ABSTRACT

ANDREWS, JOSHUA SCOTT. A Tale of Two Constructs: Defining Integrity and Corruption, Clarifying Their Factor Structures and Examining Their Association with Organizational Citizenship and Counterproductive Work Behaviors. (Under the direction of Dr. Samuel Pond, III).

Integrity tests have become popular tools in employee selection, but researchers still seem to lack a thorough understanding of the construct’s definition. Most research on integrity in the field of Industrial/Organizational Psychology uses an inductive approach to measurement creation. This approach, however, has failed to produce enough knowledge about the content and complexity of an integrity construct and its potential outcomes. The following paper discusses some of the major conceptual issues within integrity research and proposes a framework for integrity and its diametric construct, corruption. Results from this study provide an expanded nomological network for examining variables related to integrity and corruption. Findings from this study also suggest that Organizational Citizenship Behaviors (OCBs) and Counterproductive Work Behaviors (CWBs) are positively associated and are therefore not diametric outcome variables. Using a Factor Analytic approach, this study examined similarities within integrity and corruption scale items and recombined items into consolidated factors. Confirmatory Factor Analysis results suggest a moderate fit for higher-order models of integrity and corruption. Integrity and corruption factors all have significant correlations with their intended outcomes, even in light of the positive association between OCBs and CWBs. Findings from this study provide a vital starting point for generating consensus and guiding future research on integrity measurement.
A Tale of Two Constructs: Defining Integrity and Corruption, Clarifying Their Factor Structures and Examining Their Association with Organizational Citizenship and Counterproductive Work Behaviors

by
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DEDICATION

To Charlotte, for her continued love and support throughout writing this manuscript and within my own life.

To Dr. Samuel Pond III, for his continued support and guidance throughout my graduate school career.
BIOGRAPHY

Originally from Raleigh, North Carolina, Joshua Andrews attended North Carolina State University where he received his Bachelors of Arts in Psychology in 2013. Joshua is now currently a graduate student at North Carolina State University where he is pursuing a Ph.D. in Industrial and Organizational Psychology.
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A Tale of Two Constructs: Defining Integrity and Corruption, Clarifying Their Factor Structures and Examining Their Association with Organizational Citizenship and Counterproductive Work Behaviors

Integrity is likely the most convoluted construct in psychological research and, by matter of consequence, the most difficult to discourse upon. Integrity is also one the oldest topics of philosophical debate, perhaps the oldest, with a notable origin in Plato’s *The Republic* (Plato, 1943). As evidenced in Plato’s work, human fascination with integrity derives from a necessity to create order and to organize people within societies. Researchers’ fascination with integrity also, without doubt, arises from its pragmatic application in predicting ethical behavior and adherence to societal laws. Nonetheless, after thousands of years of inquiry, neither a coherent framework for integrity nor a consensus on an operational definition exists.

Integrity is undoubtedly a popular term in psychological research and an increasingly popular construct within the field of Industrial/Organizational (I/O) Psychology. Implementation of integrity tests as employee selection assessments has become increasingly popular, with estimates that organizations administer around 5 million integrity tests annually (Camara & Schneider, 1994; Fine, Horowitz, Weigler, & Basis, 2010). In the field of I/O psychology, research tends to use inductive approaches when defining integrity, mainly focusing on its relationships with Counterproductive Work Behaviors (CWBs). With regard to employee selection, practitioners often measure variables that relate highly to CWBs and combine them into commercially marketable instruments known as integrity tests (Berry, Sackett, & Wiemann, 2007). Dustbowl empiricism largely is the base of this approach to
measurement design (Latham, 2012; Miner, 2005). Research on an integrity construct has faded, as researchers become more comfortable using integrity as a catchall term for CWB predictors. Researchers have yet to generate a cohesive theory for integrity to guide measurement design and application. The purpose of this study is to identify and address some fundamental issues in integrity research and to organize scientific understanding in defining the latent construct. This study proposes a more comprehensive framework for understanding the content domain of integrity. In doing so, this study also identifies the content domain of corruption, which acts in direct opposition to integrity. Providing a theoretical framework for these two constructs serves to create consensus in one of the oldest topics in Psychology and Philosophy and to guide future research on the topic.

**What is Integrity…and What is it Not?**

Researchers have designed integrity instruments with specific regard to predicting CWBs (Fine et al., 2010), which is a distinctly different approach from designing a measure for the construct of integrity. The former approach implies a purely inductive process, one that neglects the use or building of theory (Miner, 2005; Miner, 2006). Consequently, research on the topic has fallen into the typical pitfalls of dustbowl empiricism (Latham, 2012). Specifically, the construct’s content domain is ambiguous and researchers understand its relationship with outcome variables only through empirical ties and validity coefficients. The most basic research questions are still unanswered: What is integrity and how do we measure it? Any meaningful conversation about integrity relies upon a definition; however, the definition of integrity itself is a topic of dubious nature. Researchers have suggested that the number of attempts in defining integrity is equal to the number of authors who have written on the topic (Craig & Smith, 2000). This critique is astute and points to the
underlying issue in integrity research, zero consensus. Too much disagreement exists on the fundamental principles of integrity, with one major cause being referred to as the conduct-character distinction.

In Psychology, researchers have divided integrity into two distinct aspects or definitions. The first distinction refers to being honest, fair, and having strong moral principles. This first interpretation suggests that integrity is a quality of an individual, i.e. an individual who is honest and fair has integrity. The second distinction refers to a state of being undivided, or internal consistency of words and actions, i.e. an individual behaves with integrity (Kaiser & Hogan, 2010). This second interpretation suggests that integrity represents expected behaviors; a person high on integrity would have low discrepancy between expected and actual behavior. This bi-model conceptualization represents the conduct-character distinction (Kaiser & Hogan, 2010; Northouse, 2006). In general, researchers and philosophers have yet to successfully integrate the conduct-character distinctions into a unified theory of integrity (Cox, La Caze, & Levine, 2013). The answer to this conundrum lies in the heuristic device Lewin’s Equation, which was originally presented as an attempt to unify the different branches of Psychology (Lewin, 1936).

Essentially, researchers have failed to identify and distinguish between integrity as a personal characteristic and the behavioral outcomes of integrity, i.e. does a person have integrity or do they behave with integrity? Consider Kurt Lewin’s Equation: \( B = f(P,E) \). Behavior (B) is the outcome of a function between personal-characteristics (P), the environment in which the behavior takes place (E), and the interaction of P to E (“,“). Having integrity refers to P and “,” while behaving with integrity refers to B. Thus, the conduct-character distinction is less of a distinction and more of a realization that character
alone does not predict behavior. Behavior regarding integrity is dependent upon three components: the individual’s attributes, the individual’s attitudes, and the atmosphere (context) in which the behavior takes place. Attributes and attitudes are internal person-related variables, while context is an external variable that depends upon a specific setting. The purpose of the current study is to focus on attributes and attitudes (P and “,”) as they represent the latent construct of integrity.

**Defining Integrity**

With an understanding that integrity is a person-related construct, researchers need an operational definition to clarify its content domain and boundaries (Hinkin, 1995). Integrity has been equated highly with morality or moral character (Craig & Smith, 2000; Kaiser & Hogan, 2010). Integrity drives an individual to be honest, sociable, and fair and to act in accordance with social values, norms, and rules. Integrity influences the way an individual views the world and his or her conception of right and wrong, i.e. morality. However, other uses for the term integrity are equally important for consideration. One can also speak of integrity as a) an integration of various parts into a harmonious whole and b) intactness or purity (i.e. wholeness) (Cox, La Caze, & Levine, 2013). An integration of parts into a harmonious whole suggests that integrity goes beyond simple rule following or honesty. There is a degree of complexity to integrity that requires integration of multiple parts (laws, social norms, guiding principles, etc.) into a single understanding that is free from dissonance. Alternatively, one may say that the integration of parts is uncorrupted (Cox, La Caze, & Levine, 2013). Corruption, or lack of it, is actually the major topic of discourse surrounding integrity research, which essentially defines integrity by what it is not. To move research on integrity forward, researchers need an operational definition that integrates all
elements of what integrity is, rather than what it is not. Here, I present a comprehensive
definition of integrity to move discussion forward.

*Integrity is a set of psychological characteristics and attitudes within individuals that
influence pro-social and altruistic behavior, including acceptance and adherence to societal
values, norms, and rules, consistent with an understanding of morality, fairness, socialness,
and consideration of society’s–and its constituents’–best interests.*

Integrity is a synergistic combination of “psychological characteristics and attitudes”
that constitute an altruistic mindset. This mindset influences pro-social behavior, which
includes adherence to societal rules, norms, and values as integral pieces of the social
framework. The complexity of integrity emerges through consistency with an understanding
of morality, fairness, etc. Integrity influences adherence to societal laws and norms, but
adherence to laws and norms does not define integrity. Laws are a product of human
behavior and they change with context. The characteristics and attitudes that define integrity
are consistent across contexts. A person of high integrity may reject societal values when
those values are dissonant with his or her understanding of good citizenry (i.e. morality,
fairness). Likewise, a person of high integrity may break laws that are extremely inconsistent
with a pro-social and altruistic mindset. An extreme context is required for persons of high
integrity to break laws. Anti-semetic laws in prewar/wartime Germany and laws requiring
segregation in the United States are historical examples of this extremity. When individuals
high in integrity break laws, they do not abandon the characteristics and attitudes that define
integrity.

