

Early Work on the Sensation Seeking Personality Trait Scale

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As early as 1893 researchers studied individual differences in the optimal level of stimulation (Wundt, 1902). Since then there has been a growing body of research supporting a personality construct, or type, which governs this level of stimulation. Most of the current models of personality include some facet of this need for stimulation (see Zuckerman et al., 1993 and Zuckerman & Glicksohn, 2016 for review). For instance, research conducted by Eysenck resulted in the extraversion-introversion dichotomized trait (Eysenck, 1947, 1967). Individuals who are high on extraversion are characterized as being insensitive to low levels of stimulation, whereas individuals classified as high on introversion are described as being overwhelmed by high levels of stimulation (Eysenck, 1947). Additionally, Cloninger (1987) defined novelty seeking, one construct of his four personality temperaments. Novelty seeking is described as a combination of impulsivity and behavioral approach to novel stimuli. As research progressed, it became clear that the novelty seeking and extraversion were not broad enough to completely explain individual differences in the need for stimulation (Eysenck & Zuckerman, 1978; Waller et al., 1991; Whiteside & Lynam, 2001; Zuckerman, 1971; Zuckerman et al., 1993). Additionally, researchers identified a cluster of individuals who expressed a significantly different personality trait from those high on extroversion and novelty seeking (Zuckerman et al., 1964). Zuckerman labeled this personality trait sensation seeking (Zuckerman et al., 1964).

To fully evaluate the utility of the Sensation Seeking Personality Trait scale (SSPT) it is important that I provide details about scale development prior to these confirmatory analyses. This version of the SSPT represents the culmination of 20 years of work. The goal when the development of the scale began was to address many of the shortcomings of the SSS-V

(Zuckerman, 1994), the most widely used scale to measure sensation seeking since its initial development in the early 1970's. The primary shortcomings of that scale are criterion contamination, a factor structure that does not replicate consistently, a forced-choice response format, and the use of outdated colloquial language. As I worked to develop the SSPT, I was determined to adhere as closely as possible to Zuckerman's original construct definition of sensation seeking (1971).

The original exploratory factor analysis (EFA) started with the development of 202 items that were expected to load onto 4 subscales, Experience Seeking, Risk Seeking, Disinhibition and Boredom Susceptibility (Conner & Henson, 2008). Five experts reviewed the item pool and indicated that they thought that items completely assessed the construct of sensation seeking. Prior to data collection, the original pool was trimmed to 170 items by removing duplicate or nearly duplicate items, compound items, and poorly worded items. I collected data from over 1000 participants. I used this sample to conduct EFA, wherein I found preliminary evidence to support a 4-factor structure. Factors were extracted using maximum likelihood and rotated using geomin rotation, an oblique type of factor rotation. I followed up the EFA by conducting CFA using the assumptions and fit indices detailed in the analyses section above on a subsequent sample of approximately 850 participants. Results of the CFA indicated a failure to replicate the factor structures for boredom susceptibility and disinhibition. Over the next 4 years I attempted multiple revisions of the scale and retesting of the factor structures. I found it quite difficult to identify self-report items that reliability and validly assessed disinhibition. Additionally, I began to question the usefulness of a boredom susceptibility factor when boredom susceptibility was not a core part of the original construct definition of sensation seeking.

As item and factor development progressed, I attempted to adhere more closely to the original definition of the construct, “the need for varied, novel, and complex sensations and experiences, and the willingness to take physical and social risk for the sake of such experiences” (Zuckerman, 1979, p. 10). Strict adherence to this definition led to trimming the disinhibition and boredom susceptibility subscales from the measurement of sensation seeking using the SSPT (Conner & Henson, 2011). This made sense theoretically as disinhibition and boredom susceptibility are likely separate constructs that could be facets of impulsivity (Miller, & Lynam, 2013), not sensation seeking. This also addressed concerns that arose after multiple attempts to develop self-report items of disinhibition that repeatedly failed to replicate across different samples.

Since approximately 2008 (Conner & Henson, 2008; Conner & Henson, 2011). the development of the SSPT proceeded with only the Experience Seeking and Risk Seeking subscales. This work has consisted of data collection from approximately 7600 participants from multiple psychology department participant pools, community samples, clinical samples, and across age ranges from early adolescence to late adulthood. The version of the SSPT reported on herein was finalized in late 2016. This version of the SSPT addresses all of the measurement issues of previous sensation seeking scales and the factor structure has been replicated multiple times in numerous distinct samples to ensure its stability. More specifically, items were developed using latent-trait theory, meaning there are no references to specific behaviors that have been engaged in or that one might prefer to engage in, but instead, items are designed to tap into the propensity to engage in both novel and risky behaviors respectively. Constructing a scale using this latent-trait approach allows for freedom in responding, stability over time, and reduces risks associated with criterion contamination. Additionally, there is no colloquial language used

in any of the items. This means the scale will not become outdated over time or will not offend respondents. Items are scaled on a 5-point Likert-type scale, allowing for more freedom in responding compared to other measures of sensation seeking.

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