SELF-SOLICITATION OF A PROVISIONAL SELF: THE DARK TRIAD AND SPONTANEOUS SELF-CONCEPT CONTENT

by

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Abstract

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Higher levels of Dark Triad traits (Machiavellianism, psychopathy, and narcissism) are considered to be self-defeating, maladaptive, and can potentially interfere with the ability to develop a strong sense of self. Despite this, previous research has not examined the extent to which self-concept content differs for individuals in relation to levels of Dark Triad traits. The current study examined sense of self and self-concept content related to increased Dark Triad trait levels based on fundamentals of self-solicitation theory (Rhodewalt & Tragakis, 2002). Whereas most individuals develop a strong sense of self through self-verification of stable self-concepts (Swann, 1985), those with a weaker sense of self solicit malleable self-concept content. Self-concept content was assessed via a spontaneous self-concept task. It was hypothesized that (1) increased Dark Triad traits would predict decreased trait-term usage in self-concept content; (2) increased Dark Triad traits would predict increased state-term usage in self-concept content; (3) higher levels of Dark Triad traits would be associated with inner-directedness; (4) increased Dark Triad traits would predict a weak sense of self; and (5) a weak sense of self would mediate the relationship between increased Dark Triad traits and trait- and state-term usage in self-concept content. The results revealed that an increased level of Dark Triad traits significantly
predicted decreased trait- and increased state-term usage in self-concept content, and that this relationship was mediated by a weak sense of self. Dark Triad traits were not positively correlated with inner-directedness.
# Table of Contents

Acknowledgements .................................................................................................................. iii

Abstract ...................................................................................................................................... iv

List of Figures ............................................................................................................................... viii

List of Tables ............................................................................................................................... ix

Chapter 1: Introduction .............................................................................................................. 1

  Self-Concept Integration .......................................................................................................... 1

  Self-Concept Content Evaluation ........................................................................................... 5

The Present Study ....................................................................................................................... 8

  Hypothesis 1 .......................................................................................................................... 8

  Hypothesis 2 .......................................................................................................................... 8

  Hypothesis 3 .......................................................................................................................... 9

  Hypothesis 4 .......................................................................................................................... 9

  Hypothesis 5 ........................................................................................................................ 10

Chapter 2: Method .................................................................................................................... 11

  Participants ............................................................................................................................ 11

  Measures ............................................................................................................................... 11

    Dirty Dozen Scale .................................................................................................................. 12

    Inner-Other Directedness Scale ......................................................................................... 12

    Sense of Self Scale .............................................................................................................. 12

    Who Am I? Questionnaire ................................................................................................. 13

Chapter 3: Results ..................................................................................................................... 15

  Data Screening ...................................................................................................................... 15

  Hypothesis 1 .......................................................................................................................... 15

  Hypothesis 2 .......................................................................................................................... 16
Hypothesis 3 .............................................................................................................................................. 16
Hypothesis 4 .............................................................................................................................................. 17
Hypothesis 5 .............................................................................................................................................. 17
Controlling for Gender ............................................................................................................................. 17
Age as a Predictor of Sense of Self ........................................................................................................... 18
Chapter 4: Discussion ............................................................................................................................... 20
Strengths .................................................................................................................................................... 22
Limitations and Future Directions ........................................................................................................ 23
Summary .................................................................................................................................................... 24
References ................................................................................................................................................ 26
Figures ....................................................................................................................................................... 32
Tables ......................................................................................................................................................... 33
Appendices ................................................................................................................................................. 36
List of Figures

Figure 1  Results for the pathway model .................................................................................. 32
List of Tables

Table 1  An Overview of Major Points of Similarity and Difference Between Self-Verification Theory and Self-Solicitation Theory ................................................................. 33

Table 2  Means, Standard Deviations, and Alpha Coefficients for the Archival Data Variables of Interest.................................................................................................................. 34

Table 3  Direct, Indirect, and Total Effects for the Pathway Model.............................................. 35
CHAPTER 1

INTRODUCTION

Over the last two decades, researchers have shown an increasing interest in three exploitative and manipulative traits that are collectively referred to as the Dark Triad. When the three traits are brought together as a single construct, the resulting Dark Triad is assumed to be a core personality dimension that is characterized as an approach to life that is cold and manipulative (i.e. Machiavellian), callous and impulsive (i.e. psychopathic), and grandiose and entitled (i.e. narcissistic) (Bertl, Pietschnig, Tran, Stieger, & Voracek, 2017).

Though considered evolutionarily advantageous in some, but certainly not all, social contexts (Jonason & Tome, 2018; Jonason, Valentine, Li, & Haberson, 2011), Dark Triad traits, when enacted over the long term, tend to be self-defeating and maladaptive (Grigoras & Wille, 2017; Vazire & Funder, 2006). Researchers agree that Dark Triad traits interfere with the ability to develop a well-integrated core self-concept – though the methods used to test the content of self-concept have been much debated (Barlett, 2016; Barlett & Barlett, 2015; Fukushima & Hosoe, 2011; Grigoras & Wille, 2017; Morf & Rhodewalt, 2001; Showers & Zeigler-Hill, 2012). To avoid some of the common methodological objections, this study examines the relationship between Dark Triad traits and self-concept content that is assessed without the use of primed or pre-constructed responses. My predictions were derived from two relevant theories: Swann’s (1985) self-verification theory and Rhodewalt’s and Tragakis’s (2002) self-solicitation theory.

Self-Concept Integration

Swann’s (1985) self-verification theory and Rhodewalt and Tragakis’s (2002) self-solicitation theory describe a similar goal of seeking affirmation from others regarding aspects of
one’s own self-concept. Both theories propose that an unstable self-esteem motivates individuals to examine their self-concepts and then attempt to get others to affirm and validate specific aspects of their self-concept. The two theories further propose that individuals are aware of which aspects of their self-concepts they want others to confirm. However, despite their similarities, self-verification theory and self-solicitation theory differ on who is eligible to “self-verify” or “self-solicit.” Furthermore, these two theories diverge in the processes involved in self-concept confirmation and the outcomes of interpersonal evaluations. (For an overview of major points of similarity and difference between self-verification theory and self-solicitation theory, refer to Table 1.)

Individual differences influence one’s predisposition to self-verify or self-solicit. In particular, the tendency to self-verify is assumed to be more common for individuals with a strong sense of self, whereas self-solicitation is assumed to be more common for individuals who lack a secure self-concept (Rhodewalt & Tragakis, 2002). Self-verifiers and self-solicitors further diverge in their interpersonal interaction motives. According to Rhodewalt and Tragakis (2002), “[w]hereas self-verification involves interacting with others so that they come to see you as you see yourself, self-solicitation involves seeking social feedback that enables you to maintain or protect desired or “hoped for” self-images” (p. 136). Thus, self-verification theory suggests that some people seek social interactions that can confirm their own stable, confidently held self-concepts, whereas self-solicitation theory suggests that other people engage in social interactions with the intent to “solicit” confirmation of potential self-concepts. To the extent that self-solicitors lack a secure self-concept, they should also have relatively few trait-based self-schemas within their self-concept.
Self-verification theory further proposes that individuals self-verify through use of other-oriented impression management (Rhodewalt & Tragakis, 2002), such that self-verifiers are concerned that other people validate and reflect back to them the self-concept that the self-verifier already has. In contrast, self-solicitation theory proposes that individuals with a fragile sense of self “constrain others so that they provide feedback that supports the precarious self-view” (Rhodewalt & Tragakis, 2002, p. 136), via self-oriented impression management. That is, self-solicitors are more focused on how others can validate and help reify their potential or aspired-to self-views, whereas self-verifiers seek feedback from others to validate their already well-established self-views. In summary, self-verification theory asserts that some individuals maintain clear, stable, and well-defined self-views by acting in ways that encourage others to validate those self-views, whereas self-solicitation theory asserts that other individuals—those with a weak sense of self—try to “constrain others” to provide feedback to support a desired self-view that is currently fragile and provisional.

