Assessing “Western” Mindfulness among Thai Theravāda Buddhist Monks

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Description
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Abstract

Mindfulness has its roots in Eastern contemplative traditions and is rapidly gaining popularity in Western psychology. However, questions remain regarding the validity of Western operationalizations of mindfulness. Therefore, the purpose of this study was to assess the applicability of several Western mindfulness measures among a sample of Thai Theravāda Buddhist monks. Twenty-four monks recruited from Buddhist temples in Thailand participated in the study. The monks evinced similar associations between mindfulness and related variables as American validation study samples did, and on two facets of mindfulness the monks’ mean scores were greater than an American college student sample. However, the American sample endorsed significantly higher scores on three other facets of mindfulness. These results raise concerns about whether these scales are measuring mindfulness as it is conceptualised in a Buddhist context. Future research with larger samples is needed to further assess the cultural validity and measurement equivalence of Western mindfulness measures across cultural groups.

Keywords: mindfulness, Thai Buddhist monks, cultural validity

Mindfulness in Western Science

In recent years Western psychology has developed a burgeoning interest in mindfulness. Western researchers have defined mindfulness as paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally (Kabat-Zinn, 1994) and as an awareness of present experience with acceptance (Germer, Siegel, & Fulton, 2005). Bishop et al. (2004) operationalized mindfulness as two interrelated components: (1) the self-regulation of attention focused on immediate experience, and (2) an orientation that is characterised by curiosity, openness, and acceptance.

To varying degrees, mindfulness practice forms the foundation for several psychotherapies developed in the West over the past two decades. Mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990) and mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2002) conceptualise daily
formal mindfulness practice (e.g., sitting meditation) as the essential element in the amelioration of symptoms associated with stress-related disorders and the prevention of depressive relapse, respectively. Alternatively, befitting of the more comprehensive theoretical bases for these treatments, acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and dialectical behaviour therapy (DBT; Linehan, 1993) utilize various techniques in which mindfulness-related skills are practiced without necessarily engaging in meditation. Additional mindfulness-based psychotherapies have been developed to treat other clinical syndromes, including (but not limited to) eating disorders (Kristeller & Hallet, 1999), substance use disorders (Marlatt et al., 2004), couple distress (Christensen, Sevier, Simpson, & Gattis, 2004), and generalized anxiety (Roemer & Orsillo, 2002). There is a growing body of empirical support for the effectiveness of mindfulness-based interventions in reducing symptoms associated with a variety of medical and psychological conditions (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004). Similarly, neuroimaging studies suggest that mindfulness training results in neural changes hypothesized to be related to enhanced attention capabilities and positive affect (Farb et al., 2007; Jha, Krompinger, & Baime, 2007). Moreover, correlational studies have revealed that dispositional mindfulness is related to a variety of desirable attributes, including subjective well-being, cognitive flexibility, and emotional intelligence (see Brown, Ryan, & Creswell, 2007). On the other hand, in a recent meta-analysis of randomised controlled trials of MBSR and adapted MBSR treatments, it was concluded that collectively these interventions have equivocal effects on symptoms of anxiety and depression (Toneatto & Nguyen, 2007). Moreover, although generally not assessed in most mindfulness-based treatment outcome research, increased mindfulness has been presumed to be the causal factor resulting in symptom reduction. Until recently, this has been due in large part to a lack of self-report mindfulness measures.

To fill this need several mindfulness measures have been developed in recent years. These include the Cognitive and Affective Mindfulness Scale – Revised (CAMS-R; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007), the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Wallach, 2001; Walach, Buchheld, Buttenmüller, Klienknecht, & Schmidt, 2006), the Toronto Mindfulness Scale (TMS; Lau et al., 2006), the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004), and the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003). These measures offer unique advantages and disadvantages in terms of their conceptual coverage of the components of mindfulness, their item content, and their generalizability. Perhaps because they were two of the earliest developed scales, the KIMS and MAAS have been used more in research relative to the other scales. Although mindfulness is operationalized in a slightly different way in the KIMS and MAAS, both conceptualise the construct as a trait (as opposed to state) and both assess the general tendency to be mindful in daily life (Baer et al., 2004; Brown & Ryan, 2003). We decided to utilize the KIMS and MAAS in this study because together they represent a robust measure of the Western conceptualization of mindfulness, capturing both the attentional and attitudinal components\(^1\). These two scales are reviewed in more detail below.

