

Relationships among Mindfulness, Suppression-Emotion Regulation, Reappraisal-Emotion Regulation, and Psychological Well-Being

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The Asian Conference on Psychology & the Behavioral Sciences 2017
Official Conference Proceedings

Abstract

With the increased number of psychological problems in workplace within Thailand, it becomes necessary to find ways to enhance psychological well-being for workers. One such way was to identify psychological ingredients that contribute to psychological well-being. Such attempts remained very limited in Thailand, however. This research study hence aimed to establish relationships among psychological well-being, mindfulness, cognitive reappraisal and emotional suppression. Data was collected in 148 Thai individuals who had been a worker in originations or companies (age 21 – 60 years). Participants responded to relevant measures. Multiple Regression Analysis was conducted. Findings suggested that mindfulness, cognitive reappraisal and emotional suppression together significantly predicted psychological well-being (38.5%, $p < .001$). Findings were discussed in terms of research contribution and clinical implication in worker's psychological well-being enhancement.

Keywords: mindfulness, emotion regulation, suppression-emotion regulation, reappraisal-emotion regulation, psychological well-being, employee

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Introduction

In Thailand, more than 50 % of Thai population was in the labor force or available for work (National Statistical Office of Thailand, 2017). Making preparation for supporting this population is essential. Attempts have been made to for this preparation; however, such attempts mainly focus on the physical and financial aspects. The provision for psychological support, however, does not advance at the same pace. Attempts to understand what contribute to psychological well-being in the Thai employees still remained, especially within the cognitive domain, very limited. The current study, therefore, aims to understand cognitive factors that contribute to psychological well-being in Thai employees. Psychological well-being in this study was based on Eudaimonic well-being which arises from the awareness and development of one's potential (Waterman, et al., 2010). In western research studies have indicated that mindfulness (Eberth & Sedlmeier, 2012), cognitive reappraisal and emotional suppression (Gross & John, 2003) contribute to psychological well-being.

Mindfulness is typically described as paying attention on purpose, in the present moment, and non-judgmentally, to the unfolding of experience moment-to-moment (Kabat-Zinn, 2003). As described, several theories discuss the place of awareness and attention in the maintenance and enhancement of psychological and behavioral functioning. One of these is self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000), which suggest that an open awareness, as in mindfulness, may be facilitating the choice of behaviors that are consistent with one's needs, values, and interests (Deci & Ryan, 1980). In this sense, mindfulness may facilitate psychological well-being through self-regulated activity and fulfillment of psychological needs (Hodgins & Knee, 2002) and can be facilitate directly by adding clarity and vividness to current experience and encouraging closer, moment-to-moment sensory contact with life that is, without a dense filtering of experience through discriminatory thought (Deci & Ryan, 1985; Kabat-Zinn, 2005). Mindfulness is mentioned that it is positively related to psychological well-being in many aspects such as self-esteem, optimism, pleasant Affect, positive Affect, vitality, self-actualization, autonomy, competence, relatedness (Brown & Ryan, 2003), as in recently research studies have shown that mindfulness is positively associated with psychological well-being (Eberth & Sedlmeier, 2012).

Emotion Regulations in this study are divided into two types, cognitive reappraisal and emotional suppression. Cognitive reappraisal is a form of cognitive change that involves construing a potentially emotion-eliciting situation in a way that changes its emotional impact (Lazarus & Alfert, 1964). This means that its can alter the entire subsequent emotion trajectory to decrease negative emotion. Emotional suppression is a form of response modulation that involves inhibiting ongoing emotion-expressive behavior (Gross, 1998). Moreover, suppression creates in the individual a sense of incongruence, or discrepancy, between inner experience and outer expression (Rogers, 1951). This sense of not being true to oneself, of being inauthentic rather than honest with others (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997), may lead to negative feelings about the self and alienate the individual not only from the self but also from others. Research studies has shown that cognitive reappraisal is positively influence on psychological well-being, While emotional suppression is negatively influence on psychological well-being (Gross & John, 2003).

This research study aimed to establish relationships among psychological well-being, cognitive reappraisal and emotional suppression. This study attempted to understand cognitive ingredients that contribute to psychological well-being in the Thai employees.

Psychological Well-being and Cognitive Factors

Eudaimonic well-being which arises from the awareness and development of one's potential. Eudaimonic conceptions of happiness are associated with notions of the true self, personal expressiveness, and meaningful goal pursuits (Ryan & Deci, 2001) and has been defined as the "quality of life derived from the development of a person's best potentials and their application in the fulfillment of personally expressive, self-concordant goals" by Waterman and colleagues (2010), Which has six components: self-discovery, perceived development of one's best potentials, a sense of purpose and meaning in life, investment of significant effort in pursuit of excellence, intense involvement in activities and enjoyment of activities as personally expressive (Lee & Carey, 2013). To summarize eudaimonic well-being is a form of psychological well-being that based on how much a person aware and understand toward oneself and the dedication to development of one's potential. According to the previous studies, mindfulness, cognitive reappraisal and emotional suppression could be viewed as cognitive ingredients that lead to psychological well-being.