It is further assumed that the propensity to self-verify or self-solicit is contingent on an individual’s personality and motivation (Hoyle, Kernis, Leary, & Baldwin, 1999). For example, classic identity theories credit narcissism as the antecedent of an ill-defined and fluctuating self-concept in development (Erikson, 1968; Kernberg, 1976; Kohut, 1971). Specifically, Kohut (1971) proposed that successful parenting styles provide both mirroring (opportunities for a child to affirm self-views in interactions with a caregiver) and idealization (instances in which an omnipotent caregiver provides non-contingent emotional support). Unempathetic parents do not provide appropriate mirroring and idealization opportunities, and so the child looks to other people to provide these opportunities. Under these circumstances, children develop narcissism such that they develop a grandiose persona in order to receive affirmation of their self from
others (Kohut, 1971). In the hope of obtaining a sense of self, the narcissists must continue to seek identity from others through self-solicitation.

In the same way, more contemporary perspectives consider all of the Dark Triad traits (not just narcissism) as reflective of an unstable self-concept formation. First, the Dark Triad traits are associated with notable differences in life transition phases. Two studies have demonstrated that possession of Dark Triad traits in adolescence is related to repeated changes in identity, feeling overwhelmed with options on who to become, less optimism about choices in identity, and feeling neither like a child or an adult (Barlett, 2016; Barlett & Barlett, 2015).

Second, the Dark Triad traits, viewed collectively, are characterized as maladaptive. Notably, Grigoras and Wille (2017) correlated Dark Triad traits with five domains within the DSM-V maladaptive trait model. These maladaptive trait domains represent high openness to experience (psychoticism), low conscientiousness (disinhibition), low extraversion (detachment), low agreeableness (antagonism), and high neuroticism (negative affect), and are generally considered maladaptive personality characteristics (Gore & Widiger, 2013; Grigoras & Wille, 2017).

Third, in their dynamic self-regulatory processing theory, Morf and Rhodewalt (2001) depict narcissists (who represent one major component of the Dark Triad), as “individuals who possess transient, overblown, and fragile self-images that are dependent on social validation and social context or situation” (Rhodewalt, 2012, p. 573). In support of Morf and Rhodewalt’s theory, Vazire and Funder (2006) found evidence for impulsivity in narcissists that leads to inappropriate self-enhancement and delayed gratification abnormalities. Further, Fukushima and Hosoe (2011) found that narcissists lack stable self-knowledge and thereby “retain an unstable self-concept” (p. 573). In sum, a consensus of classic theories and contemporary theories and
evidence suggests that individuals with increased Dark Triad traits are more likely to become self-solicitors than self-verifiers.

Rhodewalt and Tragakis (2002) argue that any individual with an insecure self-concept is likely to employ self-solicitation in their interpersonal encounters. Although narcissists were an early focus of Rhodewalt and Tragakis’s self-solicitation theory, people who score high on the entire Dark Triad should also tend to be self-solicitors. Previously, I introduced the Dark Triad as a core measure encompassing exploitative and manipulative traits. In a model fit analysis, Bertl et al. (2017) demonstrated the increased explanatory value that results from measuring the Dark Triad as a core, latent construct, rather than as three separate constructs. In fact, the same self-concept deficiencies that characterize narcissists as self-solicitors are also known predictors of Machiavellianism and psychopathy development (Barlett, 2016; Barlett & Barlett, 2015). Hence, it may be beneficial to study those with Dark Triad traits as self-solicitors, rather than self-verifiers, due to their self-centered approach and unstable self-views.

**Self-Concept Content Evaluation**

Methods used to evaluate individual self-concepts diverge according to the theoretical framework employed. One popular method is a card-sorting task based on Linville’s (1985) *self-complexity approach*. According to the self-complexity approach, an individual’s self-complexity refers to their ability to differentiate self-knowledge in varying aspects of their lives. For example, a person with many overlapping self-attributes in various roles (e.g., self at work, self with family, self with friends) has low self-complexity because he or she cannot differentiate self-knowledge domains (Linville, 1985). Despite its popularity, some researchers have questioned the theoretical grounds of the self-complexity method (for discussion, see Showers & Zeigler-Hill, 2012). Moreover, self-complexity studies have returned unreliable results. For
example, one study claimed that narcissists suffer from low self-complexity (Rhodewalt & Morf, 1995). However, subsequent research failed to replicate this finding (see Rhodewalt, Madrian, & Cheney, 1998; Rhodewalt & Morf, 1998).

Further, the self-complexity approach imposes substantial methodological constraints because it does not account for the natural organization of self-concept content and instead uses pre-defined personal attributes in card-sorting tasks. Equally important, the self-complexity approach is unable to quantify differences in types of self-concept content. Likewise, studies that use standardized self-concept evaluations, such as questionnaires, are also limited, because they do not provide a naturalistic depiction of self-concept content (Rentsch & Heffner, 1994).

Because of these methodological limitations, Gordon (1968) proposed over 50 years ago that researchers should evaluate individual self-concepts using a spontaneous and open-ended measure called the “Who Am I?” task.

In Gordon’s (1968) “Who Am I?” task, respondents are given the prompt “I am:”, and then respond with 15 sentence completions that express their spontaneous self-descriptions. Whereas other self-concept tasks consist of primed or pre-determined self-related content, “Who Am I?” task responses are spontaneous and self-generated, and they are more likely to accurately represent how an individual defines their self through the use of a self-schematic approach (Markus, 1977). A self-schematic approach is a method of retrieving easily accessible, hierarchically-organized knowledge structures about the self, i.e., self-schemas, that guide behavior. The first 15 responses from individuals to the prompt “I am:” are chosen because those responses are easily retrievable, indicating both salience and relevance to the person. For example, an artist might describe their self-concept as artistic, creative, and free-spirited. Self-concept content derived from an individual’s self-schemas can be malleable over time (DeSteno
& Salovey, 1997). However, the self-schemas themselves are fairly stable in most individuals (Markus, 1977).

In creating his original coding scheme, Gordon (1968) described the challenges involved in individual self-concept measurement:

The self is not a thing; it is a complex process of continuing interpretive activity – simultaneously the person’s located subjective stream of consciousness (both reflexive and nonreflexive, including perceiving, thinking, planning, evaluating, choosing, etc.) and the resultant accruing structure of self-conceptions (the special system of self-referential meanings available to this active consciousness). (p. 116)

Gordon proposed a coding scheme to capture the complex self, using summations of self-description categories. Though keeping the same general procedure intact, several researchers have adapted the “Who Am I?” technique to study aspects of self-concept relevant to their own particular research goals (e.g. Bond & Cheung, 1983; Ickes, Layden, & Barnes, 1978).