Upon reflection, current integrity measures seem to lack the measurement of
integrity; instead they measure an oppositional set of forces. Ones, Viswesvaran, and
Schmidt (2003) note that construct validity research regarding integrity tests has found that integrity measures focus on “attitudes towards theft, poor impulse control, lack of conscientiousness, disregard of rules, and general organizational delinquency.” (p. 22). It is impossible to speak of integrity literature without also attending to its counterpart, corruption.

**Defining Corruption**

Corruption represents the diametric construct to integrity. Integrity compels a strengthening of the social fabric, whereas corruption compels is dilution. Corruption represents: “an inducement to wrong by improper or unlawful means”, “departure from what is pure or correct”, and/or “decay and decomposition” (Merriam-Webster). Corrupt individuals are anti-social and egocentric; they are the opposite of good citizens. Decay is the fundamental force working in opposition to intactness and purity. The antithetical nature of integrity and corruption is encoded in their common meaning and understanding. I define corruption with respect to the definition of integrity that I provided.

*Corruption is a set of psychological characteristics and attitudes within individuals that influence anti-social and egocentric behavior, including non-acceptance and disregard for societal values, norms, and rules, consistent with disregard for morality, fairness, socialness, and society’s–and its constituents’–best interests.*

Corruption is equally as complex as integrity; therefore, it also consists of multiple aspects. Corruption is a combination of psychological characteristics and attitudes that constitute an egocentric and self-indulgent mindset. Corrupt organisms spread toxicity and create decay within a system. Criminologist may be most aware of this fact with regard to human behavior. Based on social relations theory, peer influence is a major risk factor for
crime, particularly in adolescent males (Benda, 2003). Corrupt individuals have a general disregard for societal values, norms, and rules that are dissonant with their egocentric desires. Corruption influences non-adherence to societal laws, but non-adherence to societal laws does not define corruption. Again, in extreme circumstances individuals of high integrity may break laws. Furthermore, corrupt individuals will adhere to laws until circumstances provide likely success of unimpeded egocentric behaviors.

Laws are a direct product of human behavior and, in general, people use them to create environmental variables that deter undesired behaviors. Laws create a context that requires corrupt individuals to be discrete and deceptive. Corrupt individuals seek power and will use value systems, norms, and rules as a mechanism to gain power. Dictatorships, cults, and gangs institute hierarchies and values systems, but attitudes towards good citizenry (i.e. morality, fairness, etc.) do not characterize these systems. The values in these systems are often anti-social, unjust, and contain an egocentric moral foundation that neglects the interest of the overall society. The values and attitudes incorporated into these systems are the defining features of corruption. Like integrity, the characteristics and attitudes of corruption are consistent across contexts.

**Measuring Integrity in Organizations**

Having a comprehensive definition for integrity and corruption affords a much more critical examination of existing measurement. In her dissertation, Ones (1993) conducted a broad review of commercial integrity measures at the test level using both primary and meta-analytic data. Ones (1993) notes that integrity tests are classified into two categories: overt measures and personality-based measures. Researchers often refer to the latter as covert measures because their relevance to honesty and integrity is not immediately clear to test
takers (Barrett, 2001). According to Ones, Viswesvaran, and Schmidt (2003 p. 23-24), overt measures of integrity are measures that predict “attitudes regarding dishonest behaviors”, while personality-based (covert) measures of integrity are “intended to predict a broad range of counterproductive behaviors at work... using personality scale items.” An issue of critical concern becomes immediately apparent; neither of these provided definitions describes integrity. Moreover, the relationship between these two types of measures is, and has always been, unclear (Hogan & Brinkmeyer, 1997).

Ones (1993) conducted Confirmatory Factor Analyses to test the relatedness of overt and covert integrity tests by using each test as a singular indicator of the latent construct. Ones concluded that overt integrity tests measure a single common construct and that covert integrity tests measure a distinct yet related construct; however, she labeled each of these reportedly distinct constructs as conscientiousness. Ones also concluded that these individual constructs were related via a superordinate construct, which she also labeled conscientiousness. The overt/covert classification system ignores the content of integrity tests in favor of non-transparent testing instruments and it fails to create a unique interpretation of integrity. Ones’ interpretation hinges on conscientiousness as the overarching construct that connects overt and covert tests. I do not believe this interpretation supports the inference that overt and covert tests both measure integrity; rather, they both measure conscientiousness. Indeed, researchers have met with disagreement over the interpretation of commercial integrity test content and validity evidence (Camara & Schneider, 1995; Lilienfeld, Alliger, & Mitchell, 1995; Ones, Viswesvaran, & Schmidt, 1995).

Camara and Schneider (1995) doubt the assertion that researchers fully understand the underlying structure of integrity, claiming that they have increasingly broadened the
scope of the construct. Due to the broad conceptualization of the construct, the authors question whether commercial measures are actually measuring integrity, and if their validity evidence holds merit. Essentially, the authors are critiquing the pure inductive reasoning behind integrity tests, which are driven almost exclusively by criterion-related validity studies. Researchers have reported that integrity tests have strong criterion-related validity (Ones, Viswesveren, & Schmidt, 1993; Schmidt & Hunter, 1998) and have examined the relationship between integrity tests and outcomes such as job performance (Ones et al., 1995; Iddekinge, Roth, Raymark, & Olde-Dusseau, 2012), training performance (Schmidt & Hunter, 1998), absenteeism (Ones et al., 2003), and CWBs (Fine et al., 2010). Researchers even suggest that integrity test have more criterion-related validity support for predicting overall job performance than most other selection tools (Ones et al., 1995). However, criterion-related validity assessments are particularly useful in atheoretical and empirically driven research designs (Carmines & Zeller, 1979). Furthermore, ensuring that a scale accurately measures the target construct is the most difficult part of survey research (Barrett, 1972; Hinkin, 1995; Hinkin, 1998). Researchers have offered little evidence to allay the criticism of Camara and Schneider (1995).

Addressing issues of content validity, Wanek, Sackett, and Ones (2003) conducted a study to illuminate the structure and similarities of the major commercial integrity tests. Building on the previous research of Ones (1993), Wanek et al. (2003) conducted an item-based analysis on the same data set of commercial integrity measures. The authors sorted 798 items and produced 23 composites based on similarities in item theme. The authors then conducted a principle-components analysis (PCA) with promax oblique rotation on the composites and interpreted a 4-component solution: anti-social behavior, socialization,
positive outlook, and orderliness/diligence. A major limitation to this study is that the individual items are unavailable for review; thus, it is difficult for outside authors to interpret the appropriateness of the assigned factor labels. The authors’ archival and inductive approach does little to expand upon the content domain of existing measures, or to offer a theoretical basis for the suggested factor structure. It is also important to note that the authors used a Principle Component Analysis (PCA) approach when analyzing the data. Researchers sometimes use PCA in place of a Factor Analysis (FA) approach; in certain circumstances, the two approaches produce similar results. However, the FA approach differs mathematically and conceptually from a PCA approach. PCA expresses each component as a linear combination of variables, whereas FA expresses variables as a linear combination of factors. Conway & Huffcutt (2003) assert that the FA approach is the more appropriate statistical procedure for modeling latent constructs. While this study provides some useful insight into current measures, it falls short of offering a theoretical structure for integrity. In fact, the purported content of commercial integrity measures seems to exhibit an ambiguous relationship to any definition of integrity. Herein lies the major issue with current integrity instruments…they lack the measurement of integrity.

Integrity research has continued without any guiding theory and as a result, there exists no consistent starting point for further reasoning or argumentation. The paucity of theory is cause for alarm; inferences about criterion-related validity are dependent upon a clear specification of content domain and the degree to which a measure accurately represents the construct domain (Linn, 1980). Without a thorough understanding of the construct, criterion-related validity evidence is meaningless. Validating the inference that a predictor measure actually relates to the performance domain requires support for all three
types of validity: construct, content, and criterion. This constitutes the accepted Unitarian perspective of validity (Binning & Barrett, 1989). Nonetheless, proponents of criterion-referenced measures seldom take this fact seriously (Linn, 1980). Researchers have neglected to generate any substantive research linking integrity measures to pro-social or citizenship behaviors, which speaks to the field’s disregard for theoretical underpinnings. As such, a range of potential criteria has been ignored.

**Outcomes of Integrity**

Researchers have often linked integrity measures to CWBs and to task performance, which is expected given their noted focus on corruption. However, it seems rather illogical that researchers almost never examine measures of integrity as predictors of Organizational Citizenship Behaviors; an equally important part of Rotundo and Sackett’s (2002) tripartite model of performance. An overreliance on corruption measurement has led to a blinding effect on researchers and an entire half of the integrity equation has gone unaccounted for, namely the integrity portion. Integrity encompasses an individual’s understating of morals and good citizenry. Accordingly, OCBs present themselves as the logical outcome of integrity, just as CWBs are a logical outcome of low integrity (i.e. corruption). Indeed, the prevailing assumption has been that CWBs and OCBs are also diametric constructs; however, some researchers have challenged this assumption. Further explanation requires a review of each behavioral measure.

