



THE RELATIONSHIP BETWEEN PERSONALITY TRAIT AND MINDFULNESS DIMENSIONS IN PRIMARY SCHOOLS IN THAILAND

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Abstract

Personality trait and mindfulness are associated with a way we understand ourselves and those around us and consequentially be able to demonstrate skills to react in society peacefully. These skills are, for example, working with others, solving problems, making decisions, and adapting to change. The present study proposes a conceptual framework to examine relationship between personality trait and mindfulness dimension of students in primary schools in Thailand. School administrators, expert teachers, and parents have provided information about mindfulness activities and training conducted in schools and at home. Participating students aged between 7 and 12 will response to questionnaires measuring mindfulness dimensions and personality trait. The expected result will include the following: first, an analysis of mindfulness training activities classified based on mindfulness dimensions and personality trait, and, second, a statistic test on the relationship between personality trait and mindfulness dimensions in students. Then the classification of mindfulness training activities will be matched with relationship to recommend mindfulness training that can enhance the chosen mindfulness dimensions and personality trait.

Keywords: personality trait, mindfulness dimensions, mindfulness in education, mindfulness with children

Introduction

The concept of mindfulness is originated from Buddhism for 2,600 years; but the number of published studies on mindfulness has been steadily increased over the few decades. It has gained attention in both scientific research and practitioner's community as a mean to deal with a large variety of physical and psychological disorders (Keng et al. 2011). According to Kabat-Zinn (1994), "mindfulness means paying attention in a particular way; on purpose, in the present moment, and nonjudgmentally." Giluk (2010) lists several positive effects that already proved in research in healthcare and social science. The effects are shown in mental health and psychological well-being (e.g., depression, anxiety, stress), physical health (e.g., pain, physical impairment), and quality of intimate relationships – recorded in Baer (2003); Brown and Ryan (2003); Brown, Ryan, and Cresswell (2007); and Grossman et al. (2004). Specially, mindfulness also shows positive effects in workplace in reducing stress and exhaustion, having more positive relationships at work, and increasing adaptability (Hunter & McCormick, 2008). Hooker and Fodor (2008)



summarize benefits of mindfulness into four categories: cognitive change, self-management, relaxation, and acceptance. The literature evidences the benefits of mindfulness; however, most of them focus on adults. “Very little research and writing have been done on the use of mindfulness with children.” (Hooker & Fodor, 2008). Chongphaisal, Raweewan, and Wong (2012) measure an effect of mindfulness in emotional intelligence (EI) in children. After six weeks of training in classroom, EI score has improved. Hooker and Fodor suggest that schools should be an ideal setting to introduce mindfulness techniques to students; the same literature presents such mindfulness techniques. Hanh (2011) also proposes techniques to practice with children gathered from 30 years of experience teaching mindfulness to parents, teachers, and children. The techniques in both literatures, however, have taught in society and culture that different from Thailand. In Thailand, Buddhism has integrated in people’s daily life. Children are familiar with Buddhist practices. However, to implement mindfulness in schools successfully, mindfulness practitioners, Hooker and Fodor (2008) and Hanh (2011) advise that the training activities should be designed and adapted for each classroom, level and school setting before finally incorporated into the curriculum and practice throughout the school day. Therefore, our research focuses on a study of training activities that have been employed in schools that have incorporated mindfulness program in the curriculum. We will analyze correlation between students’ personality trait and mindfulness dimensions and looks for the possible matching between mindfulness activities and the relationship that come from correlation analysis, in order to find proper activities that can enhance mindfulness in chosen dimensions.

Mindfulness: a state and a trait

Researchers view mindfulness differently. The first group associates mindfulness as dispositional mindfulness or trait mindfulness as seen in neurobiology. The second group observes it as state of mind that can be changed with mindfulness training. They define this state as a state of being present in the here and now; being in the moment, being in your body; not being on “autopilot.” The last group investigates it as a combination of both a state and a trait – a characteristic changed with mindfulness practice.