Relevant to the present study are self-concept coding categories that can be used to determine if the possession of Dark Triad traits correspond more to a self-verifying or a self-soliciting process. Concerning self-concept content, self-verifiers desire to present a consistent self, centered on their confidently-held, predictable traits. Because the self-verifier is both aware of these self-attributed traits and desires to present them to other people consistently (Swann & Schroeder, 1995), they should be more likely to use more trait-based references in their self-descriptions as compared to state-based self-descriptions. For example, a self-verifier should be more likely to describe their self-concept as “extraverted” or “serious” rather than as “happy” or “stressed.”

If all individuals are self-verifiers, there should be no differences in self-concept content in relation to Dark Triad trait possession. However, if Dark Triad traits are more indicative of self-solicitation, higher levels of Dark Triad traits should predict fewer trait-based evaluations
and more state-based evaluations. Thus, the coding categories that are relevant to this study include the use of trait- and state-based terms to describe the self-concept, as discussed below in hypotheses 1 and 2.

**The Present Study**

Because Dark Triad traits reflect the inability to develop a well-integrated core self-concept, Dark Triad traits should affect the content of self-evaluations. The present investigation thus sought to determine whether Dark Triad traits influence self-concept descriptions in ways predicted by existing theory and research. The following hypotheses were tested:

**Hypothesis 1.** As noted above in regard to self-solicitation theory, individuals with higher Dark Triad traits are more likely to be self-solicitors than self-verifiers. As such, I expected that Dark Triad traits will negatively predict the use of ascribed personality trait terms in spontaneous self-concept descriptions.\(^1\) Note that self-verification theory would predict no significant association between scores on the Dark Triad and trait term usage because it postulates that most individuals are stable in their self-knowledge.

**Hypothesis 2.** Self-solicitors attempt to regulate their self-esteem through confirmation of ambiguous self-concepts. Additionally, evidence suggests that Dark Triad traits are maladaptive in that negative affect can prime negative, impulsive self-concepts, such as state-based self-concepts (Grigoras & Wille, 2017; Morf & Rhodewalt, 2001). As self-solicitors, those with high Dark Triad traits are thus expected to report more situational and non-defining self-concepts, such as state-descriptors. I therefore predicted that higher levels of Dark Triad traits

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\(^1\) Notably, Klein et al. (1996) claimed that an individual’s ability to describe the self using trait self-knowledge content is dependent on their repeated trait-specific experience. Whereas self-verifiers use more consistent trait-based self-concepts, self-solicitors have more malleable self-concepts. That is not to say that self-solicitors will not report trait-based self-concept content. Rather, because self-solicitors are less likely than self-verifiers to already possess salient trait-based self-knowledge, I hypothesize that higher levels of Dark Triad traits will be associated with fewer trait descriptors in their self-concept content.
will positively predicted increased state-based evaluation terms (e.g., tired, happy, relieved, stressed, exhilarated) in spontaneous self-concept content.

**Hypothesis 3.** According to self-verification theory, people seek social environments that confirm their own self-evaluations (whether these self-evaluations are positive or negative overall). To be a successful self-verifier, an individual’s self-view should match how others view them. This means that individuals must present their self in a coherent, predictable manner to others in line with their self-concept. After others can predict the self, subsequent behaviors from others should, in turn, become more consistent and predictable (Swann, 1985). In this way, self-verification is an other-oriented approach to impression management (Rhodewalt & Tragakis, 2002), meaning that self-verifiers are concerned that other people validate and reflect back to them the self-concept that the self-verifier already has. Whereas self-verifiers are other-oriented, self-solicitation involves a self-oriented approach to guide impression-management. Therefore, the behavior of the self-solicitor is not meant to help others understand the self-solicitor’s self, but rather to help the self-solicitor understand their self. Kassarjian (1962) outlined a method to examine individual levels on a continuum of inner- and other-directedness for those using a self-oriented approach to guide behavior. Due to the other-directedness of self-solicitation, I predicted that higher levels of Dark Triad traits will be positively correlated with inner-directedness.

**Hypothesis 4.** Throughout the literature, self-solicitors and narcissists are described as having a weak sense of self. Attempts to quantify the extent to which someone’s personality can be evaluated as either “weak” or “strong” resulted in the Sense of Self Scale (Flury & Ickes, 2007). Characteristics describing a weak sense of self include: (1) a lack of self-understanding, (2) sudden changes in opinions, values, and feelings, (3) confusion between one’s own thoughts
and feelings, and that of others, and (4) a tenuous feeling of one’s own existence (Flury & Ickes, 2007). The Sense of Self Scale has been used to study the relationship between sense of self and identity status (Ickes, Park, & Johnson, 2012) and distress in gay and lesbian adults (Sowe, Brown, & Taylor, 2014). Because self-solicitation theory views self-solicitors, such as those with high levels of Dark Triad traits, as having a weak sense of self, I hypothesized that possession of Dark Triad traits is associated with a weak sense of self.

**Hypothesis 5.** As mentioned earlier, individual differences influence likelihood of being a self-solicitor, that is, someone with a weak sense of self who must “solicit” aspects of his or her self-concept. Accordingly, self-solicitation theory (Rhodewalt & Tragakis, 2002) suggests that the characteristic of having a weak sense of self is what causes unstable self-concepts. Considering these relationships, I predicted that the degree to which someone has a weak sense of self will mediate both trait and state term self-concept content related to higher levels of Dark Triad traits.
CHAPTER 2

METHOD

This current study tested the research hypotheses through use of an archival data set that I collected in the Spring of 2018. (See Table 2 for a list of means, standard deviations, and Cronbach’s alphas for the variables of interest from the archival data.)

Participants

A total of 304 undergraduates (213 females and 91 males) from The University of Texas at Arlington were recruited in Spring 2018 to participate in an online study measuring personal characteristics and self-concept content. Students were recruited from the departmental subject pool with a criterion of English as one of their most used languages. In exchange for completing the study, participants received .75 SONA credit hours towards participation or extra credit in their psychology courses.

Measures

A total of four measures were selected for use in the current study to assess individuals’ propensity to self-solicit as a result of Dark Triad traits. First, the Dirty Dozen scale was selected to concisely examine Dark Triad traits in respondents due to its high reliability in measuring Machiavellianism, psychopathy, and narcissism (Jonason & Webster, 2010). Second, the Inner-Other Directedness Scale (Kassarjian, 1962) was selected to measure the degree to which a participant is inner-directed, that is, they are guided by their own goals (i.e. self-oriented impression managers). Once again, as self-oriented impression-managers, self-solicitors are more likely to score higher on inner-directedness than self-verifiers. Third, the Sense of Self Scale (Flury & Ickes, 2007) measures the extent to which an individual’s sense of self is weak or strong. As stated previously, a weaker sense of self indicates a lack of self-understanding, which
is expected for self-solicitors. As was mentioned earlier, to measure trait- versus state-based terminology in self-concept, the “Who Am I?” task was chosen because it depicts a natural representation of self-knowledge content (Markus, 1977).

