 372-387.

Wright, T.A., Cropanzano, R., & Bonett, D.G. (2007). The Moderating Role of Employee Positive Well Being on the Relation Between Job Satisfaction and Job Performance. *Journal of Occupational Health Psychology, 12*(2), 93-104.

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.