**Counterproductive Work Behaviors.** Counterproductive work behaviors include a range of behaviors that are oppositional to the organization’s goals including theft of company materials, work withdrawal, sabotage of equipment, and physical violence against organizational members. Research has examined a wide variety of antecedents to CWBs,
including both person and contextual factors (Greenberg, 2002). As a formative construct, CWBs are a set of unique, but commonly associated, behavioral categories that tend to have high perceptions of co-occurrence (Gruys, 1999). The current study operationalizes CWBs using the definition from Spector, Fox, Penny, Bruursema, Goh and Kessler (2006), CWB’s are “volitional (as opposed to accidental or mandated) and harm or intend to harm organizations or organizational stakeholders…” (p. 447). The defining features of CWBs in this definition are that the behaviors are voluntary and that they potentially harm the organization. Distinguishing between accidental and intentional behavior is important. Because accidental behaviors are outside of an individual’s control, an individual’s characteristics do not influence them and they are therefore not relevant. Under this operational definition, CWBs are a logical outcome of corruption (formally low integrity). Corrupted individuals are unsociable and have less regard for fairness or rule following; hence, they would be more likely to violate social norms, values, and rules in the form of CWBs compared to high integrity individuals.

**Organizational Citizenship Behaviors (OCBs).** Organizational citizenship behaviors are contextual performance behaviors that often fall outside of normally required task performance. Borman (2004, p. 238) defines this as “…behaviors that are not directly related to the main task activities but are important because they support the organizational, societal, and psychological context…” This includes behaviors such as coaching and mentoring coworkers, tidying-up around the office, and expressing appreciation to other coworkers (Fox, Spector, Goh, Bruursema, and Kesler, 2012). If integrity drives an individual to play fair and to be sociable, it is logical to hypothesize that high integrity individuals would be more likely to engage in contextual helping behaviors that are beneficial to the
organization at large. This would be particularly true if the values of the organization support pro-social behaviors. However, the small body of research on integrity and OCBs is often inconsistent and produces confusing results, which has led to inconsistent empirical research on the topic (Tomlinson, Lewicki, & Ash, 2014).

Some researchers have criticized OCB measures for having an unclear content domain (Podsakoff, MacKenzie, Paine, & Bachrach, 2000) that can overlap with measures of CWBs through the use of reversed scored items that essentially target CWBs (Fox, et al., 2012). Previously, researchers viewed OCBs and CWBs as non-orthogonal (diametric), because many antecedents had opposite correlations with the two constructs. However, Fox and Spector (2010a) challenge this assumption, suggesting that the non-orthogonal relationship is the result of construct contamination with CWB scales. As a result, Fox et al. (2012) designed a measure of OCBs that minimizes overlap with CWB scales. Employing their new OCB measure across two studies, Fox et al. (2012) found a positive association between self-reported OCBs and self-reported CWBs. This psychometrically improved measure allows for the examination of both OCBs and CWBs as separate and distinct criterion related to integrity/corruption. Furthermore, the diametric association between the two measures is testable. Based on competing assumptions concerning the relationship between CWBs and OCBs, I ask the following research question.

**Research Question 1:** What is the magnitude and direction of the relationship between CWBs and OCBs?

I believe a relationship between integrity and OCBs is both plausible and overlooked. A sociable individual who is considerate of the organization’s best interests seems likely to show appreciation to coworkers and to coach or mentor others. Individuals with integrity are
good organizational citizens; they seek to preserve the important organizational, societal, and psychological contexts that support the organization. To move research forward on this topic, researchers require a framework that models the complexity of integrity and corruption.

**A Hierarchical Framework for Integrity and Corruption**

Because of its inherent complexity, integrity best represents a higher-order construct consisting of several subordinate constructs. A profile analysis by Cohen, Panter, Turan, Morse, and Kim (2014) offers the most valuable insight to date concerning the content of integrity, or moral character, and its relationship with organizational behaviors. The researchers conducted longitudinal research over the course of 12 consecutive weeks to create latent profiles for moral character. They conducted three studies on separate participant pools; study one had 1,020 participants, study two had 494 participants, and study three had 665 participants. Participants represented a diverse group of full-time employees from all 50 United States. Additionally, participants represented all 23 occupations reported by the U.S. Bureau of Labor Statistics. In each study, Cohen et al. found 3 latent profiles representing low, average, and high moral character.

Cohen et al. (2014) ran regression analyses on data from studies one and two with moral character profile as a predictor of self-reported CWBs and Organizational Citizenship Behaviors (OCBs). In each study, individuals with high moral character reported fewer CWBs and more OCBs than did individuals with average moral character. Individuals with average moral character reported fewer CWBs than did individuals with low moral character; in study one they also reported less OCBs. In study three, researchers used delinquency and approval of unethical negotiation tactics as outcome variables. Researchers found the same relationships between these criterion and moral character profile as they did in studies one
and two. With regard to variables encompassed in the high moral character profile, I propose a hierarchical framework for integrity built upon four subordinate constructs: sociability, humility, self-control, and moral identity. Figure 1 illustrates the proposed model of integrity, which is an indirect hierarchical model (Gignac, 2008). The proceedings sections explain the content and rationale for each of the subordinate constructs included in the proposed integrity model.

**Sociability.** Integrity involves an aspect of self-integration, the process of integrating various parts of the self into a harmonious whole (Cox et al., 2013). With regard to integrity, self-integration represents the likelihood that an individual will accept (integrate) the norms, values, and rules of the organization—and the society that houses it—into their own behavior. The underlying psychological construct influencing the self-integration process is socialization. Socialization is “the process whereby an individual learns to adjust to a group (or society) and behave in a manner approved by the group” (Encyclopedia Britannica). The socialization process typically occurs during childhood and adolescence, as a result of social learning, when it influences moral judgments (Bandura, 1969) and personality development (Bandura & Walters, 1963). Thus, socialization is not a skill or trait, but a process that results in attributes like social skills. These social skills allow an individual to navigate the surrounding social/cultural terrain successfully. The underlying trait associated with social skills is trait emotional intelligence (EI), specifically the social skills factor (Perez, Petrides, & Furnham, 2005). The trait EI theory and model suggests that EI is a personality trait located at lower levels of the personality hierarchy (Petrides & Furnham, 2001), i.e. a more narrow than broad trait.
Researchers have linked EI factors to both CWBs and OCBs, albeit in non-U.S. worker samples (Jung & Yoon, 2012; Singh & Dubey, 2015). Supporters of the trait EI model assert its importance in predicting organizational outcomes including job performance, work engagement, CWBs, and OCBs (Petrides, Mikolajczak, Mavroveli, Sanchez-Ruiz, Furnham, & Perez-Gonzales, 2016). A study by Jung & Yoon (2012) found that three factors of trait EI were significantly and negatively related to CWBs. Those same three factors were also significantly and positively related to OCBs. Researchers have also produced strong incremental validity evidence for EI when correlated with similar constructs, such as conscientiousness (Singh & Dubey, 2015).

Singh and Dubey (2015) collected data on a sample of 117 managerial workers of various private organizations in India. The authors measured the participants’ EI using the Trait Emotional Intelligence Questionnaire (TEIQue) and correlated these scores with self-reported OCBs. The authors present correlations between the composite EI score, conscientiousness, and each of the OCB composites: sportsmanship, civic virtue, courtesy, and altruism. The correlation coefficient between EI and OCBs was .41, suggesting a moderate to strong relationship. Trait EI is an aspect of integrity focused on understanding and integration of social norms and rules; thus yielding an understanding of what constitutes fair play in social interactions. Therefore, I hypothesize the following:

_Hypothesis 1._ Sociability will be positively associated with OCBs.

_Humility._ Integrity involves integration into harmony, which requires an individual to achieve an accurate view of the self. Doing so requires an acceptance of guidance from others, often in the form of socialization. Past research has defined humility as “a willingness to view oneself accurately”, “appreciation of others strengths and contributions”, and
“teachability” (Owens, Johnson, & Mitchell, 2013, p. 1518). Researchers have also described humility as a core organizational virtue (Cameron, Dutton, & Quin, 2003; Owens et al., 2013). Although there may be a tendency to confuse humility with low self-regard, research shows that humble individuals can have positive opinions of themselves (Krumrei-Mancuso & Rouse, 2016).

The findings from Owens et al.’s (2013) multipart study further illuminate the influence of humility in organizations. Study 2 collected data from a sample of 144 upper-level undergraduate students from three business management courses. Results from the study indicate that self-reported humility was positively associated with individual performance ratings, measured as grades on course assignments and exams, after including generalized self-efficacy, conscientiousness, and general mental ability in the regression model. Furthermore, researchers assigned participants a large group project to complete throughout the semester; results indicated a positive relationship between an individual’s self-reported humility and team member ratings of project contribution. Hence, those who reported higher humility also received higher ratings of contribution from team members, a clear indication of their value to the group. In congruence with theory, humility seems to indicate a heightened ability to work as part of a team. Further supporting this notion, Owens et al. (2013) study 3 found that leader expressed humility had a significant and positive relationship with subordinate job engagement and job satisfaction as well as a significant negative relationship with subordinate turnover. Increased employee satisfaction and decreased turnover are desirable outcomes that have an overall positive influence on the community (work group and organization). Humility presents itself as an aspect of integrity.
that focuses on consideration of others as well as a concern for group needs and success.

Therefore, I make the following hypothesis:

**Hypothesis 2.** Humility will be positively associated with OCBs.

**Self-control.** Individuals high in integrity are able to control their behavior so that it adheres to societal norms, values, and rules. Self-control represents one’s ability to inhibit behavior, at least long enough to engage in conscious moral cognition. Individuals who lack self-control are impulsive. Impulsive individuals are prone to rapid, unplanned, reactions to stimuli with diminished regard to consequences (Morean, et al., 2012). The most widely cited theory in criminology, the general theory of crime (Gottfredson & Hirschi, 1990), posits that low self-control is involved in all forms of crime because humans naturally desire pleasure or self-gratification (Benda, 2003). Researchers have studied impulsivity and self-control as antecedents to a wide range of undesirable behaviors, including heavy substance use (Leeman & Potenza, 2012), drunk driving (Moan, Nordstrom, & Storvoll, 2013) and intimate partner violence (Shorey, Brasfield, Febres, & Stuart, 2011). Individuals with high self-control are able to inhibit impulsive behavior; consequently, they are more likely to engage in ethical reasoning before acting. In Cohen et al.’s (2014) study 2, self-control had a significant and negative correlation with CWBs as well as a significant and positive correlation with OCBs. Therefore, I make the following hypothesis.