**Dirty Dozen Scale.** The 12-item Dirty Dozen scale (Jonason & Webster, 2010) measures Dark Triad traits in individuals. Machiavellianism (e.g., “I tend to manipulate others to get my way”), Psychopathy (e.g., “I tend to be callous or insensitive”), and Narcissism (e.g., “I tend to want other to admire me”) are each measured with four items. Scale items were calculated using a 7-point Likert-scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*). An overall Dark Triad score was calculated by summing the twelve items.

**Inner-Other Directedness Scale.** Kassarjian (1962) developed the Inner-Other Directedness Scale to measure both direction and strength of respondents’ level of inner- or other-directedness, such that a high score indicates a more inner-directed individual (\(M = 81.74, SD = 13.37\)). In the original format, participants select an inner- or an other-directed response to a hypothetical scenario, and either write a “1” if they slightly prefer, or a “2” if they strongly prefer the chosen response. To compute inner-other directedness in an online study, the scale was administered with the two response options on separate sides of a 4-point scale (see Appendix C). Participants were instructed to select the box closest to the response they prefer or the middle box closest to the response if they only have a slight preference for it. There were no reported problems with the revised response format.

**Sense of Self Scale.** The Sense of Self Scale (Flury & Ickes, 2007) is a 12-item scale, with 3 items reverse coded, that was measured using a 4-point Likert scale (1 = *strongly disagree*; 4 = *strongly agree*) to measure the degree of weakness versus strength of an individual’s sense of self. Based on the relevant clinical literature as summarized by Flury and
Ickes, (2007), the scale measures 4 components that differentiate a weak versus strong sense of self: (1) a lack of self-understanding (e.g., “Who am I? is a question that I ask myself a lot”); (2) sudden changes in opinions, values, and feelings (e.g., “I wish I were more consistent in my feelings”); (3) confusion between one’s own thoughts and feelings, and the thoughts and feelings of others (e.g., “I’m not sure that I can understand or put much trust in my thoughts and feelings”); and (4) a tenuous feeling of one’s own existence (e.g., “I often think how fragile my existence is”).

**Who am I? Questionnaire.** A measure designed to capture aspects of the spontaneous self-concept was initially developed in 1950 by Bugental and Zelen, and then updated by Gordon (1968). Participants provided free-response answers to finish the statement “I am…” 15 times. Subsequently, 5-person teams of trained, undergraduate raters coded each of these free-response items using the 11 coding categories listed in Appendix F. The inter-rater reliabilities of the coding for each of these categories, assessed via a one-way random intraclass correlation are provided in Table 2. Raters were provided specific instructions for identifying and coding trait-versus state-descriptors, and these instructions appear below.

**Trait Descriptors.** “If the response contains one or more ascribed trait descriptors (in other words, personality traits) that apply to the participant (e.g., introverted, kind, serious, fun-loving, shy, lazy, passionate, unfriendly, curious), code the response with a 1. Otherwise, code it with a zero (0).”

**State Descriptors.** “If the response contains one or more ascribed state descriptors (in other words, current psychological states) that apply to the participant (e.g., tired, happy, relieved, stressed, exhilarated, worried, sad, excited, sleepy) code the response with a 1.
Otherwise, code it with a zero (0).” Note that the interrater reliabilities for these particular coding categories were .92 and .88, respectively.
CHAPTER 3
RESULTS

Data Screening

The data from 6 participants were excluded from analyses of the archival data set for various reasons. Those participants that were removed included: (a) four participants who individually selected the same value on all items of at least one Likert-scale personality measure that had reverse-keyed items (e.g., selected “2” for all items on a 5-point scale); (b) one participant who completed the 15 “Who Am I?” prompts with a series of words, many of which could not be coded, but when combined together, formed a sentence; and (c) one participant who completed each of the 15 “Who Am I?” prompts with the letter “a”. After these participants were excluded, 298 participants (210 females and 88 males) remained and those data were used in the analyses reported below.

Assumptions of normal distribution and kurtosis were assessed for all measures in the present study prior to statistical analyses. Histograms of each variable confirmed that normality assumptions were met. A few univariate outliers emerged, but were retained because they represented plausible values.

Hypothesis 1

A linear regression was employed to test whether higher levels of Dark Triad traits would negatively predict the use of trait terms in spontaneous self-concept descriptions. Results of the regression supported the hypothesis, $R^2 = .03$, $F(1, 296) = 10.54$, $p = .001$. Higher levels of Dark Triad traits predicted decreased trait term usage in self-concept content, $\beta = -.19$, $t(296) = -3.25$, $p = .001$, $sr^2 = .03$. This supports suggestions by Klein et al. (1996) that the ability to describe
trait self-knowledge is related to sufficient trait-specific experience. Unlike self-verifiers, self-solicitors do not have consistent trait-based self-concepts.

**Hypothesis 2**

A linear regression was used to determine if higher levels of Dark Triad traits would predict increased use of state terms in spontaneous self-concept descriptions. Dark Triad traits are considered maladaptive in that negative affect can prime negative, impulsive self-concepts, such as trait-based self-concept evaluations (Grigoras & Wille, 2017; Morf & Rhodewalt, 2001). Results from the regression analysis supported the hypothesis, $R^2 = .03$, $F(1, 296) = 7.59$, $p = .01$. Higher levels of Dark Triad traits were able to predict state term usage in self-concept content related to Dark Triad trait possession, $\beta = .16$, $t(296) = 2.76$, $p = .01$, $sr^2 = .03$.

**Hypothesis 3**

A Pearson’s correlation was used to determine if higher levels of Dark Triad traits were related to inner-directedness. Contrary to the hypothesis, the results indicated that there was a weak negative relationship between Dark Triad traits and inner-directedness, $r(296) = -.15$, $p = .01$.

There are several potential reasons why this relationship was negative instead of positive. First, more inner-directed scores on the inner-other directedness scale may indicate an increased propensity to self-verify due to a reliable, core sense of self, rather than indicating a motivational difference in impression management. Also, low internal consistency may indicate that the inner-other directedness measure has poor reliability. Further, the transformation of the scale to an online format may have affected measurement of the scale such that statistical significance may be due to Type 1 error.
Hypothesis 4

A linear regression was used to test the hypothesis that higher levels of Dark Triad traits are associated with a weak sense of self. Self-solicitors differ from self-verifiers in that they have a weak sense of self. The model supported the hypothesis, $R^2 = .06$, $F(1, 296) = 19.18$, $p < .001$. Higher levels of Dark Triad traits uniquely predicted having a weak sense of self, $\beta = .25$, $t(296) = 4.38$, $p < .001$, $sr^2 = .06$.

Hypothesis 5

A path analysis was conducted using IBM SPSS Amos 20.0 structural equational modeling software to test hypothesis 5. Consistent with the hypothesis, the overall model demonstrated that the degree to which an individual has a weak sense of self mediates both the use of trait and state terms in relation to higher levels of Dark Triad traits (see Figure 1). The proposed pathway demonstrated a good model fit, $\chi^2(2) = 5.03$, $p = .08$; $NFI = .98$; $CFI = .99$; $RMSEA = .07$, determined by criteria recommended by Tabachnick and Fidell (2012). Table 3 reports the direct, indirect, and total effects from the path model.