**Mindful Attention Awareness Scale (MAAS)**

Brown and Ryan (2003) operationally defined mindfulness as an open or receptive attention to and awareness of present events and experience and the MAAS measures this by asking respondents to rate the frequency with which their day-to-day consciousness reflects this quality. The development of MAAS items was centred on the idea that present-focused awareness is the foundation of mindfulness. The MAAS therefore assesses a distinct type of attentional awareness that facilitates the self-regulation necessary for the development of positive states of mind, and similar to the KIMS, the MAAS
conceptualises mindfulness as a naturally occurring trait with variable levels that can be impacted by meditation experience, but was not designed exclusively to assess it. Unlike the KIMS, the MAAS only includes statements that tap mindlessness (e.g., “I do jobs or tasks automatically, without being aware of what I am doing”). Brown and Ryan (2003) assert that mindlessness is more easily detected given that these types of thoughts and actions are more common than mindful ones.

**Kentucky Inventory of Mindfulness Skills (KIMS)**

In developing the KIMS, Baer and colleagues (Baer et al., 2004) conceptualised mindfulness in terms of four behaviourally oriented factors: observing or attending to internal and external stimuli; describing and labelling phenomena non-judgmentally; acting with awareness in which undivided attention is focused on one thing at a time, and; accepting or allowing present moments or events to occur without judging them. The theoretical basis for these four factors was derived primarily from the DBT operationalization in which mindfulness is dichotomized into “what” skills (observing, describing, and participating) and “how” skills (taking a nonjudgmental stance, focusing on one thing in the moment, and being effective) (Linehan, 1993). Although the KIMS was developed from a DBT perspective, it is not theoretically dissimilar from the mindfulness interventions utilized in MBSR and MBCT (Baer et al., 2004). The KIMS was also designed to be understandable to general and clinical populations regardless of meditation experience and to tap a unique combination of mindfulness characteristics.

Both the KIMS and MAAS have demonstrated evidence of reliability and validity, including higher scores on both scales for experienced meditators compared to non-meditators in American samples (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Brown & Ryan, 2003); however, their use and the subsequent assessment of their psychometric qualities beyond primarily white American college students has been limited. As noted above, mindfulness has its roots in Eastern spiritual traditions, and Buddhism in particular. In shifting contexts from religion to psychotherapy, mindfulness has been adapted to fit with Western scientific ideals and to enhance its palatability to Western patients (Kabat-Zinn, 2003). Similarly, operationalizations of mindfulness have been constructed with an eye toward deconstructing specific components; however, these attempts have thus far led to little consensus in psychology (Hayes & Wilson, 2003).