**Hypothesis 3.** Self-Control will be positively related to OCBs.

**Moral identity.** Moral identity is a construct that represents a particular facet of self-identity, the importance of moral behavior to one’s self-concept. Aquino and Reed (2002 p.1423) define moral identity as a “self-regulatory system that motivates moral action”, i.e. a motivating force that links self-concept to moral behavior. Blasi (1983) believed that moral
identity represented a deep-rooted commitment to morality, such that acting in a manner inconsistent with this identity would disrupt one’s self-concept. Based on this idea, Blasi (1984) proposed the self-model of moral action. This model supposes that individuals consciously deliberate right from wrong and then decide if an action is acceptable, or required, based on their beliefs (Black & Reynolds, 2016).

Aquino and Reed (2002) created the moral identity scale (MIS), which purports to measure the importance an individual places on morality as a part of his or her self-identity. Researchers on moral identity have used Aquino and Reed’s (2002) scale frequently in recent studies; however, others have criticized this measure for failing to cover the full content domain of the target construct (Black & Reynolds, 2016). In their recent study, Black and Reynolds (2016) help to make an important clarification about the construct. They propose that an important part of the construct is self-consistency, which researchers have often not measured in conjunction with moral identity. Blasi (2005) believed that integrity was comprised of two aspects: moral identity and moral responsibility, i.e. a desire to be consistent with one’s identity. However, the authors note, “Both integrity and self-consistency can be separate from adherence to accepted moral norms” (Black & Reynolds, 2016 p. 121). This component of integrity targets an individual’s personal integration of morality as an aspect of self-identity rather than simple adherence to imposed rules.

Black and Reynolds (2016) improved upon previous measures with the creation of the Moral Identity Questionnaire (MIQ), which targeted both the importance individuals place on their own moral principles and the importance they place on acting accordingly. The researchers did not examine their measure’s relationship with any outcome criterion such as OCBs or CWBs; however, they did examine the MIQ’s relationship with other scales
purporting to measure the same or a similar construct. This included the MIS by Aquino and Reed (2002), which correlated at .57 with the MIQ (Black & Reynolds, 2016). A moderately strong correlation such as this suggests that the MIQ is measuring the construct in a similar manner to the MIS. Previous studies have indicated that responses on the MIS have a positive relationship with pro-social behaviors (Aquino & Reed, 2002; Cohen et al., 2014) and a negative relationship with CWBs (Andrews, Thompson, & Williams, 2016; Cohen et al., 2014). Therefore, I make the following hypothesis.

**Hypothesis 4.** Moral Identity will be positively associated with OCBs.

**Factors of Corruption**

Within I/O Psychology, the majority of research on the topic of integrity focuses on the corruption end of the spectrum. The implicit assumption is that measuring corruption affords an accurate view of integrity, yet this assumption remains untested. Given the inherent complexity of integrity, a greater understanding of its diametric constructs is warranted. Doing so creates a true nomological network (Hinkin, 1998) and a framework for understanding the interrelationship between variables. Each end of the continuum may hold valuable insight into the mechanics of the latent force. The following sections describe the subordinate factors of a hierarchical corruption construct: anti-social traits, entitlement, impulsivity, and moral disengagement. I propose that each sub-factor of corruption is proposed to be a diametric point existing on the same straight continuum as a corresponding sub-factor of integrity. Figure 2 illustrates the proposed model of corruption, which is also an indirect hierarchical model (Gignac, 2008).

**Antisocial Traits.** Sociability concerns an individuals’ understanding of fairness and equitability in social interaction. This influences an individual’s adherence to societal values,
norms, and rules as guidelines for fair interaction. Anti-social traits compel individuals to break these prescriptions in search of self-favorable outcomes. Corrupt individual have little regard for rules or socialization that prevent self-indulging behaviors. These individuals are also more likely to view themselves as exempt from, or otherwise above, the standard social and organizational procedures. Anti-social characteristics, such as Machiavellianism, narcissism, and psychopathy, are associated with white-collar crime (Ragatz, Fremouw, & Baker, 2012) and CWBs (O’Boyle, Forsyth, Banks, & McDaniel, 2012).

The dark triad is a jargon term that describes the combination of three heavily studied anti-social traits: Machiavellianism, narcissism and psychopathy (Paulhus & Williams, 2002). Research attention has focused on these three traits as they relate to undesirable behavior (Jonason & Webster, 2010). Traditionally the dark triad has been composed of three separate measures (with some overlap); however, research on these scales provides evidence that they are indicators of the same latent construct (Jonason & Webster, 2010). Jonason and Webster (2010) sought to create a composite scale for the dark triad. Across three studies, their measurement produced high model fit, high reliability, and high discriminant validity compared to other personality measures, such as the Big-Five. The resulting 12-item scale (The Dirty Dozen) shows high potential as a composite measure, but the authors did not produce criterion-related evidence with regard to CWBs or OCBs specifically.

Research suggests that Machiavellianism, narcissism, and psychopathy are predictors of immoral behavior (Mandell 2006; Ragatz et al. 2012; Scherer, Baysinger, Zolynsky, & LeBreton, 2013). Individuals high on these traits hold beliefs that norms/values/rules do not apply to them, or they are otherwise unconcerned with these behavioral regulations. It is logical to assume that these traits would negatively influence one’s likelihood to accept
organizational or societal values (i.e. sociability) and would thus be diametric to sociability. Therefore, I make the following hypotheses.

**Hypothesis 5a:** The dark triad (Machiavellianism, narcissism, psychopathy) will be negatively associated with sociability.

**Hypothesis 5b.** The dark triad (Machiavellianism, narcissism, psychopathy) will be positively associated with CWBs.

**Entitlement.** Public discourse often invokes the concept of entitlement when referring to the wealthy, celebrities, and individuals with power such as CEOs (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004); however, Psychologists seem to lack interest regarding the topic. Campbell et al. (2004) note that the majority of research on entitlement is encapsulated within narcissism research, noting that entitlement is likely a component of narcissism. Individuals with higher entitlement believe that they deserve more resources than others do. This sense of deservingness is pervasive, generally not the result of a specific context, and is therefore experienced across situations (Campbell et al., 2004). Entitlement acts in opposition to humility by fostering a sense of deservingness rather than appreciation. Narcissism and entitlement may overlap on their opposition to humility by fostering an inaccurate view of the self. Narcissism is associated with grandiose views of the self and a desire for admiration, which likely involves feelings of entitlement towards resources.

Campbell et al. (2004) developed and validated a self-report measure for entitlement, the Psychological Entitlement Scale (PES), arguing that narcissism measures fail to capture the full content domain of entitlement. Results from their study are promising in that the PES presented itself as a unique measure when placed within a larger nomological network. Study 4 involved a sample of 500 undergraduate students; results suggest that the PES was unique
from the Big Five measure of personality. The PES showed a significant association with both agreeableness and emotional stability factors, but not at a magnitude that would suggest redundancy (−.19 and −.16 respectively). The authors further assert that the PES is non-redundant with the NPI entitlement subscale; although, they base this assertion on the differing relationships the two measures have with the Big Five, the authors did not provide a correlation between PES scores and NPI scores. Hence, I still hold some reservations about their uniqueness. Nonetheless, it seems important to further validate entitlement as a stand-alone factor within the integrity-corruption framework as unique from other anti-social traits such as the dark triad. Based on previous findings concerning entitlement, I make the following hypotheses.

**Hypothesis 6a.** Entitlement will be negatively associated with Humility.

**Hypothesis 6b.** Entitlement will be positively associated with CWBs.

**Impulsivity.** Impulsivity is the established diametric opposite of self-control (Morean et al., 2014), as previously asserted. Therefore, inclusion of impulsivity into the framework is obvious and without need of additional exhaustive evidence.

**Hypothesis 7a.** Impulsivity will be negatively associated with Self-Control.

**Hypothesis 7b.** Impulsivity will be positively associated with CWBs.

**Moral disengagement.** Moral disengagement is a construct derived from Bandura’s social learning theory (Bandura, 1990; Bandura, 2002) and represents a cognitive process involved in ethical decision-making. Moral disengagement allows one to “cognitively restructure” (Bandura, 2002 p.101) unethical decisions so that they appear less harmful. This cognitive process permits an individual to behave in an unethical manner without feeling distress (Moore, Detert, Trevino, Baker, & Mayer, 2012). In other words, moral
disengagement allows an individual to reduce cognitive dissonance (Festinger, 1957) by framing an unethical action as somehow unrelated to typical moral guidelines. According to Bandura’s theory, a person can employ eight major mechanisms to morally disengage: moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, dehumanization, and attribution of blame (Bandura, 1990).