As predicted by Hypothesis 4, higher levels of Dark Triad traits predicted having a weak sense of self ($\beta = .25$). Afterwards, a weak sense of self predicted a decreased use of trait terms ($\beta = -.27$) and an increased use of state terms ($\beta = .26$) in self-concept content. Altogether, a weak sense of self, a prerequisite of self-solicitation, mediates trait- and state-term usage in self-concept content related to increased Dark Triad trait levels. Thus, this model suggests that those with higher Dark Triad traits are likely self-solicitors.

Controlling for Gender

Stepwise linear regression analyses were used to determine if the gender of participants would predict differences in trait- and state-term usage, and whether controlling for gender
reduced the predictability of self-concept content in relation to Dark Triad traits. These results indicated that gender was not a significant predictor of trait-term usage in self-concept content, $F(1, 296) = 1.12, p = .29$. Further, controlling for gender resulted in no noticeable change in effect for the prediction of trait-term usage related to Dark triad traits, $\Delta R^2 = .03, \Delta F(1, 295) = 9.57, p = .002$. Gender was also not a significant predictor of state-term usage in self-concept content, $F(1, 296) = .29, p = .59$. Likewise, controlling for gender resulted in no noticeable change in effect for the prediction of state terms usage related to Dark triad traits, $\Delta R^2 = .02, \Delta F(1, 295) = 7.27, p = .01$.

**Age as a Predictor of Sense of Self**

Identity is likely to fluctuate more for individuals in emerging adulthood than for older adults (Santrock, 2018). However, differences in sense of self have also been noted between freshmen and senior undergraduates, such that senior undergraduate students have a stronger sense of self than freshmen undergraduate students (Kroger, 2015). An additional regression analysis was conducted to determine if both age and Dark Triad traits predict strength or weakness in sense of self in a single model, $R^2 = .08, F(2, 295) = 12.30, p < .001$. As described by Santrock (2018), age predicted a stronger sense of self for undergraduate students, $\beta = .25, t(295) = 4.50, p < .001, sr^2 = .06$. In this model, increased Dark Triad traits remained a significant predictor of a weaker sense of self, $\beta = -.13, t(295) = -2.27, p = .02, sr^2 = .02$.

Two additional models were tested to determine whether Dark Triad trait levels and age collectively predicted trait-term usage ($R^2 = .04, F(2, 295) = 5.28, p = .01$) and state-term usage ($R^2 = .03, F(2, 295) = 5.03, p = .01$) in self-concept content. Age was not a unique predictor of trait-term usage in the first model, $\beta = .01, t(295) = .21, p = .84$; whereas increased Dark Triad traits remained a significant predictor of trait-term usage, $\beta = -.19, t(295) = -3.25, p = .001, sr^2 = .02$. 
.03. Similarly, age was not a unique predictor of state-term usage in the second model, $\beta = -.09$, $t(295) = -1.56, p = .12$; whereas increased Dark Triad traits remained a significant predictor of state-term usage, $\beta = .16$, $t(295) = 2.82, p = .01$, $sr^2 = .03$. 
Researchers agree that higher levels of Dark Triad traits interfere with the development of a well-integrated core self (Barlett, 2016; Barlett & Barlett, 2015; Fukushima & Hosoe, 2011; Grigoras & Wille, 2017; Morf & Rhodewalt, 2001). However, there have been no studies to date that have investigated self-concept content related to overall Dark Triad trait levels. Accordingly, the present study was meant to address this gap in the literature. In addition to examining the self-concept content related to increased Dark Triad traits, the results indicated that the relationship between higher levels of Dark Triad traits and self-concept content was mediated by the degree to which an individual has a weak sense of self. Taken together, these findings suggest that individuals with higher dark triad traits have a weak sense of self that is characteristic of self-solicitors (Rhodewalt & Tragakis, 2002).

The purpose of this study was to test whether Dark Triad traits influence self-concept descriptions in a spontaneous self-concept task. Historically, previous studies relied on pre-defined adjectives or self-report questionnaires to measure self-concept content. However, these measures produce unreliable results and do not account for the natural organization of self-concept content (Rentsch & Heffner, 1994). Therefore, the present study employed a spontaneous self-concept measure. A spontaneous self-concept measure improves the ability to measure self-concept content through use of a self-schematic approach (Gordon, 1968). As a result, the current study measured easily accessible, hierarchically-organized knowledge structures about the self, and related self-knowledge to Dark Triad trait levels through tests of the research hypotheses.
The results of the present study supported hypotheses that levels of Dark Triad traits were related to self-concept content. Specifically, the results of the first hypothesis indicated that increased Dark Triad traits were related to decreased trait-term usage in self-concept content. This result supports previous findings that repeated trait-specific experience is required to describe trait self-knowledge (Klein et al., 1996).

In addition, the results of the second hypothesis revealed that increased Dark Triad traits were related to an increase in state-term usage in self-concept content. This finding was expected because Dark Triad traits are considered to be maladaptive such that the self-concepts of those with higher Dark Triad traits can be impulsive and based on current affect, which increases the likelihood that current emotional states will become a focus of their self-concept (Grigoras & Wille, 2017; Morf & Rhodewalt, 2001).

If individuals with higher levels of Dark Triad traits are self-solicitors, a weak sense of self should mediate their likelihood towards use of decreased trait- and increased state-based self-concept content. The current study therefore identified relationships between trait- and state-term usage in self-concept content related to level of Dark Triad traits. The results indicated that the relationship between Dark Triad traits and self-concept content was in fact mediated by a weak sense of self.

Significantly, the present study is one of the first to identify self-concept content related to overall Dark Triad traits. Self-concepts are used by individuals to guide behavior. “Feeling that one knows oneself facilitates using the self to make sense and make choices, using the self as an important perceptual, motivational and self-regulatory tool” (Oyserman, Elmore, & Smith, 2012, p. 69). Recent studies have shown that higher levels of Dark Triad traits are related to aggression (Barlett, 2016; Burtăverde, Chraif, Aniței, & Mihăilă, 2016), lying (Baughman,
Jonason, Vernon, & Lyons, 2014), and criminal tendencies (Wright et al, 2017). A better understanding of the differences in self-concepts related to Dark Triad trait possession may partially explain why those with higher Dark Triad traits are more likely to engage in antisocial behavior.

**Strengths**

The present study is the first, or one of the first, to examine whether self-concept content is related to the Dark Triad. This study is also the first to use a spontaneous self-concept measure to assess this relationship. Self-concept content was assessed using a free-response format, which minimized primed responses (Rentsch & Heffner, 1994) and increased the potential range of responses (Gordon, 1968). In the “Who Am I?” task, the first 15 responses from participants to the prompt “I am:” indicate both salience and relevance to the individual. Inclusion of a spontaneous self-concept measure allowed an opportunity to measure self-concept content of interest to the present study; in this case, the use of trait- and state-terms.