**Mindfulness in Thai Theravāda Buddhism**

Most Buddhist traditions dictate that mindfulness cannot be easily extracted and analysed in isolation from inherently interrelated concepts (Buddhadasa Bhikku, 1988; Rosch, 2007). The Buddha taught that in order to end suffering, we must adhere to the Noble Eightfold Path (āṭṭhāṅgika magga). Considered from the standpoint of practical training, the eight path factors divide into three groups: (a) ethical conduct (silakkhandha), which is composed of right speech (sammā vācā), right action (sammā kammaṇa), and right livelihood (sammā ājīva); (b) concentration (sammadhikkhandha) which is composed of right effort (sammā viyāma), right mindfulness (sammā sati), and right concentration (sammā samādhi); and (c) wisdom (paññakkhandha), which is composed of right understanding (samma diṭṭhi) and right thinking (sammā sankappa). Clearly, mindfulness is only one part (albeit an important one) of the Noble Eightfold Path. Additionally, the relationship between the eight path factors is best conceived of in a circular as opposed to a linear fashion (Payutto, 2003). All path factors (as are all phenomena) are interdependent; nothing necessarily comes before or after each other and the factors cannot exist without one other (Buddhadasa Bhikku, 1988). For example, with regard to the concentration group outlined above, right concentration brings the requisite stillness to the mind by unifying it with undistracted focus...
on a suitable object. To do so, however, the factor of concentration needs the aid of effort and mindfulness; right effort provides the energy demanded by the task, right mindfulness the steadying points for awareness (Bhikku Bodhi, 1984).

In Theravāda Buddhism, where particular emphasis is placed on the original Pāli canon, mindfulness (sati) means to bear in mind or bring to mind; sati is the state of recollecting, the state of remembering, the state of non-fading, the state of non-forgetting (Payutto, 1971/1995). The way to enlightenment starts with sati insofar as it clears the ground for insight into the nature of things by bringing to light phenomena in the now, the present moment, stripped of all subjective commentary, interpretations, and projections (Bhikku Bodhi, 1984).

To practice mindfulness is thus a matter not so much of doing but of undoing: not thinking, not judging, not associating, not planning, not imagining, not wishing. All these “doings” of ours are modes of interference, ways the mind manipulates experience and tries to establish its dominance. Mindfulness undoes the knots and tangles of these “doings” by simply noting. It does nothing but note, watching each occasion of experience as it arises, stands, and passes away. In the watching there is no room for clinging, no compulsion to saddle things with our desires. There is only a sustained contemplation of experience in its bare immediacy, carefully and precisely and persistently (Bhikku Bodhi, 1984, p. 72).

As Wallace and Shapiro (2006) suggest, there appears to be a discrepancy between the current (particularly in Western mindfulness-based psychotherapies) and the more traditional usage of mindfulness. When Western psychology extracted the essence of mindfulness from its original religious-cultural roots, conscientiousness, clear comprehension, intention and other important Buddhist concepts were largely omitted (Leary & Tate, 2007; Shapiro, Carlson, Aston, & Freedman, 2006). Relatedly, Baer (2003) cautions that operationalizing mindfulness interventions risks overlooking important elements of the long tradition from which mindfulness meditation originates, and Kabat-Zinn (2003) warns that if the prevailing kinds of mindfulness research and theorizing are continued exclusively, they may prove limiting, distorting, and ethnocentric.

The distinction between the Eastern and Western conceptualisations of mindfulness is exemplified in the differences between Buddhist mindfulness practice in Thailand and psychotherapeutic prescriptions of mindfulness in the West. These differences are also evident in the measures currently used to assess mindfulness, as these were derived from specific Western operationalizations of mindfulness. Therefore, our goal in this study was to test the applicability of several measures designed to assess the Western conceptualisation of mindfulness among a small sample of Thai Theravāda Buddhist monks. For comparative purposes we also included small samples of college students from Thailand (a predominantly Buddhist culture) and the U.S. More specifically, in this exploratory study we proposed the following hypotheses:

**Hypothesis 1:** Among Thai Theravāda Buddhist monks, mindfulness would be negatively related to depressive symptoms and negative cognitions, and a positively related to satisfaction with life.