Essentially, moral disengagement serves to make exceptions to an individual’s existing moral guidelines. For example, Bandura (1990) suggests that moral disengagement explains how soldiers are able to kill in times of war without battling their moral selves; the context of war allows an individual to disengage the circumstance of killing from its typical moral ramifications. Disengaging thoughts, once accepted, become attitudes about the acceptability of certain behaviors. Attitudes, beliefs, and thoughts regarding the acceptability of certain behaviors can predict future criminal behaviors (Kaplan, 1975; Knight, Garner, Simpson, Morey, & Flynn, 2006). Propensity to morally disengage represents the existence of attitudes that reflect moral disengagement mechanisms. An attitude is an evaluative judgment that, while more malleable than traits, cannot be properly defined as a state variable because it lacks the accompanying experiential component (Plemmons & Weiss, 2013).

Previously, researchers have found that measures for attitudes reflecting the eight mechanisms of moral disengagement load unto a common latent factor, which they called propensity to morally disengage (Moore et al., 2012). Hence, propensity to morally disengage is an attitudinal measure that purports to measure the existence of disengaging attitudes within an individual as representative of their future likelihood to disengage. Across several studies, Moore et al. (2012) found that propensity to morally disengage was
significantly associated with: self reported lying/cheating/stealing (.31), responses to an ethically charged hypothetical situation (.23), and self-interest based decision-making (.23).

The authors suggest that propensity to morally disengage predicts cognition underlying unethical behavior in an array of contexts. Study three from Cohen et al. (2014) confirms that propensity to morally disengage is positively associated with delinquency and acceptance of unethical negotiation tactics in an organizational work sample. Andrews, Thompson, and Williams (2016) found that moral disengagement was significantly associated with self-reported CWBs in a U.S. worker sample gathered via MTurk. Therefore, I make the following hypotheses.

**Hypothesis 8a.** Moral Disengagement will be negatively associated with Moral Identity.

**Hypothesis 8b.** Moral Disengagement will be positively associated with CWBs

**Other Variables of Interest**

Within literature on moral and criminal behavior, several variables of interest exist that are not part of the higher-order integrity and corruption constructs. Regardless, past research has shown that some additional variables may have a significant relationship to the variables of interest in the current study. Those notable variables are social desirability, gender, and age.

**Social Desirability.** Socially desirable responding (SDR) constitutes individual bias or response distortion in survey responses in the form of over-reporting positive behaviors and/or under-reporting negative behaviors (Hart, Ritchie, Hepper, & Gebauer, 2015). Concern over socially desirable responding in self-report survey instruments is sensible, especially in the context of the current study. It is now ordinary practice for researchers to
use social desirability scales (SDRs) to assess the amount of response distortion in individual responses (de Vries, Zettler, & Hilbig, 2013). Current convention is to test for a significant association between SDR and focal scales; should a significant association arise, researchers partition out the effects of SDR (Hart et al. 2015). In general, the theory of socially desirable responding is founded on an often unspoken assumption, that some behaviors are simply too good to be true. Support for SDR scales is inconsistent (Paunonen, & LeBel, 2012). Some researchers suggest that SDR scales may measure a substantive trait rather than a response set or faking (de Vries et al, 2013). Furthermore, Paunonen and LeBel’s (2012) research supports the notion that SDR has a relatively minor impact on criterion related validity; however, the researchers also note that SDR could still create issues in construct validity in the case that some respondents obtained score and true scores are grossly misrepresented. With consideration to past research findings, SDR is an important variable of interest but its relationship to a larger integrity framework is still unidentified. Therefore, I ask the following research question.

**Research Question 2.** What is the nature of the relationship between SDR scores and the focal scales included in this study?

**Gender (Sex).** The overwhelming research consensus is that males are more likely to be delinquent compared to females; this is considered one of the most stable findings in criminology (Fagan & Lindsay, 2014). Research findings suggest that females are victimized more often and are more fearful of crime compared to males (Fox, Nobles, & Piquero, 2009). Research also suggests differences in predictive models of delinquency for males and females (Benda, 2003) as well as sex-based differences in the effectiveness of various prevention programs (Fagan & Lindsay, 2014). Males are more likely to engage in acts of
violence and constitute the overwhelming majority of juvenile arrests for violent offenses (Fagan & Lindsay, 2014). Researchers have also recognized that White-Collar offenders are more likely to be male (Ragatz Fremouw, & Baker, 2012). If for no other reason, sex is a variable of interest due to its historic significance in the literature. Therefore, I ask the following research question.

**Research question 3.** Are there significant sex-based differences in the focal scales included in this study?

**Age.** The relationship between age and crime is a longstanding relationship of interest among Forensic Psychologists and Criminologists (Piquero & Benson, 2004; Piquero, Farrington, & Blumstein, 2003). For the majority of individuals, involvement in delinquency or crime will begin in the mid-teenage years (Piquero & Benson, 2004). Researchers argue that individuals still involved in crime after their mid 20’s become lifelong and persistent offenders (Moffitt, 1997). Thus, the majority of research on age and delinquency falls outside the scope of the current study and it is difficult to claim confidently whether this trend will persist in a working age sample. Nonetheless, age has a historical significance on research regarding crime and is therefore of at least exploratory importance in the current study. Therefore, I ask the following research question.

**Research Question 4.** Is there a significant relationship between age and the focal scales included in this study?

**Methods**

**Sample**

A total of 734 individuals from Amazon’s Mechanical Turk (MTurk) attempted the study. The study required participants to be 18 or older and have worked full time (29 +
hours per week) for at least one year. The survey removed 1 participant for being under 18 years old and 71 participants because they indicated that they worked under the minimum hours for participation in the study. Additionally, the survey removed 1 participant who did not agree to the consent form and 64 participants who indicated that they live outside of the U.S. The survey also removed 50 participants for failing to accurately respond to attention check items. Finally, 46 participants failed to fully complete the survey instrument. The final participant pool included 501 U.S. workers who sufficiently completed the survey and received compensation.

The final sample included 239 male participants and 262 female participants. The mean age was 36 (median 33) with a minimum age of 19 and a maximum age of 71. The distribution of race was 72% white (363), 12% Asian (62), 6% black (34), 4% Native American (24), <1% Native Hawaiian/Pacific Islander (3), and 2% “other” (15). Participants represented all twenty-three job sectors established by the Bureau of Labor Statistics, with the most representation coming from Business (N=53), Sales (N=55) and Education (N=56).

Materials and Procedures

Participants responded to an anonymous online survey via Qualtrics. Participants accessed the survey through an invite-only link via an MTurk HIT (Human Intelligence Task). Participants received an electronic consent form and provided consent to participate in the study. Participants received compensation of one dollar for successfully completing the study.

Measures

The following are previously published scales that purport to measure their corresponding constructs. These scales are the property of their individual authors and they
are available for academic and research purposes. For all behavioral items, CWBs and OCBs, participants responded using a Likert scale (1=Never, 2=Once or twice, 3=Once or twice per month, 4=Once or twice per week, 5=Everyday). For all other items, participants responded to the prompt “Please indicate how much you agree with the following statements” via Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

**Counterproductive Work Behaviors Checklist (CWB-C).** I used Spector et al.’s (2006) 33-item measure ($\alpha = .97$) to survey participants about their counterproductive work behaviors. Participants responded to the prompt “How often have you done each of the following things on your job(s) within the past year?” I made a slight alteration to the original scale prompt by changing the ending of the prompt from “…on your present job?” to “…on your job(s) within the past year?” I did this for two reasons. First, an individual’s ability to recall accurately beyond this time may be limited. Second, I was interested in an individual’s tendencies across organizational settings. Individuals may have multiple employers or may have switched jobs within the timeframe. Furthermore, participants may have a job termination within the timeframe, possibly for CWBs. I specifically asked individuals to report tendencies across jobs/employers for a specific timeframe, the past year. Example items include “purposely wasted your employer’s materials/supplies” and “came to work late without permission.”

**Organizational Citizenship Behaviors Checklist (OCB-C).** I used Fox et al.’s (2012) 20-item measure ($\alpha = .91$) to survey participants about their organizational citizenship behaviors. Participants responded to the prompt “How often have you done each of the following things on your job(s) within the past year?” I made the same alteration to this prompt that I made to the CWBs measure. I also altered the wording of item 14, which I
change from “Took a phone message for an absent or busy co-worker” to “Handled client services for…” I made this change because email now likely replaces phone messages; handling client services for a co-worker may be similar and more current to most occupations. Example items include “took time to advise, coach, or mentor a co-worker” and “offered suggestions to improve how work is done.” Fox et al. (2012) reported an alpha coefficient of .94.

**Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF).** I used the TEIQue-SF (Petrides, 2009) Sociability ($\alpha = .71$) and Emotionality scales ($\alpha = .75$), consisting of 14 items altogether, to survey participants about their sociability. Example items include “I’m usually able to influence the way other people feel” (Sociability) and “expressing my emotions with words is not a problem for me” (Emotionality). Cooper and Petrides (2010) reported alpha coefficients between .87 and .89 for the TEIQue-SF across two studies.

**Expressed Humility.** I used an adapted version of Owens et al.’s (2013) 9-item Expressed Humility scale ($\alpha = .86$) to measure participants’ perceived humility. The scale was adapted for self-report from its original others-rating format. For example, item one was changed from “This person actively seeks feedback, even if it is critical” to “I actively seek feedback, even if it is critical.” Additional example items include “I take notice of others’ strengths” and “I am open to advice from others.” Owens et al. (2017) reported alpha coefficients of .95 and .94 for the Expressed Humility scale.

**Brief Self-Control Scale (BSCS).** I used Morean, et al.’s (2014) abbreviated 7-item Brief Self-Control Scale ($\alpha = .79$) to measure participants’ perceived self-control. Example items include “I often act without thinking through all the alternatives” and “I am good at
resisting temptation.” Morean et al. (2014) reported an average alpha coefficient of .72 for the BSCS.

