

When does Independent Problem-Solving have Negative Psychological Effects?
Investigating the Moderating Effect of Openness to Experience

by

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Statement of Originality

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968.

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Samineh Sanatkar

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Abstract

The Independent-Interdependent Problem-Solving Scale (IIPSS; Rubin, Watt, & Ramelli, 2012) is based on Cross, Bacon, and Morris' (2000) conceptualisation of relational-interdependent self-construal. The IIPSS provides a context-free measure of people's tendencies to solve problems independently or with the help of others.

Because previous investigations did not provide extensive evidence for the reliability and validity of the IIPSS (Rubin et al., 2012; Vieira, 2013), the current research aimed to test the psychometric properties of this novel measure. A second aim of the research was to address the mental health consequences of everyday problem-solving styles. In particular, the research investigated the extent to which independent and interdependent problem-solving predicted state- and trait-based negative affect, and the extent to which these relations are moderated by the Big Five personality trait of openness to experience.

Investigations of four student samples and one sample comprised of academic researchers generally supported the reliability and validity of the IIPSS. The IIPSS yielded a single factor structure in all studies and showed adequate test-retest reliability. The IIPSS also showed predicted convergent validities with social personality traits and divergent validities with measures of demand characteristics and social desirability. With regards to the conditional effect of problem-solving style on negative affect, Studies 1 to 5 revealed that openness moderated the effect of independent-interdependent problem-solving on measures of neuroticism, depression, stress, and anxiety. Specifically, pattern of results indicated that independent problem-solving led to greater negative affect when openness was low, and interdependent problem-solving led to greater negative affect when openness was high. These results could be explained in terms of intrapersonal mechanisms in which individuals who are high in openness

tend to appraise their problem-solving abilities as high, and are therefore emotionally equipped to solve problems alone. In contrast, individuals who are low in openness tend to appraise their problem-solving abilities as low, and therefore benefit emotionally from solving problems with the help of others.

In summary, the present research shows that the IIPSS is a valid and reliable measure of people's preferences to solve general problems independently or with the assistance of others. The research also shows that both independent and interdependent problem-solving are related to negative affect among people who are low and high in openness respectively.