The ICAB: Development and Validation of a Test for Oddity
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Abstract

Research has found evidence for “oddity” as a dimension of personality, but existing measures of oddity are significantly limited. Therefore, the goal of the present study was to develop a new measure of oddity: the Inventory of Conventional Attitudes and Behavior (ICAB) and assess its psychometric properties.

Introduction

Oddity can be defined as the extent to which someone exhibits unusual behavior that does not conform to norms that are typical for one’s age, gender, or culture. Indeed, recent studies provide evidence that oddity exists as a dimension of personality (e.g., one can exhibit tendencies ranging from “very normative” to “very odd”). For example, Watson et al. (2008) used the Schizotypal Personality Questionnaire to define and measure the extent to which individuals exhibit behaviors consistent with the construct of oddity. They found oddity to be a distinct hierarchical factor of personality that moderately correlated with Openness to Experience. Ashton and Lee (2012) defined the construct as “perceived oddity or eccentricity”, which is a blend of Openness to Experience, some Schizotypy/Dissociation, and unconventionality/eccentricity. They found oddity to be more strongly related to personality disorders, autism spectrum, some OCD symptoms, and symptoms of sleep disorders (Watson et al., 2008). Further, Watson et al. (2008) speculated that, in addition to its relationship with specific diagnoses, oddity may be related to more general personality disorders, and needs for approval.

Method

Participants: Participants included 307 undergraduate students who completed the study for course credit. From our initial pool of 307, our final sample consisted of $n = 284$, as 23 were eliminated due to evidence of random responding (see IFS description). In the final sample, the mean age was 19.59; 89% were Caucasian and 5% were African-American.

Measures: See handout for detailed descriptions, including details of ICAB development.

Procedure: Participants completed the study in small groups by providing consent and then completing the required surveys online while supervised by a research assistant.

Results

Analysis #1: Initial Descriptive Statistics for ICAB. We first assessed the mean, standard deviation, and distribution of ICAB scores in the present sample. Total scores reflect the participant’s average across items, thus the range is 1 – 5. The mean for the present sample was 1.96 (SD = .90), and the scores were found to be normally distributed as well (skewness = .68).

Analysis #2: Reliability of ICAB. Cronbach’s alpha was used to assess the internal consistency of ICAB scores in the present sample. Results indicated that the reliability of the measure was excellent, $\alpha = .91$.

Analysis #3: Validity of ICAB. As an initial test of this psychometric property, the convergent and discriminant validity of the ICAB were investigated. For convergent validity, we hypothesized that ICAB scores would be positively associated with detachment and psychotropy scores (from PID-5), as well as schizotypy (SQP) scores, as all of these constructs show obvious overlap with oddity. For discriminant validity, we hypothesized that the ICAB would show no significant relationship to either a life satisfaction survey (the SWLS) or a depression scale (the CES-D). Regression coefficients demonstrating the observed relationships are displayed in Table 1 below.

| Table 1. Regression coefficients examining convergent and discriminant validity of ICAB. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| **Oddy (ICAB)** | **Detachment** | **Psychotopy** | **Schizotypy** | **Life Satisfaction** | **Depression** |
| **Convergent Validity** | .10*** | .38*** | .35*** | -.06 | .15*** |
| **Discriminant Validity** | | | | | |

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

Analysis #4: Relationship of ICAB to Social Functioning Scores. Previous research has suggested that oddity is predictive of difficulties in social functioning. Therefore, as a further test of ICAB validity, the relationship of ICAB scores to various dimensions of social functioning was examined. It was hypothesized that ICAB scores would be negatively associated with best friend intimacy (MSIS scores), social satisfaction and closeness to friends (researcher-created items), and the need for social approval (RM/ALAM scores). It was further predicted that oddity would be positively correlated with the personality construct of antagonism (which also has negative implications for social functioning.) Regression coefficients demonstrating the observed relationships are displayed in Table 2 below.