**Moral Identity Questionnaire (MIQ).** I used Black and Reynolds’ (2016) 20-item Moral Identity Questionnaire (α = .92 to survey participants about their moral identity. Example items include “not hurting other people is one of the rules I live by” and “I always act in ways that do the most good and least harm to other people.” Black and Reynolds (2016) reported an alpha coefficient of .90.

**The Dirty Dozen.** I used Jonason and Webster’s (2010) 12-item dark triad measure (α = .86 to survey participants about their perceived anti-social traits. Example items include “I tend to want others to admire me” and “I have used deceit or lied to get my way.” Jonason and Webster (2010) reported a test-rested correlation of .89 and a corrected test-retest correlation of .91.

**Psychological Entitlement.** I used Campbell et al.’s (2004) 9-item Personal Entitlement measure (α = .90) to survey participants about their perceived entitlement. Example items include “I honestly feel I’m just more deserving than others” and “I demand the best because I am worth it.” Campbell et al. (2004) reported an alpha coefficient of .85.

**Barrett Impulsivity Index (BIS).** I used Morean et al.’s (2014) abbreviated 8-item Barratt Impulsiveness Scale (α = .82) to survey participants about their perceived impulsivity. Example items include “I say things without thinking” and “I act on the spur of the moment.” Morean et al. (2014) reported an alpha coefficient of .75 for the 8-item BIS.

**Propensity to Morally Disengage.** I used Moore et al.’s (2012) 8-item Propensity to Morally Disengage measure (α = .85) to survey participants about their morally disengaging attitudes. Example items include “people can’t be blamed for doing things that are
technically wrong when all their friends are doing it too” and “I think it is okay to spread rumors to defend those you care about.” Moore et al. (2012) reported an alpha coefficient of .77 for the 8-item measure.

**Balanced Inventory of Socially Desirable Responding-Short (BISDR).** I used Hart et al.’s (2015) 16-item Balanced Inventory of Socially Desirable Responding-Short (α = .83) to survey participants socially desirable responding. Example items include “I never cover up my mistakes” and “I never take things that don’t belong to me.” Hart et al. (2015) reported a test-rested correlation of .79.

**Attention Checks.** I included attention check items to ensure that participants were thoroughly reading each item prior to responding. These items asked participants to select a certain response option in order to proceed with the survey. An example of an attention check item is “for this question, select the option, “agree’”. If a participant failed an attention check item, the survey platform immediately removed the participant.

**Presentation of Measures**

The electronic survey presented OCB and CWB items to participants first. An overall prompt preceded this section: “Please answer the following questions honestly; remember that your answers are anonymous.” This prompt encouraged participants to answer honestly to CWB items, even though they describe socially undesirable behaviors. OCB and CWB items appeared in random order. Following this, the survey presented all measures pertaining to integrity in random order.

**Results**

I ran all statistical analyses using R statistical computing program. Table 1 contains means, standard deviations, and Pearson’s Product-Moment correlation coefficients for all
study variables below the diagonal. Coefficient alphas are on the diagonal. The relationship between CWBs and OCBs was positive and significant, with a correlation coefficient of $r = .33, p < .001$. This finding addresses research question one, providing insight into the relationship between CWB and OCBs.

**Correlation Analysis**

Sociability and Emotionality both had non-significant relationships with OCBs, with correlation coefficients of $r = .07, p = .71$, and $r = .07, p = .71$, respectively. Hypothesis 1 was not supported. The relationship between humility and OCBs was positive and significant with a correlation coefficient of $r = .35, p < .01$. Hypothesis 2 was supported. The relationship between self-control and OCBs was non-significant with a correlation coefficient of $r = .07, p = .71$. Hypothesis 3 was not supported. The relationship between moral identity and OCBs was non-significant with a correlation coefficient of $r = .10, p = .26$. Hypothesis 4 was not supported.

The dark triad had a significant and negative correlation with both sociability and emotionality with correlation coefficients of $r = -.16, p < .001$, and $r = -.40, p < .001$, respectively. Hypothesis 5a was supported. Humility and entitlement had a non-significant relationship with a correlation coefficient of $r = -.06, p = .71$. Hypothesis 6a was not supported. Impulsivity and self-control had a significant and negative relationship with a correlation coefficient of $r = -.76, p < .001$. Hypothesis 7a was supported. Moral disengagement and moral identity had a significant and negative relationship with a correlation coefficient of $r = -.82, p < .001$. Hypothesis 8a was supported. The associations among the dark triad, entitlement, impulsivity, and moral disengagement with CWBs are all
positive and significant with values of $r = .59, p < .001$, $r = .36, p < .001$, $r = .38, p < .001$, and $r = .66, p < .001$, respectively. Hypotheses 5b-8b were supported.

**CWBs.** Results from a D’Agostino’s test for normality, $K^2 = 2.46, p < .001$, showed that the data from the CWB scale had an extreme positive skew. This skew presented a clear and extreme violation of Pearson’s Product-Moment correlation assumptions. I recoded the CWB items to include a range of zero and then summed these items into a composite count-like variable. Hence, the transformed scale data had only integer values, which included zero. The mode for CWBs was zero, which represents individuals who responded “never” to all CWB items. The distribution has some resemblance to a negative binomial or Poisson distribution with a sharp asymptote indicating the high zero response rate. Notably, the distribution also had an extremely long tail. A polyserial correlation offers several advantages for assessing the magnitude of the relationships between CWBs and other study variables given the data’s distribution.

A polyserial correlation assesses the magnitude of change between ordered categories (X) and mean change in a continuous variable (Y), i.e. the probability of occurrence X given increased levels of the continuous variable Y (Olsson, Drasgow, & Dorans, 1982). A polyserial correlation allows for the ordinalization of a continuous variable X, rather than dichotomization required for point-biserial correlation. Furthermore, a polyserial correlation does not stipulate that X and Y be normally distributed or that they share identical distributions (Demirtas & Hedeker, 2016). I performed a polyserial correlation on the summative CWB score using the “polycor” package in R. Table 2 presents the polyserial correlations between CWBs and other study variables. Results from the polyserial analysis are very similar to those of the Pearson’s Product-Moment results. The current dataset
offered an opportunity to apply a relatively new type of analysis and compare results to more established procedures.

**Integrity Factor Analysis**

A major purpose of this study was to create an interpretable factor structure for integrity and corruption. Doing so requires an independent analysis of each construct; however, the use of reverse scored items makes this task difficult. Many psychological measures incorporate reverse scored items, including several in the present study. For example, measures from Morean et al. (2014) all include reverse scored items that tap into the diametric nature of self-control and impulsivity. The use of reverse scored items decreases the interpretability of factor analysis as it causes artificial factors to emerge between reverse and non-reverse items (Hinkin, 1995; Hinkin, 1998).

To begin the factor analytic approach I first conducted an Exploratory Factor Analysis (EFA) that included reverse scored items. I conducted the EFA using a holdout sample by splitting the participant pool in half and conducting the EFA on the first 250 participants. Parallel Analysis suggested a four-factor solution with eigenvalues of 13.13, 4.51, 2.73, and 1.22 for factors one through four respectively. Next, I ran an EFA with oblique rotation specifying a four-factor solution. Table 3 presents the results from this EFA. Results illustrate the issue with reverse scored items when conducting factor analysis. As suspected, results clearly indicate that artificial factors emerged due to the inclusion of numerous reverse scored items. For example, Factor 1 consisted of reverse scored items for self-control and moral identity. Factor solutions like this do not yield meaningful or interruptible results.
I conducted further analyses after removing reversed scored items. An exception is that I included reversed scored items for Impulsivity in the self-control scale so that the subordinate scale would consist of a sufficient number of items for further analysis, i.e. more than three. Parallel analysis suggests a three-factor solution with eigenvalues of 9.70, 2.13, and .95; however, a four-factor solution produces a more interpretable factor structure that fits the proposed model. I chose to continue using the four-factor solution. Next, I conducted an EFA with oblique rotation specifying a four-factor solution. Table 4 presents the results from this EFA.

**Factor One (Humility).** Factor 1 consists of emotionality Item 4, humility Item 1, humility Items 4-9, and moral identity Item 4. Emotionality Item 4 reads, “I’m normally able to ‘get into someone’s shoes’ and experience their emotions.” Moral identity Item 4 reads, “I want other people to know they can count on me.” An examination of the items that loaded onto this factor shows a consistent theme of consideration and reference to “others.” This factor measures an individual’s attitudes regarding the value of others (skills, effort, advice) and incorporates a non-egocentric perspective on social interactions. Therefore, I labeled this factor Humility.

**Factor Two (Moral Identity).** Factor 2 consists of moral identity Items 1-3 and Items 6-8 as well as humility Items 2 and 3. I excluded humility Item 3 due to significant cross-loadings with Factor 1. Factor 2 represents moral identity with the addition of humility Item 2: “I admit when I don’t know how to do something.” This item refers to self rather than others, which would explain why its loads more strongly onto moral identity rather than humility. This factor measures an individual’s attitudes regarding the self and personal values. Therefore, I kept the label Moral Identity.
Factor Three (Self-Control). Factor 3 consists of self-control Items 1-3 and impulsivity Items 2 and 3 without reverse scoring, clearly reflecting a self-control factor.

Factor Four (Sociability). Factor 4 consists of sociability Items 1, 2, and 5 along with emotionality Item 1. Emotionality Item 1 reads, “Expressing my emotions with words is not a problem for me.” The items in this factor share a theme of expression and influence, i.e. social skills. Unlike items in Factor 1, items in Factor 4 do not focus on the consideration of others; instead, they represent the ability to effectively interact with and influence others. Therefore, I kept the label Sociability.

