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Psychometric properties of the Mindful Attention Awareness Scale in Colombian undergraduates

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ABSTRACT

The Mindfulness Attention Awareness Scale is one of the most popular instruments to measure mindfulness, and this construct is conceived as unidimensional, emphasizing attention/awareness as its essential aspect. This study aimed to analyze the factor structure and psychometric properties of the Spanish version of the MAAS in a Colombian sample of 762 undergraduates. Data were very similar to those obtained in other validation studies of the MAAS. A confirmatory factor analysis found that the expected one-factor structure showed a good fit to the data. The MAAS had excellent internal consistency, and showed theoretically coherent correlations with emotional symptoms, automatic negative thoughts, psychological inflexibility, and life satisfaction. Participants who could have a psychopathological problem because they exceeded the cut-off of the General Health Questionnaire, 12 scored lower on the MAAS than participants who scored below this cut-off. In conclusion, the MAAS seems to be a reliable and valid measure of mindfulness in Colombian undergraduates.

Propiedades psicométricas de la Mindful Attention Awareness Scale en universitarios colombianos

RESUMEN

La *Mindfulness Attention Awareness Scale* es uno de los instrumentos más populares para medir *mindfulness*, concibe este constructo como unidimensional y subraya el aspecto esencial de la atención/conciencia. Este estudio pretende analizar la estructura factorial y las propiedades psicométricas de la versión en español de la MAAS en una muestra de 762 universitarios colombianos. Los resultados fueron muy similares a los obtenidos en otros estudios de validación. El análisis factorial confirmatorio encontró que la estructura unifactorial esperada mostró un buen ajuste a los datos. La MAAS tuvo una consistencia interna excelente y mostró correlaciones teóricamente coherentes con síntomas emocionales,

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pensamientos automáticos negativos, inflexibilidad psicológica y satisfacción vital. Los participantes que podían tener algún problema psicopatológico por exceder el punto de corte del *General Health Questionnaire* – 12, puntuaron más bajo en la MAAS que los participantes que puntuaron por debajo de este punto de corte. En conclusión, la MAAS parece ser una medida fiable y válida de *mindfulness* en universitarios colombianos.

Mindfulness meditation is an increasingly popular technique in several areas such as clinical psychology, health psychology, and educational psychology (e.g., Creswell & Lindsay, 2014; Hyland, 2014; Kang & Whittingham, 2010). Parallel to this interest, an array of self-report measurements have been developed to assess this construct, including the Mindfulness Attention and Awareness Scales (MAAS; Brown & Ryan, 2003), the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004), the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Walach, 2001), the Philadelphia Mindfulness Scale (PHLMS; Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008), the Toronto Mindfulness Scale (TMS; Lau et al., 2006), the Southampton Mindfulness Questionnaire (SMQ; Chadwick et al., 2008), and the Five Facets Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

These above-mentioned assessment instruments vary in some relevant aspects. Firstly, some of them (FMI and TMS) require some degree of familiarity with mindfulness meditation practice, whereas others do not (e.g., MAAS, KIMS, PHLMS, and FFMQ). Secondly, the scales vary in the number of factors proposed: from one (MAAS, FMI, SMQ, and TMS) to the five factors of the FFMQ. The reason for such a disparate number of factors has its origin in the lack of agreement about the dimensions involved in mindfulness.

Although mindfulness is usually defined as the ability to purposely pay attention to present moment experience in a nonjudgmental way (Kabat-Zinn, 1990), authors disagree about the number of behavioral dimensions involved and their relevance. Some authors consider that the key dimension of mindfulness is awareness of the present moment experience and defend that acceptance is redundant because present moment attention cannot take place without an accepting attitude (e.g., Brown & Ryan, 2003). Other authors, however, defend that acceptance of the present moment experience without issuing any judgment is a conceptually and empirically different dimension needed to explain mindfulness (e.g., Cardaciotto et al., 2008). Lastly, other authors (e.g., Baer et al., 2004, 2006) support the idea that mindfulness involves multiple skills or facets, such as observing, describing, acting with awareness, accepting without judgment, and non-reacting to inner experience.

Among the one-dimension self-report instruments, the MAAS is by far the most widely used one. As previously mentioned, both the FMI and TMS require some degree of familiarity with mindfulness practice, whereas the SMQ was designed for patients with psychosis. Conversely, the MAAS presents the advantage that it was designed for the general population with or without familiarity with mindfulness.

There are several Spanish translations of the MAAS (e.g., Barajas & Garra, 2014; Soler et al., 2012) that have proved good psychometric properties and a one-factor structure. However, to our best knowledge, the psychometric properties and factor structure of the MAAS in Colombia have not been explored. Accordingly, the aim of this study is to advance in this direction by analyzing the psychometric properties of the Spanish translation by Soler et al. (2012) in a large sample of Colombian undergraduates. We expected the MAAS to show good psychometric properties and a one-factor structure as in the Soler et al. study. Additionally, as shown in the literature (e.g., Long & Hayes, 2014), we expected scores on the MAAS to be negatively associated with scores on the frequency of negative automatic thoughts, psychological inflexibility, emotional symptoms, and dysfunctional schemas, and positively with life satisfaction.

Method

Participants

A convenience sampling was conducted. The sample consisted of 762 undergraduates (age range 18–63, $M = 21.16$, $SD = 3.76$) from seven universities of Bogotá (two public and five private universities). Forty-six percent of the sample was studying Psychology. The other studies included Law, Engineering, Philosophy, Communication, Business, Medicine, and Theology. Sixty-two percent were women. Of the overall sample, 26% of participants had received psychological or psychiatric treatment at some time, but only 4.3% were currently in treatment. Also, 2.9% of participants were taking some psychotropic medication.

Instruments

Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003; Spanish version by Soler et al., 2012). The MAAS is a 15-item, 6-point Likert-type scale (6 = *almost never*; 1 = *almost always*) designed to measure the extent to which individuals pay attention during several tasks or, in contrast, behave on "autopilot," without paying enough attention to them. The MAAS does not require familiarity with meditation. Examples of items are (see all items in Table 1): "I find it difficult to stay focused on what's happening in the present," "I tend not to notice feelings of physical tension or discomfort until they really grab my attention," "I find myself preoccupied with