**Hypothesis 2:** Thai Theravāda Buddhist monks would endorse higher levels of mindfulness than American college students, and Thai college students would probably fall in between these two groups.
Method

Participants

The 24 monks in this study were recruited from two Theravāda Buddhist temples located in rural, north central Thailand. The mean age of the monks was 37.46 years (SD = 15.54) and the monks reported an average of 69.67 minutes (SD = 25.38) of daily sitting meditation practice. The monks further reported 14.86 mean years of meditation experience (SD = 8.22) and being an ordained monk for an average of 3.96 years (SD = 0.82). Thai college student participants were 77 (49 female, 28 male) undergraduate students recruited from a large private university in Bangkok, Thailand. The mean age for Thai students participants was 19.97 years (SD = 1.65). Consistent with Thai census data figures, 94% (n = 73) of Thai participants reported a Buddhist religious affiliation, 5% (n = 3) Christian, and 1% (n = 1) Muslim. Thirty percent (n = 23) of the Thai student sample endorsed having a current meditation practice. American college student participants were 95 (72 female, 23 male) undergraduate students recruited from a small private college located in the Pacific Northwestern U.S. The mean age for American participants was 22.76 years (SD = 7.52). The racial and ethnic makeup of the American sample was 5% (n = 5) African American, 17% (n = 16) Asian American, 1% (n = 1) Latino American, 1% (n = 1) Native American, 69% (n = 65) White American, 5% (n = 5) Multiracial, and 2% (n = 2) other. The primary responses to religious affiliation among the American sample were 26% (n = 25) none, 24% (n = 23) other, 18% (n = 17) Catholic, and 8% (n = 7) Protestant. Six percent (n = 6) of the American student sample endorsed having a current meditation practice.

Measures

Mindful Attention Awareness Scale. The MAAS is a 15-item questionnaire in which respondents indicate, on a 6-point Likert-type scale (1 = almost always to 6 = almost never), their level of awareness and attention to present events and experiences (Brown & Ryan, 2003). Sample MAAS items include “I find it difficult to stay focused on what’s happening in the present” and “I do jobs or tasks automatically, without being aware of what I’m doing.” A mean rating score is calculated with higher scores indicating greater mindfulness. The MAAS shows a good range of internal consistency across a wide range of American samples (α = .80 – .87) and excellent test-retest reliability over a 1-month time period (r = .81). The MAAS also exhibits adequate convergent validity; as expected it correlates negatively with measures of anxiety and depression and positively with measures of positive affect and self-esteem (Brown & Ryan, 2003).

Kentucky Inventory of Mindfulness Skills. The KIMS is a 39-item questionnaire in which respondents rate, on a 5-point Likert-type scale (1 = never or very rarely true to 5 = always or almost always true), their general tendency to be mindful in daily life (Baer et al., 2004). The KIMS was designed to measure four elements of mindfulness: Observing, Describing, Acting with Awareness, and Accepting without Judgment. Items include, “I notice when my moods begin to change” (Observing); “I’m good at finding words to describe my feelings” (Describing); “When I do things, my mind wanders off and I’m easily distracted” (Acting with Awareness – reverse scored); and “I tell myself that I shouldn’t be feeling the way I’m feeling” (Accepting without Judgment – reverse scored). Internal consistencies and test-retest correlations (over a two-week period) among American samples range from .76 to .91 and .65 to .86, respectively, for the four subscales. Exploratory and confirmatory factor analyses supported the proposed
four-factor structure, and expected correlations with a variety of other constructs were obtained (Baer et al., 2004).

Center for Epidemiological Studies Depression Scale (CES-D). The CES-D is a 20-item questionnaire in which respondents rate, on a 4-point Likert-type scale (0 = rarely or none of the time to 3 = most all of the time) their depression symptoms over the past week (Radloff, 1977). Of the 20 items, 4 are positive and are reverse scored. Sample items include, “I felt depressed” and “I had crying spells.” The alpha coefficient in an American general population sample was .85 (Radloff, 1977). In a translated version of the CES-D among a sample of Thai adolescents the alpha coefficient was .88 (Charoensuk, 2007). Among Thai (Charoensuk, 2007) and American (Radloff, 1977) samples expected correlations with a variety of other constructs have been obtained.