Integrity CFA. Next, I tested the model specified from the EFA with Confirmatory Factor Analysis using the remaining 251 participants. Using the Lavaan package in R, I tested a higher-order factor structure for integrity as presented in Figure 3. Results from the CFA indicate acceptable, but less than ideal, model fit for a higher-order model of integrity. The chi-squared test was significant, $X^2(271, N=251) = 640, p < .01$, but chi-squared tests are notoriously sensitive to sample size. Other goodness-of-fit indices suggests a moderate level of fit; Comparative Fit Index (0.83), Tucker-Lewis Index (0.81), Root Mean Squared Error of Approximation (.07), and Standard Root Mean Squared Residual (.09).

Corruption Factor Analysis

I conducted an EFA for corruption using the same holdout sample as the integrity EFA. First, I ran a Parallel analysis that suggested a three-factor solution with eigenvalues of 11.01, 3.47, and 1.18 respectively. Next, I ran an EFA with oblique rotation specifying a three-factor solution. Table 5 presents the results from this EFA.

Factor One (Moral Disregard). Factor 1 consists of all moral disengagement items as well as dark triad Items 1, 2, 4, 5, 6, 7, and 12. Given that this factor contains over half of
the items targeting the dark triad, it is difficult to justify a simple classification as moral disengagement for this factor. It is important to ask why the selected dark triad items relate more to moral disengagement than other dark triad items. Dark triad Items 1, 2 and 4 refer to using manipulation, deceit, and exploitation for personal gain, i.e. antisocial traits. Dark triad Items 5, 6, and 7 refer to a lack of remorse, lack of regard for morals, and insensitivity, i.e. psychopathy. Dark triad Item 12 refers to the expectation of favors from others, i.e. narcissism. Overwhelmingly, the selected dark triad items represent psychopathy and antisocial personality. The common theme between the dark triad items and moral disengagement items is a lack of moral concern or understanding. Each item references attitudes that are generally self-centered and would suggest that an individual’s primary focus is on personal gain without regard to societal values. Either through a lack of concern for morals or through a process of moral disengagement these items represent a disregard for moral consideration. Therefore, I attribute the title of Moral Disregard to this factor.

Factor Two (Entitlement). Factor 2 consists of all entitlement items as well as dark triad Items 9 and 11. Dark triad Items 9 and 11 target narcissism; it is not surprising that some of these items overlap with entitlement given previous research findings discussed in the literature review. Dark triad Item 9 refers to the desire for admiration from others and Item 11 refers to seeking prestige and status. Therefore, I labeled this factor Entitlement.

Factor Three (Impulsivity). Factor 3 consists of impulsivity Items 1-7 as well as dark triad Item 8. Clearly, the selected items represent an impulsivity factor with the interesting inclusion of the dark triad item that reads, “I tend to be cynical.” Cynical individuals are self-interested. Controlling impulses both expends cognitive energy and
deprives an individual of certain hedonic gains, which might explain the relationship this dark triad item has with impulsivity.

**Confirmatory Factor Analysis.** Next, I tested the model specified from the EFA with Confirmatory Factor Analysis using the remaining 251 participants. Using the Lavaan package in R, I tested a higher-order factor structure for integrity as presented in Figure 4. Results from the CFA reveal acceptable, but less than ideal, model fit for a higher-order model of corruption. The chi-squared test was significant, $\chi^2(524, N=251) = 1219, p < .01$, but chi-squared tests are notoriously sensitive to sample size. Other goodness-of-fit indices suggest a moderate level of fit: Comparative Fit Index (0.82), Tucker-Lewis index (0.82), Root Mean Square Error of Approximation (.07), Standard Root Mean Squared Residual (.09).

**Factor Correlation Analysis**

Table 6 presents Pearson’s Product-Moment correlations between all integrity and corruption factors as well as CWBs and OCBs. Coefficient alphas are on the diagonal. All integrity factors had a positive and significant relationship with OCBs; humility, $r = .38, p < .001$, moral identity, $r = .27, p < .001$, self-control, $r = .22, p < .001$, and sociability, $r = .25, p < .001$. All corruption factors had positive and significant correlations with CWBs; moral disregard, $r = .67, p < .001$, entitlement, $r = .37, p < .001$, and impulsivity, $r = .35, p < .001$.

Table 7 presents the polyserial correlations between CWBs and all integrity and corruption factors. A notable difference between the two approaches is that sociability had a non-significant correlation with CWBs using the polyserial approach. The polyserial results may be a more appropriate indicator of the strength of these relationships given the distribution of the CWB data.
Social Desirability Analysis

Table 1 also contains correlations between social desirability and focal scales. SDR had a negative and significant correlation with self-reported CWBs, $r = -.31, p < .001$, and a non-significant relationship with OCBs. Furthermore, SDR had a significant positive correlation with all integrity-related constructs and a significant negative correlation with all corruption related constructs. In particular, SDR had a strong positive correlation with self-control, $r = .73, p < .001$, and a strong negative correlation with impulsivity, $r = -.63, p < .001$. Results from the correlation analysis provide insight into research question 2. Social desirability seems to be a variable of importance given its significant relationship to almost all study variables.

A straightforward approach for controlling SDR in the current study was to remove participant’s data from further analysis if he or she endorsed an extreme response on the SDR measure. This approach was consistent with traditional methods for dichotomization of extreme responses (Paulhus, 1991). Interestingly, 326 participants answered with an extreme response to at least one socially desirable responding item, reducing the sample to 175 after controlling for SDR. The remaining sample size was too small to continue with the planned holdout sample approach. Paulhus (1991) mentions more complex methods for removing participants’ data by creating cut-off scores using SDR scales; however, based on findings from the current study, removing participants based on SDR seems inappropriate. Participants had no external reason to respond in a socially desirable way given the anonymous nature of the study, suggesting that social desirability may be an important psychological variable of interest in its own right.
Sex-Linked Differences Analysis

Data were collected on participants’ biological sex and expressed gender. Ten participants’ gender did not match their reported biological sex. The following analyses used the biological sex variable for analyzing sex-based differences, sex being a protected class in employee selection. There was no significant effect for sex on OCBs, $t(482) = -1.66, p = .39$, or CWBs $t(453) = 2.41, p = .10$. There was also no significant effect for sex on the humility factor, $t(484) = -1.52, p = .39$, the self-control factor, $t(494) = 1.56, p = .53$, the sociability factor, $t(498) = 1.98, p = .24$, or the impulsivity factor, $t(498) = -0.67, p = .85$. There were significant effects for sex on several study factors. Female participants reported higher scores on the moral identity factor ($M = 4.10, SD = .58$) than male participants, $t(485) = -3.18, p < .02, d = .28$. Male participants reported higher scores on the moral disregard factor ($M = 2.36, SD = 0.76$) than female participants, $t(481) = 4.82, p < .001, d = .43$, and on the entitlement factor ($M = 2.97, SD = 0.79$) than female participants, $t(489) = 2.60, p = .04, d = .23$. Results provide insight into research question 3 regarding the influence of sex on integrity and corruption measures.

Age Analysis

Table 6 includes correlations between age and all integrity and corruption factors as well as CWBs and OCBs. Results indicate that age had a negative and significant correlation with CWBs, $r = -.28, p < .001$, but a non-significant relationship with OCBs. Age also had positive and significant correlations with humility, $r = .13, p = .04$, and moral identity, $r = .30, p < .001$, as well as negative and significant correlations with moral disregard, $r = -.34, p < .001$, entitlement, $r = -.29, p < .001$, and impulsivity, $r = -.16, p < .01$. Results provide
insight into research question 4 regarding the association that age has with integrity and corruption measures.

**Discussion**

The purpose of this study was to operationalize integrity and to provide a framework for understanding its complexity. In doing so, this study also operationalized corruption to test an assumed diametric relationship to integrity measurement. Results from this study highlight several important relationships that are pivotal to future research on the topics of integrity and corruption.

**Outcome Measures**

The relationship between CWBs and OCBs was significant and positive. This finding may seem surprising given that researchers have often assumed the relationship between OCBs and CWBs as diametric. Fox et al. (2012) foresaw the potential for OCBs and CWBs to be distinct constructs, which lead to the creation of their scales. Fox et al. (2012) also reported a positive association between self-reported OCBs and self-reported CWBs across two studies. Although past research has found a significant and negative relationship between CWBs and OCBs, this is perhaps due to content contamination from reverse scored items. Findings from the current study support that researchers should entertain the idea that measures of OCBs do not diametrically oppose measures of CWBs. The behaviors of leaving work early without permission and offering suggestions about how work might be improved are not mutually exclusive.

There are several potential explanations for why CWB and OCB would have a significant and positive relationship. Fox et al. (2012) note that environmental variables are likely important factors for determining discretionary organizational behaviors such as OCBs.
and CWBs. Spector and Fox (2010b) propose multiple antecedent situations that may lead to both OCBs and CWBs, one of which is expected rewards for OCBs. For example, individuals who engage in more OCBs than others may feel permitted to more liberties, such as leaving work early. This assertion suggests a compensatory framework where CWBs serve to compensate an individual for his or her discretionary OCBs. The opposite may also be true, individuals who engage in CWBs may sometimes engage in OCBs to compensate for their misdeeds. Alternatively, they may engage in OCBs to provide a façade. Another explanation for the positive association between CWBs and OCBs lies in the motivation behind corrupt behavior. Corrupt individuals have a disregard for values, norms and rules, but this does not restrain them for engaging in pro-social behavior that yields a favorable outcome. Assisting co-workers via OCBs may grant praise and admiration from co-workers, which is associated with narcissism. Regardless of the causal explanation, the current study supports that CWBs and OCBs can co-occur when measured without the use of reverse scored items.