Moreover, the current study included a measurement of weakness versus strength of an individual’s sense of self. Individuals who have a weak sense of self are likely to be self-solicitors (Rhodewalt & Tragakis, 2002). Considering that previous studies have shown that individuals with higher levels of Dark Triad traits have a weak sense of self (Barlett, 2016; Barlett & Barlett, 2015; Fukushima & Hosoe, 2011; Grigoras & Wille, 2017; Morf & Rhodewalt, 2001), the present study assessed the likelihood that those with higher Dark Triad traits are self-solicitors. In support of the fourth hypothesis, there was a positive relationship between higher levels of Dark Triad traits and a weak sense of self. Also, in support of the fifth hypothesis, a weak sense of self mediated the relationship between higher levels of Dark Triad traits and both decreased trait-based and increased state-based self-concept content. The inclusion of a sense of
self measure is a strength of the present research design because the Sense of Self Scale was able to evaluate the relationship between the Dark Triad traits and self-concept content as a result of self-solicitation, rather than evaluating the trend between Dark Triad traits and self-concept content alone. The relationship between higher levels of Dark Triad traits, a weak sense of self, and self-concept content suggests those with higher levels of Dark Triad traits are likely self-solicitors.

**Limitations and Future Directions**

Although the current study generated new insights regarding the self-concept content of individuals with higher levels of Dark Triad traits, there are some limitations. First, the age range for this study was restricted to an undergraduate sample – which primarily consists of individuals in emerging adulthood. The results of the current study suggest that individual differences in sense of self and self-concept content appear as early as emerging adulthood for individuals with higher levels of Dark Triad traits.

Moreover, individuals in late adolescence and emerging adulthood are more likely to have fluctuating self-concepts, and a weaker sense of self than older adults (Erikson, 1968; Kroger, 2015; Santrock, 2018). Whereas most individuals develop a stronger sense of self as they get older, if individuals with higher Dark Triad trait levels maintain a weak sense of self throughout adulthood, possession of Dark Triad traits may be a stronger predictor of self-concept content in older adults. Future studies should employ a longitudinal design to determine whether sense of self and self-concept content changes at a different rate for individuals based on their level of Dark Triad traits.

Second, the “Who Am I?” task may not be entirely representative of an individual’s self-concept content. Although the participants were instructed to “quickly write down whatever
comes to mind at the present time” when completing the “Who Am I?” task, some self-solicitors may have taken additional time to create trait descriptors because self-solicitors retain the capability of generating new self-concept content. In contrast, prior findings by Klein et al. (1996) suggest self-solicitors lack the repeated trait-specific experience to list multiple trait-specific self-concepts, suggesting self-solicitors are not likely to create trait self-concept content for the task. Also, there were no potential benefits for a self-solicitor to create trait-specific self-concepts for the “Who Am I?” task. At any rate, there remains the possibility that self-solicitors may have taken additional time to create trait descriptors. In order to control for this potential covariate, future studies should measure the time individuals used to complete the “Who Am I?” task.

Third, while the present study examined self-concept content related to higher levels of Dark Triad traits, there were no measures of antisocial behavior activity. Can the self-concept content of those with higher levels of Dark Triad traits predict antisocial behavior? Because self-concept content is a meaningful predictor of behavior (Oyserman et al., 2012), it is reasonable to assume the antisocial behavior typical of the Dark Triad may be mediated by self-concept content. To investigate this relationship, future studies should include a measure of antisocial behavior.

Summary

Researchers have recently started to explore the relationship between identity and the Dark Triad. However, researchers have not studied the extent to which self-concept content differs for individuals in relation to levels of Dark Triad traits. To address this gap, I examined the relationship between higher levels of Dark Triad traits, sense of self, and self-concept content. As a result, the current study generated novel findings that contribute to a more
comprehensive understanding of the self-concept of individuals with higher levels of Dark Triad traits. In addition, the results of the current investigation supported theoretical predictions made by Rhodewalt and Tragakis (2002).

The current study was designed to measure the self-concept content of those with higher levels of Dark Triad traits. Although the current study did not include behavioral measures, it provides a new way to study behavioral outcomes of Dark Triad traits (Oyserman et al, 2012). Above all, the current study provided insight into the relationship between Dark Triad traits, sense of self, and self-concept content. Ultimately, the results of this study will be valuable to future studies involving self-concept content and behavioral outcomes of the Dark Triad.
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Figure 1. Results for the pathway model. Non-Normed Fit Index = .98; Comparative Fit Index = .99; root mean square error of approximation: .07; chi-square = 5.03; degrees of freedom = 2. e = error.

*p < .05. **p < .01. ***p < .001.
Table 1

*An Overview of Major Points of Similarity and Difference Between Self-Verification Theory and Self-Solicitation Theory*

<table>
<thead>
<tr>
<th>Major Points of Similarity Between Self-Verification and Self-Solicitation Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Verification Theory</strong></td>
</tr>
<tr>
<td>• Self-esteem instability increases likelihood of self-verification</td>
</tr>
<tr>
<td>• Self-verifiers have specific self-concepts they want to confirm prior to interpersonal interactions</td>
</tr>
<tr>
<td><strong>Self-Solicitation Theory</strong></td>
</tr>
<tr>
<td>• Self-esteem instability increases likelihood of self-solicitation</td>
</tr>
<tr>
<td>• Self-soliciters have specific self-concepts they want to confirm prior to interpersonal interactions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Points of Difference Between Self-Verification and Self-Solicitation Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Verification Theory</strong></td>
</tr>
<tr>
<td>• Individuals validate <em>existing</em> self-concepts through interpersonal interactions</td>
</tr>
<tr>
<td>• The tendency to self-verify is more common in individuals who have a strong sense of self</td>
</tr>
<tr>
<td>• Interactions with others provide opportunities to confirm known self-concepts</td>
</tr>
<tr>
<td>• Individuals are <em>other</em>-oriented impression managers, wanting others to view the self as they do</td>
</tr>
<tr>
<td>• Goal of individuals is to have a stronger foundation of self-knowledge</td>
</tr>
<tr>
<td>• Feedback that confirms a self-concept benefits the individual’s self-knowledge</td>
</tr>
<tr>
<td><strong>Self-Solicitation Theory</strong></td>
</tr>
<tr>
<td>• Individuals attempt to affirm <em>desired</em> self-concepts through interpersonal interactions</td>
</tr>
<tr>
<td>• Self-solicitation is more common in individuals who lack a secure self-concept</td>
</tr>
<tr>
<td>• Interactions with others are used to assess provisional self-concepts</td>
</tr>
<tr>
<td>• Individuals are <em>self</em>-oriented impression managers, relying on others to confirm that their self-concepts are valid</td>
</tr>
<tr>
<td>• Goal of individuals is to temporarily regulate self-knowledge and self-esteem</td>
</tr>
<tr>
<td>• Individuals question confirmatory feedback when they become aware of the influence they played in soliciting feedback</td>
</tr>
</tbody>
</table>
Table 2
Means, Standard Deviations, and Alpha Coefficients for the Archival Data Variables of Interest

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
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<td>3.75</td>
<td></td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>7.86</td>
<td>5.52</td>
<td>.81</td>
</tr>
<tr>
<td>Psychopathy</td>
<td>5.91</td>
<td>5.27</td>
<td>.80</td>
</tr>
<tr>
<td>Narcissism</td>
<td>10.70</td>
<td>5.85</td>
<td>.84</td>
</tr>
<tr>
<td>Dark Triad</td>
<td>24.47</td>
<td>13.28</td>
<td>.87</td>
</tr>
<tr>
<td>Inner-Other Directedness</td>
<td>81.68</td>
<td>13.63</td>
<td>.59</td>
</tr>
<tr>
<td>Sense of Self Scale</td>
<td>27.53</td>
<td>6.32</td>
<td>.83</td>
</tr>
<tr>
<td>Trait Descriptors</td>
<td>.56</td>
<td>.25</td>
<td>.92</td>
</tr>
<tr>
<td>State Descriptors</td>
<td>.20</td>
<td>.18</td>
<td>.88</td>
</tr>
</tbody>
</table>
Table 3