Crandell Cognitions Inventory (CCI). The CCI is a 45-item questionnaire in which respondents rate, on a 5-point Likert-type scale (1 = almost never to 5 = almost always) their depressive cognitions (Crandell & Chambless, 1986). Only the 34 negatively worded items are scored, the 11 positively worded items are included as a buffer. The CCI was designed to measure Beck’s (1967) hypothesis that the thoughts of depressed individuals are characterized by negative distortions concerning themselves, the world, and the future. Sample items include, “I’m just a nobody” and “I’ll never be happy with myself.” The alpha coefficient of the CCI in an American sample composed of depressed patients and non-depressed controls was .95 (Crandell & Chambless, 1986). In a translated version of the CCI among a sample of Thai adolescents the alpha coefficient was .90 (Charoensuk, 2007). In American (Crandell & Chambless, 1986) and Thai (Charoensuk, 2007) samples, convergent validity has been demonstrated by a strong positive correlation between the CCI and CES-D.

Satisfaction with Life Scale (SWLS). The SWLS (Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item measure that is widely used to represent the cognitive evaluation of subjective well-being. Sample items include, “In most ways my life is close to my ideal” and “The conditions of my life are excellent.” All items on the SWLS are scored on 7-point Likert-type scales (1 = strongly disagree to 7 = strongly agree). Among an American sample, alpha coefficient was .87 and the test-retest reliability over a two-month interval was excellent (r = .82). A translated version of the SWLS demonstrated adequate reliability and validity among a Thai sample (Dejitthirat, 2004).

All instruments were translated following the International Test Commission (ITC) test translation and adaptation guidelines (Hambleton, 2001; Van de Vijver & Hambleton, 1996). The systematic approach to translation was selected for its assurance of construct equivalence rather than verbatim equivalence between the original and target languages. The instruments were translated into Thai by fully bilingual native speakers. These versions were then blindly back-translated into English by different bilingual individuals. Results were examined and translations adjusted to ensure the equivalence of meanings. Individuals from Thailand were also consulted to ensure the clarity of directions on how to complete the measures. Before completing the questionnaires, all participants provided written informed consent and the voluntary nature of the study was emphasized.

Statistical Analyses

All analyses were conducted using SPSS for Windows version 15.0 (SPSS Inc., 2006). The relationships between the MAAS, KIMS Observing, KIMS Describing, KIMS Acting with Awareness, KIMS
Accepting without Judgment, CES-D, CCI, and SWLS were examined using zero-order Pearson’s correlations. A one-way multivariate analysis of variance (MANOVA) was used to examine mean differences between the monks, Thai students, and American students for the MAAS, KIMS Observing, KIMS Describing, KIMS Acting with Awareness, and KIMS Accepting without Judgment. Tukey HSD comparisons were used to further evaluate specific group differences.

**Results**

Associations between variables for the monks are displayed in Table 1. With regard to the patterns of associations among the KIMS subscales and the MAAS, as expected, KIMS Describing and KIMS Observing \( (r = .40, p < .05) \) and KIMS Acting with Awareness and KIMS Accepting without Judgment \( (r = .63, p < .001) \) were significantly positively associated. Unexpectedly, KIMS Observing was significantly negatively associated with KIMS Acting with Awareness \( (r = -.54, p < .01) \) and KIMS Accepting without Judgment \( (r = -.63, p < .001) \). With regard to the expected correlations with other constructs on theoretical grounds (i.e., CES-D, CCI, and SWLS), as expected, CES-D was significantly negatively associated with KIMS Acting with Awareness \( (r = -.40, p < .05) \) and KIMS Accepting without Judgment \( (r = -.50, p < .05) \); CCI was also significantly negatively associated with KIMS Acting with Awareness \( (r = -.51, p < .01) \) and KIMS Accepting without Judgment \( (r = -.53, p < .01) \). SWLS was also significantly positively associated with the overall MAAS \( (r = .55; p < .01) \) and KIMS Describing \( (r = .52; p < .01) \). Additionally, CCI was significantly positively associated with CES-D \( (r = .86; p < .001) \). All other correlations were non-significant \( (p > .05) \).