Measuring mindfulness

The study of mindfulness began with a focus on clinical problems in adults, but since people have practiced it in religious traditions or for spiritual need, it has spread far beyond the work of clinician. The work on mindfulness in children shows the same process. (Greco & Hayes, 2008). Some of mindfulness techniques and technologies are being developed and tested with children. The same article examines clinical programs that use mindfulness methods tested in adults and later adapted to test in younger groups: Acceptance and Commitment Therapy (ACT) for pediatric pain, Dialectical Behavior Therapy (DBT), Mindfulness-based cognitive therapy (MBCT) for anxiety and Mindfulness-based stress reduction (MBSR). Even though the techniques share a focus on mindfulness, they are different. When applied to various populations, some programs’ name are slightly changed to refer population group: ACT for treatment of pediatric pain, ACT for childhood externalizing disorder, DBT-A for adolescents with borderline features, MBCT-C for children with anxiety, and MBSR for children in grades 4 through 6 and their parents.



Assessment of mindfulness in children and adolescents is still in early stage and developing; however, “the development of empirical measures for adults has helped guide

the field of mindfulness and its applications with children and adolescents” (Greco & Hayes, 2008). In adult measures, adults provide self-reported rating of various experiences on Likert scale – different tool, different scale. Examples of items in these questionnaires are “I notice the smells and aromas of things”, “I pay attention to sounds such as clocks ticking, birds chirping, or cars passing”, “I make judgments about whether my thoughts are good or bad”, etc. Some mindfulness measures are selected and summarized in the table below.

**Table 1. Summary of mindfulness measures
(in alphabetical, adapted from Greco and Hayes (2008))**

Measure Name	Author	Population	Length
Acceptance and Action Questionnaire	Hayes et al. 2004	A	9 items
Affective Control Scale	Williams, Chambless, & Ahrens, 1997	A	42 items
Avoidance and Fusion Questionnaire for Youth	Greco, Murrell, & Coyne, 2005	C, Ad	17 items
Child Acceptance and Mindfulness Measure (CAMP)	Greco & Baer, 2006	C, Ad	25 items
Diabetes Acceptance and Action Scale for Children and Adolescents	Greco & Hart, 2005	C, Ad	42 items
Difficulties in Emotion Regulation Scale	Gratz & Roemer, 2004	A	36 items
Kentucky Inventory of Mindfulness Skills (KIMS)	Baer, Smith, & Allen, 2004	A	39 items
Five Facet Mindfulness Questionnaire (FFMQ)	Baer, Smith, & Hopkins (2006)	A	39 items
Freiburg Mindfulness Inventory (FMI)	Buchheld, Grossman, & Walach (2001). Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt (2006)	A	30 items
Mindfulness Attention Awareness Scales (MAAS)	Brown & Ryan, 2003	A	15 items
Mindful Thinking and Action Scale for Adolescents	West, Sbraga, and Poole, 2007	Ad	32 items
Parental Acceptance and Action Questionnaire	Ehrenreich & Cheron, 2005	C, Ad	15 items
Personal Striving Assessment	Emmons, 1986	A	15 items in 8 domains
Personal Values Questionnaire	Blackledge & Ciarrochi, 2006a	Ad, A	9 items in 9 domains
Psychological Inflexibility in Pain Scale	Wicksell, Renofalt, Olsson, Bond, & Melin, 2007	A	16 items
Social Values Survey	Blackledge & Ciarrochi, 2006b	Ad, A	9 items in 3 domains
Toronto Mindfulness Scale (TMS)	Lau, Bishop, & Segal, 2006	A	13 items
Valued Living Questionnaire	Wilson & Groom, 2002	Ad, A	2 items in 10 domains

Note: A = Adult, C = Child, Ad = Adolescent

Our objective is to investigate a correlation between mindfulness dimensions and personality trait. Therefore, only Five Facet Mindfulness Questionnaire (FFMQ) is applicable to our work. While other questionnaire measures mindfulness in general, FFMQ



measures the five identified components of mindfulness meditation: observing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience.

However, in adapting mindfulness practices for children in a school setting, several articles emphasize the use of age-appropriate language. For instance, “don’t judge” corresponds to the “nonjudgmentally.” This brings the need of using stories, metaphors, and examples that are relevant to the lives of children in research target group, 7-12 year old, when introducing mindfulness concept to them. The same need is also required when we measure mindfulness and personality trait in children. FFMQ and Big Five Personality Test were designed for adults; thus, we need to adapt language for age appropriateness to the target group.