*Direct, Indirect, and Total Effects for the Pathway Model*

<table>
<thead>
<tr>
<th>Model</th>
<th>( \beta )</th>
<th>( B )</th>
<th>( R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dark Triad</td>
<td>Sense of Self</td>
<td>Dark Triad</td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of Self</td>
<td>.25**</td>
<td></td>
<td>.12**</td>
</tr>
<tr>
<td>Trait terms</td>
<td></td>
<td>-.27**</td>
<td></td>
</tr>
<tr>
<td>State terms</td>
<td></td>
<td>.26**</td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of Self</td>
<td></td>
<td>-.07**</td>
<td></td>
</tr>
<tr>
<td>Trait terms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State terms</td>
<td></td>
<td>.06**</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of Self</td>
<td>.25**</td>
<td></td>
<td>.12**</td>
</tr>
<tr>
<td>Trait terms</td>
<td>-.07**</td>
<td>-.27**</td>
<td>-.001**</td>
</tr>
<tr>
<td>State terms</td>
<td>.06**</td>
<td>.26**</td>
<td>.001**</td>
</tr>
</tbody>
</table>

*Note.* Results based on 1,000 bias-corrected bootstrap samples.

*\( ^*p < .05. \**p < .01. \***p < .001. \*\*p < .05. **p < .01. ***p < .001.* \*
Appendix A

Sociodemographic Questions

1. What is your age? _________

2. What is your gender?
   a. Male
   b. Female

3. What is your country of origin?

4. What is your race/ethnicity?
   a. American Indian or Alaskan Native
   b. Asian
   c. Black or African American
   d. White/Caucasian Non-Hispanic
   e. Hispanic or Latino
   f. Middle Eastern
   g. other

5. What is the highest education achieved by your mother?
   a. Did not complete high school
   b. High school / GED
   c. Some college
   d. Bachelor’s degree
   e. Master’s degree
   f. Advanced graduate work or PhD
   g. Not sure

6. What is the highest education achieved by your father?
   a. Did not complete high school
   b. High school / GED
   c. Some college
   d. Bachelor’s degree
   e. Master’s degree
   f. Advanced graduate work or PhD
   g. Not sure
7. If you are still supported by your parents, what is the annual household income of that family?
   a. Under $25,000
   b. $25,000 - $49,999
   c. $50,000 - $74,499
   d. $75,000 - $99,999
   e. $100,000 - $124,999
   f. Over $125,000
   g. Not sure
   h. Not supported

8. If you are no longer supported by your parents, what is your own annual household income?
   a. Under $25,000
   b. $25,000 - $49,999
   c. $50,000 - $74,499
   d. $75,000 - $99,999
   e. $100,000 - $124,999
   f. Over $125,000
   g. Not sure
   h. Supported by parents

9. How many siblings were you raised with?
   a. 0
   b. 1
   c. 2
   d. 3
   e. More than 3

10. Please chose the option that applies to you.
    a. I don’t have any siblings
    b. My sibling(s) is/are older than me and are of the opposite-sex
    c. My sibling(s) is/are older than me and are of the same-sex
    d. My sibling(s) is/are younger than me and of the opposite-sex
e. My sibling(s) is/are younger than me and of the same-sex
f. I have both same-sex and opposite-sex siblings
g. I have siblings younger and older than me of the same-sex

11. What was the primary language spoken in your childhood home?
12. What language do you use most often in your current day-to-day interaction with others?
13. Where did you live most of the time when you were growing up? Please provide a city, state, and country (for example: Springfield, Illinois, USA)?
14. How many years did you live in the place you listed in the previous question (question #13)?
15. Where did you live for the next-longest amount of time? Please provide a city, state, and country (for example: Manhattan, New York, USA)?
16. How many years did you live in the place you listed in the previous question (question #15)?
Appendix B

Dirty Dozen Scale (Jonason & Webster, 2010)

For the following, please indicate your strength of agreement or disagreement with each of the following items on a 7-point scale (1=Strongly Disagree; to 7=Strongly Agree) in regards to yourself.

1. I tend to manipulate others to get my way.
2. I have used deceit or lied to get my way.
3. I tend to exploit others towards my own end.
4. I have used flattery to get my way.
5. I tend to lack remorse.
6. I tend to be callous or insensitive.
7. I tend to be unconcerned with the morality of my actions.
8. I tend to be cynical.
9. I tend to want others to admire me.
10. I tend to want others to pay attention to me.
11. I tend to seek prestige or status.
12. I tend to expect special favors from others.
Appendix C

Inner-Other Directedness Scale (Kassarjian, 1962)

A number of controversial statements or questions with two alternative answers are given below. Answer every item as it applies to you. Indicate your preference by selecting the box closest to the choice if you agree with it, or the middle box closest to that selection if you only have a slight preference to it. Some of the alternatives may appear equally attractive or unattractive to you. Nevertheless, please make a real attempt to choose the alternative that is relatively more acceptable to you.

<table>
<thead>
<tr>
<th>With regard to partying, I feel:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The more the merrier (25 or more people present)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>It is nicest to be in a small group of intimate friends (6 or 8 people at the most)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I had more time:</th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>I would spend more evenings at home doing the things I'd like to do</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I would more often go out with friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I were trained as an electrical engineer and liked my work very much and would be offered a promotion into an administrative position, I would:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept it because it means an advancement in pay which I need quite badly</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Turn it down because it would no longer give me an opportunity to do the work I like and am trained for even though I desperately need more money.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I believe that:</th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>It is difficult to draw a line between work and play and therefore one should not even try it</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>One is better off keeping work and social activities separated</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I would rather join:</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A political or social club or Organization</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>An organization dedicated to literary, scientific or other academic subject matter</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I would be more eager to accept a person as a group leader who:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is outstanding in those activities which are important to the group</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Is about average in the performance of the group activities but has an especially pleasing personality.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I like to read books about:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>People like you and me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Great people or adventurers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For physical exercise or as a sport I would prefer:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Softball, basketball, volleyball, or similar team sport</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Skiing, hiking, horsebackriding, or similar individual sport</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>With regard to a job, I would enjoy more:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>One in which one can show his skill or knowledge</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Being able to make friends is a great accomplishment in and of itself</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>It is more desirable:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be popular and well-liked by everybody</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>With regard to clothing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would feel conspicuous if I were not dressed the way most of my friends are dressed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>On the subject of social living:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person should set up his/her own standards and then live up to them</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I would consider it more embarrassing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be caught loafing on a job for which I get paid</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I respect the person most who:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is considerate of others and concerned that they think well of him/her</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>A child who has had intellectual difficulties in some grade in school:</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Should repeat the grade to be able to get more out of the next higher grade</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>In my free time:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I'd like to read an interesting book at home</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A great many friends who are, however, not very intimate friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When doing something, I am most concerned with:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;What's in it for me&quot; and how long it will last</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>As leisure-time activity I would rather choose:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodcarving, painting, stamp collecting, photography, or similar activity</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I consider a person most successful when:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Option 1</td>
<td>Option 2</td>
<td>Option 3</td>
<td>Option 4</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>He/she can live up to his/her own standards and ideals</td>
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<tr>
<td>One of the main things a child should be taught is:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>As far as I am concerned:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I am only happy when I have people around me</td>
<td></td>
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<tr>
<td>On a free evening:</td>
<td></td>
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<tr>
<td>The persons whom I admire most are those who:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I consider myself to be:</td>
<td></td>
<td></td>
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<tr>
<td>In bringing up children, the parents should:</td>
<td></td>
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<tr>
<td>To me it is very important:</td>
<td></td>
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<tr>
<td>I prefer listening to a person who:</td>
<td></td>
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<tr>
<td>Schools should:</td>
<td></td>
<td></td>
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<tr>
<td>That one shares the opinions others hold on a particular matter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For me it is more important to:</td>
<td></td>
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</tbody>
</table>
When in a strange city or foreign country I should have no great difficulty because:

| I am interested in new things and can live under almost any conditions | ☐ | ☐ | ☐ | ☐ | People are the same everywhere and I can get along with them |
| believe in coffee breaks and social activities for employees because: |
| It gives people a chance to get to know each other and enjoy work more | ☐ | ☐ | ☐ | ☐ | People work more efficiently when they do not work for too long a stretch at a time and can look forward to special events |
| The greatest influence upon children should be: |
| From their own age group and from educational sources outside the family since they can be more objective in evaluating the child's needs | ☐ | ☐ | ☐ | ☐ | From the immediate family who should know the child best |
Appendix D

Sense of Self Scale (Flury & Ickes, 2007)

For the following, please indicate your strength of agreement or disagreement with each of the following items on a 4-point scale (1=Strongly Disagree; to 4=Strongly Agree) in regards to yourself.

1. I wish I were more consistent in my feelings.
2. It’s hard for me to figure out my own personality, interests, and opinions.
3. I often think how fragile my existence is.
4. I have a pretty good sense of what my long-term goals are in life.
5. I sometimes wonder if people can actually see me.
6. Other people’s thoughts and feelings seem to carry greater weight than my own.
7. I have a clear and definite sense of who I am and what I’m all about.
8. It bothers me that my personality doesn’t seem to be well-defined.
9. I’m not sure that I can understand or put much trust in my thoughts and feelings.
10. Who am I? is a question that I ask myself a lot.
11. I need other people to help me understand what I think or how I feel.
12. I tend to be very sure of myself and stick to my own preferences even when the group I am with expresses different preferences.
Appendix E

Who am I? Questionnaire (Gordon, 1968)

In each of the numbered blanks below, please write a phrase or a sentence that describes or characterizes you that begins with the words “I am.” We are interested in how you see yourself right now, so just quickly write down whatever comes to mind at the present time.

1. I am:

2. I am:

3. I am:

4. I am:

5. I am:

6. I am:

7. I am:

8. I am:

9. I am:

10. I am:

11. I am:

12. I am:

13. I am:

14. I am:

15. I am:
Appendix F

Who Am I? Coding Categories

Items listed by participants can fall into more than one category; the default is zero “0” for each response, unless the response warrants a different code from the guidelines below:

1. **Self-reference pronouns.** Code with a 1 if the response contains any first-person singular pronouns (I, me, my, mine, myself). (DO NOT INCLUDE THE “I AM” SENTENCE STEMS IN ANY OF THE CODING, HERE AND BELOW.) Code with a zero (0) if there are not any first-person singular pronouns in the response following the “I am:” sentence stem.

2. **Overall affective tone.** Code with either -1, 0, or 1, depending on whether the part of the response that follows the sentence stem is affectively positive (1), neutral (0), or negative (-1) in your opinion.

3. **Individuation.** In your opinion, to what percent of the participants who took the online survey would this particular self-description accurately apply? **Round your estimate to the nearest 10%** (i.e., you can assign scores of 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, or 100). A score of 0 means that the self-description would apply to this participant only, but to no (i.e., zero) other participants. In contrast, a score of 50 means that the self-description would apply to about half of the participants who took the online survey, and a score of 100 means that the self-description would apply to all (every one) of the participants who took the online survey.

4. If the response contains a **demographic characteristic** such as “I am: a male, female, old, young, African-American, Latino/a, white, rich, poor, working class, middle class, etc., code the response with a 1. Otherwise, code it with a zero (0).

5. If the response contains one or more **abstract identifications** that apply to the participant (e.g., “I am an atheist/Christian/Muslim, etc.”; “I am an American, Iranian, etc.”; “I am a vegan”; “I am a millennial”; “I am a Republican, Democrat, Libertarian”), code the response with a 1. Otherwise, code it with a zero (0).

6. If the response contains one or more ascribed **trait descriptors** (in other words, personality traits) that apply to the participant (e.g., introverted, kind, serious, fun-loving, shy, lazy, passionate, unfriendly, curious), code the response with a 1. Otherwise, code it with a zero (0).

7. If the response contains one or more ascribed **state descriptors** (in other words, current psychological states) that apply to the participant (e.g., tired, happy, relieved, stressed, exhilarated, worried, sad, excited, sleepy) code the response with a 1. Otherwise, code it with a zero (0).

8. If the response contains one or more **social role descriptors** that apply to the participant (e.g., son, daughter, brother, sister, mother, friend, enemy, caregiver, identical twin), code the response with a 1. Otherwise, code it with a zero (0).
9. If the response contains one or more **interest and activity descriptors** that apply to the participant (e.g., “I am a skateboarder”; “I am a guitar-player”; “I am a portrait painter”), code the response with a 1. Otherwise, code it with a zero (0).

10. If the response contains one or more **references to the person’s body** (e.g., “I am too fat”; “I am gorgeous”), code the response with a 1. Otherwise, code it with a zero (0).

11. If the response contains one or more references to the **person in relation to others** (e.g., “I am generous to others”; “I am not someone you want to mess with”), code the response with a 1. Otherwise, code it with a zero (0).
Appendix G

Authorization Form

Consent to Participate in Study

Hello! My name is Stephen Doerfler, and I am requesting your participation in a UT Arlington research study titled, "Personal Characteristics and Self-Concept." The purpose of this study is to examine how various personal characteristics are related to people's self-concepts. The procedures that you will follow as a research subject are to answer some sociodemographic questions, complete various self-report survey measures, and complete an open-ended self-concept measure. In total, your participation in this online survey should take 35 minutes or less. There are no perceived risks or direct benefits for participating in this study. There are no alternatives to this research project, but you may quit at any time. You must be at least 18 years old to participate, and English must be your most frequently used language.

You will receive .75 credit hours in the UTA Psychology SONA system for participating in this research study.

Any identifiable information will be kept confidential, with access limited to the research team. We may publish, present, or share the results, but your name will not be used. If you have questions about the study, you can contact me at stephen.doerfler@mavs.uta.edu. For questions or concerns, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

**By clicking on the “next” button below, you indicate your voluntary agreement to participate in this online survey.**