| Table 2. Regression coefficients examining ICAB scores in relation to social functioning scores. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| **Oddy (ICAB)** | **Best Friend Intimacy** | **Social Satisfaction** | **Closeness to Friends** | **Need for Social Approval** | **Antagonism** |
| **Best Friend Intimacy** | -.13* | -.23*** | -.14* | .15* | .43*** |

Note. *** $p < .001$, ** $p < .01$, * $p < .05$}

Discussion

The goal of the present study was to develop a comprehensive measure of oddity (as a personality construct) and conduct a preliminary assessment of its psychometric properties. Existing measures of oddity are exceedingly limited (in number and in scope), and this construct has strong relevance to the study of normal and abnormal functioning. Therefore, a comprehensive and valid measure of oddity is needed.

Our preliminary analyses show that the ICAB may indeed be a useful and psychometrically sound measure of the oddity construct. Initial analyses revealed a normal distribution of ICAB scores, as well as excellent internal consistency of items. Further, analyses of convergent and discriminant validity almost perfectly confirmed hypotheses. The exception was the relationship of ICAB scores to depression (weak, but positive and statistically significant). Given that oddity apparently has negative implications for social functioning, it could be that higher levels of oddity are associated with depressed mood due to difficulty in connecting with others. Further examination of this relationship is warranted.

We also examined the relationship of ICAB scores to various domains of social functioning. Once again, hypotheses were almost perfectly confirmed. The one exception observed: ICAB scores were positively (not negatively) related to need for social approval. It could be that individuals who exhibit moderate or high levels of oddity find it difficult to relate to others, thereby increasing their perceived need for approval by others. They could also be the case that expressing oneself in unusual ways (e.g., by dressing unconventionally but creatively) has become an effective way to seek and gain social approval.

Strengths of the present study include the large sample size and the use of an infrequency scale, which helped to eliminate participants who exhibited compromised effort. Despite the large size of our sample, its diversity was quite limited (in terms of demographics and use of a university only sample). Moving forward, expanding sample size and diversity will be helpful, as well as expanding the scope of possible discriminant measures. We also plan to conduct further analyses on this measure. In particular, a factor analysis of the scale, as well as item analyses, are planned in order to revise the measure.
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List of Study Measures Used

- **Infrequency Scale** (IFS; Chapman & Chapman, 1986) – A 13-item measure to ensure validity by eliminating participants with random responses. An example item is: “I have never spoken to someone who was wearing glasses.” (A response of “true” to this item is highly unlikely and scores one point. Three or more points eliminates a participant’s data from inclusion.)

- Basic demographics questionnaire, created by researchers

- **Inventory of Conventional Attitudes and Behaviors (ICAB)** – Our 84-item measure of Oddity using 5-point Likert scales. In development, we targeted various elements of psychological functioning and daily life to encompass the spectrum of oddity. Examples include items related to unusual speech, bizarre dress, strange preferences, odd thoughts, feelings of perceived isolation, and other factors addressed in the literature.

- **Personality Inventory for the DSM-5 – Brief** (PID-5-BF; Krueger, Derringer, Markon, Watson, & Skodol, 2013) – A 25-item measure of 5 pathological personality traits, including: detachment, psychotism, antagonism, negative affectivity, and disinhibition.

- **Schizotypal Personality Questionnaire** (SPQ; Raine, 1991) – A 74-item measure of schizotypal personality traits, or schizotypy.

- **Center for Epidemiological Studies Depression Scale** (CES-D; Radloff, 1977) - A 20-item scale assessing depressive tendencies and symptoms.

- **Satisfaction with Life Scale** (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) – A 5-item measure of general life satisfaction.

- **Revised Martin-Larsen Approval Motivation** (RMLAM; Martin, 1984) – A 20-item measure assessing the need for favorable evaluations from others.

- **Miller Social Intimacy Scale** (MSIS; Miller & Lefcourt, 1982) – A 17-item measure of how close/intimate one perceives oneself to be with his or her self-identified best friend.