Methodology

Participants and procedure

Administrators, teachers, parents, and students who involve in mindfulness practice have participated in the study. Students age between 7 and 12, both male and female. Administrators, expert teachers, and parents were interviewed during school visits and in an exhibition called Awake and Aware organized by schools in mindfulness-in-education network in September 2012. They have provided information of mindfulness activities and training exerting mindfulness and personality trait, conducted in schools and at home. Students will response to questionnaires measuring scales in mindfulness dimensions and personality trait using an adaptation of Five Facet Mindfulness Questionnaire (FFMQ) and an adaptation of Big Five Personality Trait Test (Big 5), respectively.

Measures

Measure 1: Mindfulness dimension

There are several ways to measure mindfulness. In our work, mindfulness will be assessed through Five Facet Mindfulness Questionnaire (FFMQ). The original FFMQ is widely used, for example, in Baer, Smith, and Hopkins (2006), Baer, Smith, and Lykins (2008), Van Dam, Earleywine, and Danoff-Burg (2009) and Baer, Samuel, and Lykins (2011). However, FFMQ is adapted appropriately for children, ages 7-12.

Measure 2: Personality traits

Big 5 Personality Traits Test will be used to identify personality trait of students. The theory based on the Big Five factors is called the Five Factor Model (FFM), developed by Costa and McCrae (1992). These five basic dimensions of personality traits are openness, conscientiousness, extraversion, agreeableness, and neuroticism. Big 5, or FFM, is also adapted for age appropriateness.

Results and expected results

Research framework is presented in Figure 1. School administrators, expert teachers, and parents have provided information about mindfulness activities and training conducted in schools and at home. Participating students aged between 7 and 12 will complete measures of mindfulness dimensions and personality trait. The expected result will include the following: first, an analysis of mindfulness training activities classified based on the two measures, and, second, a statistic test on the relationship between personality trait and mindfulness dimensions in students. Then the classification of mindfulness training



activities will be matched with relationship to recommend mindfulness training that can enhance the chosen mindfulness dimensions and personality trait.

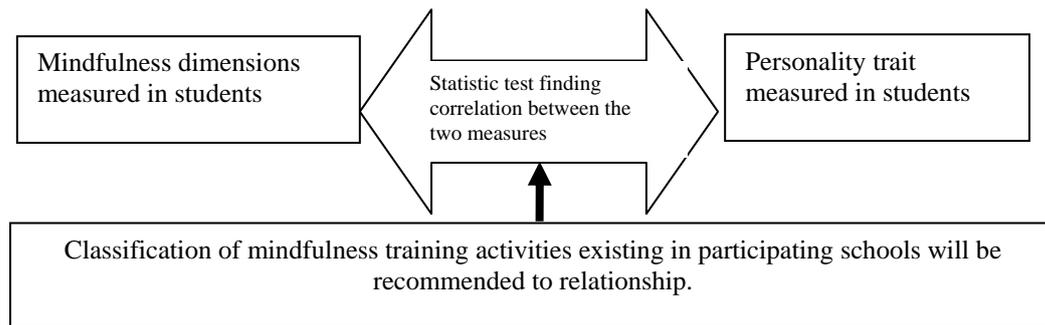


Figure 1 Conceptual of research framework

Discussion and Conclusion

This work is in the progress. We review mindfulness measures in adults, children, and adolescents and propose research framework. We expect to have a guideline and recommendation of mindfulness activities that are suitable for mindfulness developing in students aged between 7 and 12 in schools in Thailand.

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References

- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10, 125-143.
- Baer, R. A., Samuel, D. B., & Lykins, E. L. B. (2011). Differential item functioning on the five facet mindfulness questionnaire is minimal in demographically matched meditators and nonmeditators. *Assessment*, 18, 3-10.
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 11, 191-206.
- Baer, R. A., Smith, G. T., & Hopkins, J. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27-45.
- Baer, R. A., Smith, G. T., & Lykins, E. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, 15, 329-42.
- Blackledge, J. T. & Ciarrochi, J. (2006a). *Personal Values Questionnaire*. Available from the first author at University of Wollongong, New South Wales, Australia.
- Blackledge, J. T. & Ciarrochi, J. (2006b). *Social Values Survey*. Available from the first author at University of Wollongong, New South Wales, Australia.