![INSERT TABLE 1 HERE]

Mean scores on the MAAS and KIMS subscales for the monks, Thai students, and American students are shown in Table 2. MANOVA results revealed a significant main effect for group (Thai monks, Thai students, and American students): Wilks’s lambda = .67, \( F(10, 376) = 8.39, p < .001, \eta^2 = .18 \). As expected, the monks endorsed higher mean scores on the MAAS in comparison to Thai and American students, and on KIMS Acting with Awareness the monks also scored significantly higher than the American students; however, there was no difference between the monks and the Thai students. Unexpectedly, on KIMS Observing and KIMS Accepting without Judgment, American students endorsed higher mean scores than the monks and Thai students, and on KIMS Describing the American students also scored significantly higher than the monks, but they did not differ from the American students.

![INSERT TABLE 2 HERE]

**Discussion**

Overall, in this exploratory study our goal was to test the applicability of several measures designed to assess the Western conceptualisation of mindfulness among a small sample of Thai Theravāda Buddhist monks. In providing evidence for the cultural validity of the MAAS and KIMS in this population, the relationships between facets of mindfulness and other constructs on theoretical grounds were generally as expected. For example, KIMS Acting with Awareness and KIMS Accept without Judgment were negatively correlated with the CES-D and CCI, partially replicating previous studies in which all KIMS factors (except for Observing) were negatively related to depression and negative affect (Baer et al., 2004; McKee, Zvolensky, Solomon, Bernstein, & Leen-Feldner, 2007). As also demonstrated in previous
research, among the monk sample, MAAS and KIMS Describing were positively correlated with the SWLS (Baer et al., 2004; Brown & Ryan, 2003). Similarly, as expected monks endorsed higher scores than American college students on the MAAS and KIMS Acting with Awareness. These results are similar to previous research in which Zen meditators had higher MAAS scores than a non-meditating community sample (Brown & Ryan, 2003) and experienced meditators endorsed higher Acting with Awareness scores than a non-meditating comparison sample (Baer et al., 2008).

On the other hand, there were several unexpected findings. For example, similar to the American validation study sample, for the monks KIMS Observing was significantly negatively correlated with KIMS Accepting without Judgment. Baer et al. (2004) suggested that among American college students this may have been due to a lack of meditation experience, and Baer and colleagues (2008) subsequently discovered that among experienced meditators Observing is positively related to Accepting without Judgment. However, the monks in our sample averaged almost 15 years of daily meditation experience, thus the negative relationship between these two facets of mindfulness is puzzling. One explanation for this result may be that the relationship between Observing and Accepting without Judgment (as measured by the KIMS) may be impacted differentially by various types of meditation practice. For example, most of the meditators in the Bear et al. (2008) study were recruited from a conference on mindfulness at the University of Massachusetts Medical School, which is where much of the research and development of MBSR has taken place. Perhaps most of the meditators in Bear et al.’s (2008) sample primarily practise MBSR exercises, where mindfulness is taught with the explicit goal of reducing stress. Alternatively, Thai Theravada Buddhist monks engage in a wide variety of meditative practices (e.g., loving kindness, contemplating death) not to reduce stress, but rather to accept the impermanence of all phenomena. Scales such as the KIMS were developed to assess Western prescriptions of mindfulness and may measure these facets more accurately among those engaging in MBSR and similar practices. Similarly, statistically significant differences between the American student sample and the monks on KIMS Observing, KIMS Describing, and KIMS Accepting without Judgment (with American students endorsing higher scores on all three) may be more of a reflection of the item content in these measures than actual differences in mindfulness between the groups. In Western psychology—and in the KIMS Accepting without Judgment factor for example—mindfulness focuses on acceptance of the impermanence of distressing thoughts and emotions. In Buddhism mindfulness is not practiced to alleviate stress or to reduce depression, but as noted above to develop acceptance of the impermanence of all phenomena, including the self (Ostafin, Chawla, Bowen, Dillworth, Witkiewitz, & Marlatt, 2006).