Mindfulness originates from Eastern philosophies and the traditions of meditation (Jarukasemthawee, 2015). Recently, Western psychotherapies have paid a great deal of attention to the integration of mindfulness-based techniques into interventions of mental illness. These interventions include Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2003), Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), Dialectical Behaviour Therapy (DBT; Linehan, 1993), and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999). A number of research studies demonstrate the success of these interventions to reduce psychological difficulties (Baer & Krietemeyer, 2006). Later, research studies have begun to emerge on the benefits of mindfulness in positive psychology. Shapiro, Carlson, Astin, and Freedman (2006) suggested that the practice of mindfulness could enhance well-being and positive psychological outcomes. Brown and Ryan (2003) mentioned that mindfulness is positively related to a large array of beneficial outcomes, including positive affect, life satisfaction, autonomy, self-esteem, emotional regulation, self-compassion, psychological well-being, agreeableness, extraversion, openness, and conscientiousness. However, these findings are based on correlational studies.

Emotion Regulations can be defined as the ability to respond to the ongoing demands of experience with the range of emotions in a manner that is socially tolerable and sufficiently flexible to permit spontaneous reactions as well as the ability to delay spontaneous reactions needed (Cole, Michel & Teti, 1994). According to Gross & John (2003), emotional regulations are divided into two types, namely cognitive reappraisal and emotional suppression. Cognitive reappraisal is a form of cognitive change when one deals with stressful situations. It involves construing a potentially emotion-eliciting situation in a way that changes its emotional impact (Lazarus & Alfert, 1964). This means that its can alter the entire subsequent emotion trajectory to decrease negative emotion. Emotional suppression is a form of response modulation

that involves inhibiting ongoing emotion-expressive behavior (Gross, 1998). Emotional suppression is a form of response modulation that involves inhibiting ongoing emotion-expressive behavior (Gross, 1998). According to previous researches, a number of studies showed that cognitive reappraisal is positively associated with psychological well-being, In contrast emotional suppression appear to be negatively associated with psychological well-being (Gross & John, 2003).

Method

Participants

Participants were $n = 148$ (118 F, 40 M) Thai employees. Their mean age was $M = 31.22$ years ($SD = 5.8$). They were a worker in an origination or company (age between 21 – 60 year old). They met the selection criteria of having duration of employment in current organization at least 4 month or already had passed the probation in current organization.

Measures

The measures assessed psychological well-being (Jarukasemthawee, 2015), mindfulness (Jarukasemthawee, 2015), cognitive reappraisal and emotional suppression. All measures were translated into Thai following a procedure in scale translation proposed by Brislin (1970). In this procedure a person who is bilingual in English and Thai translated the questionnaire from English to Thai, and a second bilingual person independently translated the Thai version back to English. The original and back translated questionnaires were compared and discrepancies used to refine the translation.

The Eudemonic Well-Being Scale. (Waterman et.al, 2010) is a 21-item self-report scale assessing well-being across six domains: self-discovery, perceived development of one's best potential, a sense of purpose and meaning in life, investment of significant effort in pursuit of excellence, intense involvement in activities, and enjoyment of activities as personally expressive. Each item is rated on a five-point scale ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). The scale yields a total score with higher scores reflecting higher overall well-being score was used in the current study. The internal consistency of the scale was high, $\alpha = 0.86$

Freiburg Mindfulness Inventory. (Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006) is a 14-item self-report scale including four constructs; present-moment dis-identifying attention, nonjudgmental toward self and others, openness to negative mind states, and process-oriented or insight understanding. Each item is rated on a four-point scale ranging from 1 (*rarely*) to 4 (*almost always*). The scale yields a total score with higher scores reflecting higher overall mindfulness. The internal consistency coefficient of the scale was high, $\alpha = 0.86$

The Emotion Regulation Questionnaire. (Gross & John, 2003) is a 10-item self-report scale including two constructs; cognitive reappraisal (6 items) and emotional suppression (4 items). Each item is rated on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale yields a total score with higher scores which separate in to cognitive reappraisal and emotional suppression. The internal consistency coefficient of cognitive reappraisal was high, $\alpha = 0.84$ and 0.72 for emotional suppression.

Procedure

This study was approved by the Human Subjects Research Ethical Review Committee of Chulalongkorn University. Participation in the study was voluntary. Participants were screened for eligibility and after consenting to the study they were assessed on psychological well-being, mindfulness, cognitive appraisal, and emotional regulation.

Data Analysis

Statistical Package for Social Science (SPSS) version 21 was used to analyze data. Descriptive statistics were employed to explain demographic data of the sample. Relationships between psychological well-being, mindfulness, cognitive reappraisal, and emotional regulation were conducted using Pearson's product-moment correlation coefficients. Additionally, enter method, multiple regression was used to analyze the predictability of mindfulness, cognitive reappraisal, and emotional regulation on psychological well-being.

