Criterion validity of the Multidimensional Scale of Irrational Beliefs (MSIB) with respect to anxiety, depression, and life satisfaction

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Abstract

Using a sample of 200 participants, this study seeks to establish criterion validity of the Multidimensional Scale of Irrational Beliefs (MSIB), a newly developed, purely cognitive measure of irrational beliefs. As predicted by Rational Emotive Behavior Therapy, scores on the MSIB are correlated highly and positively with scores on Beck's Depression Inventory and the trait scale of the State-Trait-Anxiety Inventory. Moreover, analyses revealed medium-sized negative correlations with life satisfaction. Each of these relationships is shown to be unaffected by age, sex, and social desirability. Differential associations between subdimensions of the MSIB with criterion variables are discussed regarding the separability of irrationality concepts.

Introduction

According to the theory of Rational-Emotive Behavior Therapy (REBT) by Albert Ellis (1962), the response to a certain event depends mainly on how this event is perceived and put in relation to an individual's belief system. Rational beliefs are proposed to lead to adaptive emotions while irrational beliefs should lead to maladaptive emotions. Empirical evidence indicates that there is indeed a connection between irrationality and maladaptive emotions, such as anxiety and depression (e.g., Spörrie & Försterling, 2007), and that life satisfaction is inversely related to irrationality (e.g., Carroccio & West, 2005). The Multidimensional Scale of Irrational Beliefs (MSIB; Strobel, Bekk, Fischer, Spörrie, & Försterling, 2008) is a newly developed measure of irrationality capturing three core dimensions of irrationality according to Ellis’ (2003) most recent conceptualization: demandingsness, negative self-evaluation, and low frustration tolerance. Besides its high content validity and parsimony, the MSIB has shown high reliability and convergent validity with respect to earlier irrationality measures. The present study aims at establishing criterion validity of the MSIB by investigating its relation with anxiety, depression, and life satisfaction while controlling for social desirability.

Reliabilities were high for all subscales and the total scale

The internal consistencies were high for the total MSIB (Cronbach's α = .94) and its subscales (demandingsness: α = .85; negative self-evaluation: α = .90; low frustration tolerance: α = .85). Reliabilities of the scales assessing trait anxiety (αtrait = .92), life satisfaction (αSAT = .87), and social desirability (αSDS = .74) ranged from satisfactory to high.

The MSIB predicts external criteria while controlling for sex, age, and social desirability

Three separate blockwise entry regression analyses were conducted with each of the relevant outcome criteria (anxiety, depression, and life satisfaction) as dependent variables in order to test whether irrationality predicts these variables when age, sex, and social desirability are controlled for. In the first step, age, sex, and social desirability were included as predictors. In a second step, the three irrationality dimensions were added as predictors. For all three criterion variables, the MSIB substantially added predictive value over and above that of age, sex, and social desirability.

Correlations with external criteria were medium to high

Correlations of irrationality with the criterion variables (anxiety, depression, and life satisfaction) were all medium to high and in the expected direction and significant (with the only exception of the correlation between demandingsness and life satisfaction which was only marginally significant). Overall, correlations with external criteria were lowest for demandingsness.

Diagonal: Internal consistency (Cronbach's α). Right hand side: Pearson correlations. Left hand side: Correlations corrected for attenuation (double correction). Correlations marked with * were not significant. MSIB-D = demandingsness, MSIB-N = negative self-evaluation, MSIB-L = low frustration tolerance, STAI = State-Trait anxiety inventory (anxiety); BDI = Beck Depression Inventory (depression); SWLS = Satisfaction With Life Scale (life satisfaction); SDS = social desirability scale (social desirability). Correlations with r > .13 are significant, p < .05

Discussion & Conclusion

• Results indicate high criterion validity of the MSIB with respect to anxiety, depression, and life satisfaction.
• The MSIB predicts these criteria over and above sex, age, and social desirability.
• Correlations with external criteria are consistently lowest for demandingsness, yielding the question of how this irrationality facet is different from the other facets. This issue is to be investigated in further studies.
• Discriminant validity of demandingsness with respect to its possible functional correlates (e.g., perfectionism, need for achievement...) is to be investigated.
• The MSIB is to be validated in specific populations (e.g., psychiatric patients).
• Predictive validity of the MSIB should be addressed in longitudinal studies.

References