The results of this study must be interpreted with caution due to several limitations. The measurement techniques used in this study were exclusively self-report questionnaires. Some scholars note potential confounds when comparing Likert-type self-report scale scores across cultural groups (e.g., Heine, Lehman, Peng, & Greenholtz, 2002). For example, problems can stem from variation in response styles, such as extreme response style, which is a group (e.g., cultural) tendency to either overuse or to avoid the endpoint responses on scale items (Cheung, 2008). These issues may be compounded further by the lack of consensus regarding mindfulness in Western psychology (including mindfulness assessments), where it has been conceptualised in a variety of ways, including as a technique, as a more general method or collection of techniques, as a psychological process that can produce outcomes, and as an outcome in and of itself (Hayes & Wilson, 2003). Moreover, the three samples (Thai Buddhist monks, Thai college students, and American college students) were not comparable in several areas (e.g., age, gender, education), therefore experiential differences or other factors may also have accounted for some or all of the unexpected results. To address these issues, larger samples are needed to assess the measurement equivalence of the scales across cultural groups using structural equation modelling and other more
sophisticated analyses. Similarly, future research should focus on the development of multimodal (e.g., behavioural, interview, self-report) techniques to measure these areas in broader assessments of mindfulness and inherently related concepts.

Despite these limitations, we believe the results of this study raise important questions about mindfulness practice and research in Western psychology. Given the potential for mindfulness-based interventions to help people around the world, it is of crucial importance that as a field we do not overlook important elements of the long tradition from which mindfulness meditation originates in the name of science. As noted above, mindfulness is only one of eight inherently interrelated factors of the Noble Eightfold Path. Thus, to truly measure mindfulness we should not only assess one’s awareness, concentration, or acceptance, but also his or her ethical conduct and clear comprehension as well. Studying meditative psychologies and philosophies with sensitivity to cultural and conceptual differences can unveil limiting and ethnocentric assumptions. This preliminary study suggests that these tendencies may be present in the KIMS and the MAAS (and perhaps in Western mindfulness-based interventions as well) and must be addressed if all are to benefit from the Buddha’s teachings.
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Footnote

1Baer, Smith, Hopkins, Kriememeyer, and Toney (2006) recently developed another self-report measure of mindfulness skills entitled the Five Facet Mindfulness Questionnaire (FFMQ). The FFMQ consists of items from several mindfulness scales, including the KIMS, CAMS, FMI, and MAAS. Items for the FFMQ were selected on the basis of a factor analysis. The FFMQ is composed of the four KIMS mindfulness factors in addition to a fifth factor entitled Nonreactivity to Inner Experience. Baer et al. (2006) continue to promote the utility of the KIMS in measuring four of the five identified mindfulness facets at the present stage of research. When we began data collection in the present study, only the original four-factor KIMS was available.
Table 1

Zero-Order Correlations between Facets of Mindfulness and Relevant Variables among Thai Theravāda Buddhist Monks

<table>
<thead>
<tr>
<th></th>
<th>Observing</th>
<th>Describing</th>
<th>Awareness</th>
<th>Accepting</th>
<th>MAAS</th>
<th>CES-D</th>
<th>CCI</th>
<th>SWLS</th>
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<tbody>
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<td>Observing</td>
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<td></td>
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<tr>
<td>Describing</td>
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<td>.48</td>
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<td></td>
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<tr>
<td>Awareness</td>
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<td>-.05</td>
<td>.34</td>
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<tr>
<td>Accepting</td>
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<td>-.18</td>
<td>.63</td>
<td>.51</td>
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<tr>
<td>MAAS</td>
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<td>.27</td>
<td>.34</td>
<td>.82</td>
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<td>CES-D</td>
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</tr>
<tr>
<td>CCI</td>
<td>.11</td>
<td>-.25</td>
<td>-.51</td>
<td>-.53</td>
<td>-.21</td>
<td>.86</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>SWLS</td>
<td>-.07</td>
<td>.52</td>
<td>.08</td>
<td>.04</td>
<td>.55</td>
<td>.03</td>
<td>-.13</td>
<td>.78</td>
</tr>
</tbody>
</table>