- 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, 822-848.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, 211-237.
- Buchheld, N., Grossman, P., & Walach, H. (2001). Measuring mindfulness in insight meditation (vipassana) and meditation-based psychotherapy: The development of the freiburg mindfulness inventory (FMI). *Journal for Meditation and Meditation Research*, 1, 11-34.
- Costa, P.T., Jr. & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Chongphaisal, Pornpimol, Morrakot Raweewan, & Yau Yan Wong (2012) Developing Emotional Intelligence of people through meditation based on a research at a primary school in Thailand. *Proceeding of the 2012 International Conference on Business and Information (BAI2012)*, Sapporo, Japan.
- Ehrenreich, J. T. & Cheron, D. M. (2005). *Parental Acceptance and Action Questionnaire*. Available from Daniel M. Cheron, Department of Psychology, Boston University.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058-1068.
- Giluk, Tamara L. (2010) *Mindfulness-based stress reduction: facilitating work outcomes through experienced affect and high-quality relationships*. Dissertation, University of Iowa.
- Gratz, K. L. & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 26, 41-54.
- Greco, L. A., & Baer, R. A. (2006). *Child Acceptance and Mindfulness Measure (CAMM)*. Available from the first author at Department of Psychology, University of Missouri, St. Louis
- Greco, L.A., Baer, R.A., & Smith, G.T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the Child and Adolescent Mindfulness Measure (CAMM). *Psychological Assessment*, 23, 606-614.
- Greco, L. A., & Hart, T. A. (2005). *Diabetes Acceptance and Action Scale for Children and Adolescents*, Available from the first author at Department of Psychology, University of Missouri, St. Louis
- Greco, L.A. & Hayes S.C. (2008). *Acceptance and mindfulness treatments for children and adolescents: A practitioner's guide*. USA: New Harbinger Publication.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57, 35-43.
- Hanh, T. N. (2011). *Planting seeds: practicing mindfulness with children*. USA: Parallax press.



- Hayes, S. C., & Shenk, C. (2004) Operationalizing mindfulness without unnecessary attachments, *Clinical Psychology: Science and Practice*, 11, 249-254.
- Hooker K. E. & Iris E. Fodor (2008). Teaching mindfulness to children. *Gestalt Review*, 12(1), 75-91.
- Hunter, J., & McCormick, D. W. (2008). *Mindfulness in the workplace: An exploratory study*. In S.E. Newell (Facilitator), Weickian Ideas. Symposium conducted at the annual meeting of the Academy of Management, Anaheim, CA.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: mindfulness meditation in everyday life*. New York: Hyperion.
- Keng, S.-L. , Smoski, M.J., & Robins, C.J. (2011) Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31, 1041-1056.
- Lau, M. A., Bishop, S. R., & Segal, Z. V. (2006). The Toronto mindfulness scale: Development and validation. *Journal of Clinical Psychology*, 62, 1445.
- Van Dam, N. T., Earleywine, M., & Danoff-Burg, S. (2009). Differential item function across meditators and non-meditators on the five facet mindfulness questionnaire. *Personality and Individual Differences*, 47, 516-521.
- Walach, H., Buchheld, N., Butenmuller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring mindfulness--The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40, 1543-1555.
- West, A. M., Sbraga, T. P., & Poole, D. A. (2007), *Measuring mindfulness in youth: Development of the Mindful Thinking and Action Scale for Adolescents*. Unpublished manuscript, Central Michigan University.
- Wicksell, R. K., Renofalt, J., Olsson, G. L., Bond, F. W., & Melin, L. (2007). *Avoidance and fusion: Central components in pain related disability? Development and preliminary validation of the Psychological Inflexibility in Pain Scale*. Manuscript in preparation, Astrid Lindgren Children's Hospital, Karolinska University Hospital, Stockholm, Sweden.
- Williams, K.E., Chambless, D.L., & Ahrens, A. (1997). Are emotions frightening? An extension of the fear of fear construct. *Behavior Research and Therapy*, 35, 239-248.
- Wilson, K. G., & Groom, J. (2002). *The Valued Living Questionnaire*. Available from the first author at the University of Mississippi.