Results

Descriptive statistics and the correlations among variables were given in table 1. Psychological well-being was positively associated with mindfulness ($r = .554, p < 0.001$) and cognitive reappraisal ($r = .499, p < 0.001$). There was no correlation between emotional suppression and psychological well-being found.

Table 1

Descriptive statistics and Correlations between variables (N=148).

Variables	1	2	3	4
1. Psychological Well-Being	-	.554***	.499***	.025
2. Mindfulness	.554***	-	.579***	.344***
3. Cognitive Reappraisal	.499***	.579***	-	.349***
4. Emotional Suppression	.025	.344***	.349***	-
<i>M</i>	57.97	41.74	32.38	19.24
<i>Mdn</i>	57	41	32	20
<i>Sk</i>	0.17	0.07	-0.10	-0.55
<i>Ku</i>	-0.37	-0.09	-0.63	0.47
<i>SD</i>	9.51	5.84	5.39	3.96
<i>Min - Max</i>	33 - 80	25 - 55	19 - 42	5 - 28
<i>Possible score</i>	0 - 84	14 - 56	6 - 42	4 - 28

*** $p < .001$

Multicollinearity of variables were given in table 2. All the variables has tolerance more than 0.19 and has Variance Inflation Factor (VIF) less than 5.3, which means that all variables are independent from each other.

Table 2
Multicollinearity of variables.

Variables	Multicollinearity	
	Tolerance	VIF
Mindfulness	.642	1.557
Cognitive Reappraisal	.639	1.564
Emotional Suppression	.848	1.179

Results of Multiple Regression were given in table 3 using Enter method, Which found that all three variables together could predict psychological well-being at 40.5 percent ($R^2 = .405$, $p < .001$) When considering the standardized coefficients of variables found that all three variables are predictors, Mindfulness ($\beta = .45$, $p < .001$), Cognitive reappraisal ($\beta = .32$, $p < .001$) and Emotional suppression ($\beta = -.24$, $p < .01$).

Table 3
Multiple Linear Regression among variables.

Variables	<i>b</i>	<i>SEB</i>	β	<i>F</i>	<i>R</i>	<i>R</i> ²	<i>Adjusted R</i> ²
Psychological Well-Being				32.70	.637	.405	.393
Constant	20.09	4.81					
Mindfulness	.73	.13	.45***				
Cognitive Reappraisal	.57	.14	.32***				
Emotional Suppression	-.58	.17	-.24**				

** $p < .01$, *** $p < .001$

Discussions

Based on the study findings, several conclusions can be drawn. First both mindfulness and cognitive reappraisal are positively associated with psychological well-being. While emotional suppression is not correlated with psychological well-being. However the results showed that that psychological well-being of Thai workers was predicted by all variables namely mindfulness, cognitive reappraisal and emotional suppression. The results in this study contributed to psychological knowledge of Thai workers that in accordance with the previous studies, the results of Eberth and Sedlmeier (2012) shown that mindfulness was positively associated with psychological well-being, and Sin and Lyubomirsky (2009) found positive influence of mindfulness on psychological well-being. In addition, the findings from this study

support previous research which showed that cognitive reappraisal is positively influence on psychological well-being, While emotional suppression is negatively influence on psychological well-being (Gross & John; 2003; Sin and Lyubomirsky, 2009 and Quoidbach, Berry, Hansenne & Mikolajczak, 2010).

The explanation of mindfulness, cognitive reappraisal and emotional suppression may lead to psychological well-being could be viewed. Mindfulness is a statement of present moment and dis-identifying attention, non-judgmental and non-evaluative attitude towards self and others, openness to negative mind state and oriented insight (Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006). This could help the workers to promote psychological well-being through clear perceptions toward stimuli, and reduce negative thoughts and emotions. Consequently, this cognitive process may lead to enhanced psychological well-beings.

While the uses of emotion regulations in cognitive reappraisal that focus on cognitive change toward situations (Gross & John, 2003), make the workers change the aspect toward situations, to be more satisfied and appears connected to a more global sense that they are in charge of their situations. That will leads to enhancing in psychological well-beings. On the other hand, emotional suppression is a form of response modulation that involves inhibiting ongoing emotion-expressive behavior (Gross, 1998). Individuals who used emotional suppression dealing with situations, ones could feel a sense of incongruence, or discrepancy, between inner experience and outer expression (Rogers, 1951). This could lead to decrease in psychological well-being.

Limitations

Although this study may be provide useful insight into the associations among mindfulness, emotional regulation and psychological well-being. However, there are some limitations that need to be addressed. A common limitation in psychological studies is the use of self- report data, which is susceptible to social desirability. Given that the current study relied on self-report measures, it is susceptible to this form of bias. Future studies should aim to expand the data collection beyond self-report measures by using other methods, such as behavioural assessments. Another limitation in this study is that findings are based on a cross-sectional design. Therefore, conclusions about temporal precedence cannot be made. Future studies should aim to address this limitation in order to clarify the causal linkage between mindfulness, cognitive reappraisal and emotional suppression and psychological well-being.

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