*Note.* Observing = Kentucky Inventory of Mindfulness Skills – Observing factor, Describing = Kentucky Inventory of Mindfulness Skills – Describing factor; Awareness = Kentucky Inventory of Mindfulness Skills – Acting with Awareness factor; Accepting = Kentucky Inventory of Mindfulness Skills – Accepting without Judgment factor; MAAS = Mindful Attention Awareness Scale; CES-D = Center for Epidemiological Studies Depression Scale; CCI = Crandell Cognitions Inventory; SWLS = Satisfaction with Life Scale. \(N = 24. \ r \geq |.40|, \ p < .05; \ r \geq |.51|, \ p < .01; \ r \geq |.59|, \ p < .001.\) Cronbach’s alpha is on the diagonal.
Table 2

Mean Differences on Facets of Mindfulness between Thai Theravāda Buddhist Monks, Thai College Students, and American College Students

<table>
<thead>
<tr>
<th></th>
<th>Thai Monks</th>
<th>Thai Students</th>
<th>American Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 24)</td>
<td>(n = 77)</td>
<td>(n = 94)</td>
</tr>
<tr>
<td>MAAS</td>
<td>4.16&lt;sub&gt;a&lt;/sub&gt; 0.62</td>
<td>3.75&lt;sub&gt;b&lt;/sub&gt; 0.71</td>
<td>3.76&lt;sub&gt;b&lt;/sub&gt; 0.59</td>
</tr>
<tr>
<td>KIMS Observing</td>
<td>37.72&lt;sub&gt;a&lt;/sub&gt; 5.32</td>
<td>36.17&lt;sub&gt;a&lt;/sub&gt; 6.62</td>
<td>40.96&lt;sub&gt;b&lt;/sub&gt; 6.58</td>
</tr>
<tr>
<td>KIMS Describing</td>
<td>25.58&lt;sub&gt;a&lt;/sub&gt; 3.75</td>
<td>26.39&lt;sub&gt;ab&lt;/sub&gt; 4.01</td>
<td>28.07&lt;sub&gt;b&lt;/sub&gt; 5.95</td>
</tr>
<tr>
<td>KIMS Awareness</td>
<td>31.59&lt;sub&gt;a&lt;/sub&gt; 4.16</td>
<td>31.60&lt;sub&gt;a&lt;/sub&gt; 4.47</td>
<td>28.54&lt;sub&gt;b&lt;/sub&gt; 4.64</td>
</tr>
<tr>
<td>KIMS Accepting</td>
<td>26.08&lt;sub&gt;a&lt;/sub&gt; 4.40</td>
<td>26.29&lt;sub&gt;a&lt;/sub&gt; 4.32</td>
<td>29.08&lt;sub&gt;b&lt;/sub&gt; 6.05</td>
</tr>
</tbody>
</table>

Note. In each row, means with the same subscript do not differ at p < .05 using Tukey HSD comparisons. MAAS = Mindful Attention Awareness Scale; KIMS Observing = Kentucky Inventory of Mindfulness Skills – Observing factor; KIMS Describing = Kentucky Inventory of Mindfulness Skills – Describing factor; KIMS Awareness = Kentucky Inventory of Mindfulness Skills – Acting with Awareness factor; KIMS Accepting = Kentucky Inventory of Mindfulness Skills – Accepting without Judgment factor. η<sup>p</sup><sup>2</sup> = partial eta squared.