The Entrepreneurship Intentional Self Regulation Questionnaire: Factorial and Concurrent Validation of a New Measure of Youth Entrepreneurship

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INTRODUCTION

Little is known about the developmental attributes of young entrepreneurs (Damon & Lerner, 2008). Despite the limited scientific research on the development of entrepreneurship, Damon and Lerner (2008) developed a definition of young entrepreneurs that points to “the practical application of entrepreneurial qualities, such as initiative, innovation, creativity, and risk-taking in the work environment.” Damon and Lerner (2008) suggested that Intentional Self Regulation (ISR), which has been conceptualized as the person component of bidirectional person ↔ context interactions (e.g., Gestsdottir & Lerner, 2008), plays an important role in the development of entrepreneurship.

One model of ISR, the Selection, Optimization, and Compensation (SOC) model, highlights the importance of goal-directed behaviors (Baltes, 1997; Baltes & Baltes, 1990; Freund & Baltes, 2002; Weise et al., 2000; Ziegelmann & Lippke, 2007).

Based on the SOC model, we created a new measure, the Entrepreneurship Intentional Self Regulation (EISR) Questionnaire in order to assess self-regulation attributes among young entrepreneurs. We aimed to test the factor structure of the EISR and to test its concurrent validity by assessing interrelations among EISR scores and scores from the adapted items of the Career Values Scale (adapted from Johnson, 2001, 2002, 2005 Job Values Scale) and from a related measure of entrepreneurial activities. We adapted six items from the Job Values Scale (Baltes & Freund, 1997; Freund & Baltes, 1997; Freund & Baltes, 1998). These findings are based on a primarily European American female convenience sample. Efforts to recruit a more diverse and representative sample should be made. Second, the analyses were only exploratory, and the results should be interpreted with caution. Despite these limitations, however, these findings provide initial evidence of the factor structure of EISR, a measure that may allow researchers to test the final model structure, a confirmatory factor analysis (CFA) was conducted. However, given the nature of collecting pilot data, we allowed residual covariances and dual factor loadings, which indicated by modification indices, and where freeing a parameter made theoretical sense based on item content. All analyses are therefore strictly exploratory.

METHOD

Participants

Students were a convenience sample of 185 young adults (24.3% male and 74.6% female; 1.1% unreported) ranging in age from 18 to 26 years (M = 22.77 years, SD = 2.23 years). Self-reported race for participants included: Asian American, 3.8%; African American, 0.5%; Hispanic/Latino/a, 4.9%; European American, 88.1%; Multiracial, 0.5%; and Other 2.2%.

Entrepreneurship Intentional Self Regulation (EISR). We designed the EISR to assess domain-specific ISR, with an emphasis on aspects of self-regulation that should promote an entrepreneurial orientation among young adults (see Table 1). Response options are on a 5-point Likert scale and range from 1 = Almost never to 5 = Almost always.

Entrepreneurship Career Values Scale (ECVS). We adapted six items from the Job Values Scale (Johnson, 2001, 2002, 2005). The final model of count variables = 1433.44, χ²(520) = 677.193, p < 0.001, RMSEA = 0.04 [90% CI = 0.03 - 0.05], TLI = 0.90, CFI = 0.91, SRMR = 0.07 and BIC = 11655.05. The final model with count variables = 0.24 = 1433.44, p = 1.0, and BIC = 11302.11 (change in BIC from the continuous model to model with count variables = -352.94). The preliminary analyses presented in Figure 1 show the final model structure of the EISR. Table 2 displays the estimated correlation matrix for the latent variables. Table 3 provides the standardized regressions in the final structure equation model.

DISCUSSION

The purpose of this preliminary research was to test the factor structure of the new measure of EISR and to test concurrent validity of this measure with scores from the ECVS and the EACT. Results indicated the existence of seven distinct domains and allowed for the development of a measure of EISR, except for Optimization self-regulation, which was not a significant predictor of the EISR. The strongest correlation appeared between Selection-Challenging and Optimization-Persistence, a relationship that suggests that a person who chooses challenging goals is likely to be persistent.

When we examined the concurrent validity of the EISR Questionnaire with correlations between the EISR and EACT and ECVS, we found that the EACT correlated with all subscales of the EISR, except for Optimization-Persistence. The ECVS correlated with all subscales of EISR, except Optimization-Starting and Loss-Based Selection. Despite these significant results, several limitations of the research exist.

First, the homogeneous sample is problematic, and these findings are based on a primarily European American female convenience sample. Efforts to recruit a more diverse and representative sample should be made. Second, the analyses were only exploratory, and the findings should be interpreted with caution. Despite these limitations, however, these findings provide initial evidence of the factor structure of EISR, a measure that may allow researchers to test the final model structure, a confirmatory factor analysis (CFA) was conducted. However, given the nature of collecting pilot data, we allowed residual covariances and dual factor loadings, which indicated by modification indices, and where freeing a parameter made theoretical sense based on item content. All analyses are therefore strictly exploratory.

RESULTS

Traditional measures of CFA model fit are not provided by Mplus when analyzing count data, but a similar model that treated all variables as continuous displayed acceptable model fit, χ²(520) = 677.193, p < 0.001, RMSEA = 0.04 [90% CI = 0.03 - 0.05], TLI = 0.90, CFI = 0.91, SRMR = 0.07 and BIC = 11655.05. The final model with count variables = 0.24 = 1433.44, p = 1.0, and BIC = 11302.11 (change in BIC from the continuous model to model with count variables = -352.94). The preliminary analyses presented in Figure 1 show the final model structure of the EISR. Table 2 displays the estimated correlation matrix for the latent variables. Table 3 provides the standardized regressions in the final structure equation model.

ABSTRACT

The Entrepreneurship Intentional Self-Regulation (EISR) Questionnaire is a new measure of intentional self-regulation based on the Selection, Optimization, and Compensation (SOC) model. In this presentation we test the factor structure of the EISR and examine its concurrent validity through assessing interrelations with (a) adaptive items of the Job Values Scale (Johnson, 2001, 2002, 2005 Job Values Scale) and from a related measure of entrepreneurial activities. Results provide evidence for the factor structure and concurrent validity of the EISR. We discuss the limitations and implications of the findings.