

FEEDBACK REPORT FOR PARTICIPANTS

**Development and Validation of Situational Judgment Tests
of Conscientiousness and Hardiness**

SMU REB # 20-010

Research Project conducted by:

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INTRODUCTION & GOALS OF THE PROJECT

Situational Judgement Tests (SJTs) are a contextualized selection method which base predictions on the assessment of candidate responses to a number of job situations (Lievens & Motowidlo 2016). SJTs consist of job relevant scenarios and a set of different approaches to respond to the provided contextual situation. Past research has looked at scenarios which assess many different behaviours and constructs; however, there has not been an SJT developed specifically for traits like Conscientiousness or Hardiness. This was the purpose of the two studies involved in this research.

Study 1 - SJT of Conscientiousness:

Individuals high in conscientiousness normally work in a disciplined manner organizing their time and space to achieve their goals with accuracy and perfection. Conscientiousness can be broken down into four separate categories according to the HEXACO model of personality (Lee & Ashton, 2004): organization, diligence, perfectionism, and prudence. By examining these four facets we were aiming at expanding the literature for SJT tests and opening more possibilities for assessing an individual's personality traits.

We developed 24 SJT items to maps onto the four facets of conscientiousness described above. Every SJT item that was created described a possible contextual work situation which has a dilemma that the participant needs to decide on a course of action from a list of four multiple choice answers for how they would resolve the issue. These four choices have been created to rank from low to high levels of the facet they belong to. The SJT test was administered to participants alongside two other personality assessments and a measure of organizational citizenship behaviors to test their reliability and convergent, divergent and predictive validities.

Study 2 - SJT of Hardiness:

Hardiness has been defined as a set of characteristics, attitudes and skills which turn stressful situations into learning and growth opportunities (Maddi, 2012). Past research has identified 3 facets of Hardiness: Challenge, Control and Commitment (Bartone, 2006). We have defined Challenge as one's ability to perceive unexpected changes as an opportunity to learn and change (Lande & Conte, 2016). Control highlights the developmental process which redirects the

understanding of change to a fulfilling experience through the ability to control our own lives and decisions (Lande & Conte, 2016). Lastly, Commitment is a person's sense of purpose and their ability to persevere under pressure (Bartone et al., 2013).

Our goal was to collect responses from participants to test the validity, factor structure and reliability of the new Hardiness scale. For the newly developed Hardiness scale, we initially created pools of items and definitions, and reduced the number of items through a rating task performed by subject-matter experts (keeping only items with high ratings). Our developed measure assessed Hardiness using 23 items across the 3 facets. We also aimed to test its convergent, divergent and predictive validities, by collecting data on other measures. For instance, we believe that someone who scores high on grit will demonstrate similar characteristics to Hardiness (i.e. sustained effort in the face of adversity), and as such, we are including the Grit-O scale (Duckworth & Quinn, 2009).

PARTICIPANTS, DATA COLLECTION, & ANALYSES

Study 1 - SJT of Conscientiousness:

The total sample consisted of $N = 253$ participants, with 127 (50.2%) female and 126 (49.8%) male. The average age of the sample was 40.9 years ($SD = 10.8$ years). In reference to country of residence, 244 (96.4%) lived in the United States while 9 (3.6%) resided in Canada. All but one participant was currently employed at the time of completing the survey. The majority of respondents were White (79.8%), were married (53%) and completed college/university education (66.4%).

Participants completed demographic questions, attention-check questions, the newly-developed Conscientiousness SJT, the HEXACO Personality Inventory and SJT, and an Organizational Citizenship Behaviour Scale. We conducted various statistical analyses (e.g., exploratory factor analysis, correlations).

Study 1 - SJT of Hardiness:

The total sample consisted of $N = 251$ participants, with 109 (43%) female and 137 (55%) male. The average age of the sample was 39.6 years ($SD = 10.5$ years). In reference to country of

residence, 244 (97%) lived in the United States while 7 (3%) resided in Canada. The job status composition in the sample showed that 89.6% worked full-time, 8.4% part-time, and 2% were self-employed/independent. The majority of respondents were White (72%) and completed college/university education (80%).

Participants completed demographic questions, attention-check questions, the newly-developed Hardiness SJT, the Grit-O, the Dispositional Resiliency Scale, Perceived Stress Scale, General Health Questionnaire and an Organizational Citizenship Behaviour Scale. We conducted various statistical analyses (e.g., exploratory factor analysis, correlations).

MAIN FINDINGS

Study 1 - SJT of Conscientiousness:

The results of our analyses suggested that our SJT only included two of the expected four facet of Conscientiousness from the theoretical HEXACO model (i.e. Organization and Diligence remained but Perfectionism and Prudence were removed). Results further showed that the SJT scores for Conscientiousness (and the Organization and Diligence facets) were associated with scores obtained on self-report questionnaires of those traits (from the HEXACO-100 measure) and a broader SJT test (HECAXO-SJT), with relevant correlations ranging from .27 to .56. This confirmed that our SJT captures the expected psychological constructs. Finally, the SJT scores for Conscientiousness were also associated with organizational citizenship behaviours (correlation = .49). In other words, people who scored well on our SJT also reported engaging in behaviours supporting their employer and/colleagues.

Study 1 - SJT of Hardiness:

The results of our analyses suggested that our SJT only included two of the expected three facet of Hardiness: Challenge (with five retained items) and Control (with three retained items). Further showed that the SJT scores for Hardiness (and the Challenge and Control facets) were associated with scores obtained on the established measures of Resiliency (correlations ranging from .23 to .47) and Grit (.29 to .37). This confirmed that our SJT captures the expected psychological constructs. In addition, Hardiness SJT scores were associated with General Health

(-.14 to -.34) and Perceived Stress (-.25 to -.45), suggesting that people who face more health issues or stress become “hardier”. Finally, Hardiness SJT scores were positively related to Organizational Citizenship Behaviour oriented towards their colleagues (.29 to .35) but not towards their employer.

If you have any question about this research or our findings, please contact nicolas.roulin@smu.ca.