Future studies should focus on additional outcome measures for integrity. Current OCB measures may provide a limited view of integrity outcomes in the workplace. Coworker or supervisor ratings of organizational citizenship may provide additional opportunities to measure pro-social and citizenship behaviors in an actual work setting. Additionally, customer satisfaction ratings may be a variable of interest, particularly in job sectors that have a high degree of interaction with clients or customers. Self-report is the ideal format for CWB measures; however, measurement of citizenship behaviors may benefit from a 360-degree approach that captures an individual’s influence on the social environment.
Correlation Analysis

Results from the correlation analysis of the twelve scales included in this study provide a somewhat rare opportunity for researchers to see an expanded nomological network for popular integrity and corruption scales. All scales had acceptable alpha coefficients, which is especially reassuring considering the random presentation of items. With the exception of sociability, emotionality, and self-control, all scales maintained relationships with CWBs and OCBs that are consistent with previous research findings. The finding that several integrity measures did not have significant relationships with OCBs is not surprising. Integrity and corruption measures were highly negatively correlated, whereas CWBs and OCBs were positively associated. It is important to note that sociability, emotionality, and self-control did have a significant and negative relationship with CWBs. The included scales present themselves as valid and reliable measures, which is an important finding in itself.

I also employed a polyserial approach in this study to analyze the relationship between CWBs and other variables of interest. Future research may consider a polyserial analysis as an alternative to dichotomization when addressing the typical non-normal distribution of CWBs. Although the results from both the Pearson’s correlation analysis and the polyserial analysis are similar, the polyserial analysis may be the more appropriate statistical procedure because it may be more reliable given that the CWB distribution presents an extreme violation of Person’s assumption of normality.

Factor Analysis

The first notable finding from the factor analytic procedure is of importance to all psychological researchers. Researchers of measurement design, such as Hinkin (1995; 1998),
have long contended that the practice of using reverse scored items is unadvisable. Findings from the current study provide further validation for this claim. The inclusion of reverse scored items into the integrity EFA lead to an uninterpretable factor structure characterized by separate groupings of reverse and non-reverse scored items. The use of reverse scored items in psychological assessments is not an issue of inconsequential nature. All researchers should passionately avoid reverse scoring; further use of this method will only serve to reduce the effectiveness of all psychological research.

Results from the integrity EFA in which I excluded reverse scored items produced an interpretable factor structure that was consistent with the proposed framework. Results from the EFA were valuable for understanding item similarity and for removing poor loading or cross-loading items. Interestingly, all integrity factors had a significant and positive correlation with OCBs, unlike the original scales. By cleaning up the content domain and removing reverse scored items, the resulting item compositions had a significant correlation with OCBs, which was their target outcome. Two factors, humility and moral identity, also had significant and negative correlations with CWBs, even though OCBs and CWBs were positively associated. Future research may focus on creating more consolidated and targeted scales for measuring the subordinate constructs of integrity.

Results from the corruption EFA are particularly relevant for understanding item similarity in corruption measures. The EFA produced a three-factor model for corruption where most dark triad items loaded unto other factors. Results suggest that other corruption related constructs, particularly moral disengagement, incorporated most aspects of the dark triad. Interestingly, the entitlement factor had a non-significant association with the humility factor from the integrity EFA, which was a surprising finding. Future research might focus
on further examination of entitlement and humility, specifically, to provide further explanation of findings from the current study.

Factor analysis presented encouraging but admittedly tentative support for a higher-order framework for the constructs of integrity and corruption. The higher-order structure models that I examined for integrity and corruption produced only moderate fit to the data; however, the results still appear to offer a valuable starting point for future research. In support of the proposed framework, all integrity factors had positive, significant associations with OCBs and all corruption factors had positive, significant associations with CWBs. Results support a stronger and more parsimonious nomological network of variables.

**Sex and Age**

Findings from the current study concerning the influence of age and sex appear to be generally consistent with previous research findings. Male participants reported higher levels of moral disregard and entitlement while female participants reported higher levels of moral identity. The Cohen’s d measure of effect size was moderately strong for each of these sex-based differences. Findings suggest that sex is a variable of interest in integrity and corruption research, if for no reason other than controlling for its effects. Notably, sex is also a variable of importance in the I/O literature as it represents one of several protected employment statuses. Sex-based mean differences in measures can lead to adverse impact. However, current findings suggest this impact would likely favor woman, who are the minority group. Pragmatically, however, gender differences in integrity and corruption may be inconsequential regarding their use as selection measures.
Social Desirability

Researchers should reconsider current notions concerning social desirability and its measurement via SDR scales. I believe the results suggest that social desirability is a significant psychological phenomenon of interest and not simply a survey tool for determining response distortion. The current study included a wide range of constructs inherently related to social desirability, providing an opportunity for deeper insight into SDR functionality. SDR had a significant positive association with all integrity scales and a significant negative association with all corruption scales. Results suggest that the included SDR scale measures integrity with the same strength as any other included integrity metric. In particular, SDR had a strong positive association with self-control and a strong negative association with impulsivity. Of equal importance is the strong negative association between SDR and the dark triad. It seems logical that SDR would be negatively associated with self-reported dark triad traits. As an individual reports more social desirability, they also report less dark triad traits. However, the realization that SDR is also highly related to all measures of integrity breaks their fundamental assumption. The purpose of SDR scales is to identify individuals who distort their responses, but this in effect requires the assumption that people are inherently corrupt.

Again, SDR scales are grounded on the assumption that some behaviors are too good to be true. For example, SDR Item 10 read, “I never cover up my mistakes.” The underlying assumption of this item is that everyone makes mistakes and, importantly, that everyone attempts to hide those mistakes. While the first part of this assumption is almost certainly true, the second is less so. A person of high integrity would not attempt to deceive others by trying to cover up honest mistakes. As another example, Item 7 read, “I am very confident in
my judgments.” A person of high integrity has an integrated understanding of pro-social and altruistic values in relation to societal values, norms, and rules. It makes sense that a person of high integrity would be confident in their judgments, particularly their moral judgments. Reverse scored items in SDR measures lie on even shakier ground. For example, Item 12 read, “I sometimes try to get even rather than forgive and forget.” This attitude is fundamentally opposed to the characteristics and attitudes assessed in integrity measures. People of high integrity would likely strongly disagree with this statement and researchers may remove their data from further consideration. Researchers assume that strong agreement with this kind of item is indicative of response distortion, but I disagree with that conclusion. While corrupt individuals may respond to SDR items with extreme responses for deceitful purposes, the basis of the responses of individuals with high integrity, by definition, is not for deceitful purposes. It seems inappropriate for researchers to remove participant data based on extreme responses to SDR items or cut-off scores based on SDR scales. Researchers must reassess the content of SDR scales with a greater regard to the nomological network they are seated in, i.e. that of integrity and corruption.

**Concluding Remarks**

Integrity measurement is not new, but it has been under researched. Findings from the current study illuminate a pathway for future debate and research. Researchers have never before presented a coherent operational definition and framework for integrity in relation to its counterpart, corruption. The concerns I describe pertaining to researchers’ limited understanding of integrity content appear to be justified and they portend important issues that need addressing. For example, the results of this study suggest that the relationship between CWBs and OCBs may not be as clear as researchers think it is. Furthermore, current
notions of SDR functionality may be misinformed because of the lack of integrity research and there now exists a framework that affords a consolidation of research effort to understand this important and longstanding psychological construct and its influence on common organizational metrics. Findings from this study provide a vital starting point for generating consensus and guiding future research on integrity measurement.
References


Assessment of Emotional Intelligence (pp. 85–101). New York: Springer.


Table 1
Descriptive Statistics, Pearson’s Product-Moment Correlation Coefficients, and Coefficient Alphas for Study Scales. \( N = 501. \)

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<thead>
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<th>Variable</th>
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<th>4</th>
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<th>9</th>
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<td>1. CWB</td>
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<td>0.33**</td>
<td>(0.91)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>3. Sociability</td>
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<td>0.07</td>
<td>(0.71)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Emotionality</td>
<td>3.37</td>
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<td>-0.44**</td>
<td>0.07</td>
<td>0.50**</td>
<td>(0.75)</td>
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<td></td>
<td></td>
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<td>5. Humility</td>
<td>3.99</td>
<td>0.56</td>
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<td>0.39**</td>
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<td>7. Impulsivity</td>
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<td>8. Moral Identity</td>
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<td>0.54**</td>
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<td>0.59**</td>
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<td>-0.76**</td>
<td>(0.86)</td>
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<td>10. Entitlement</td>
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<td>0.08</td>
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<td>-0.06</td>
<td>-0.14**</td>
<td>0.13**</td>
<td>-0.48**</td>
<td>0.59**</td>
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<td>-0.49**</td>
<td>0.45**</td>
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<td>0.78**</td>
<td>0.53**</td>
<td>(0.85)</td>
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<td>0.30**</td>
<td>0.73**</td>
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<td>0.45**</td>
<td>-0.56**</td>
<td>-0.17**</td>
<td>-0.40**</td>
<td>(0.83)</td>
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*Note.* \(*p < .05, \text{**P} < .001.\) Coefficient alphas are on the diagonal.
Table 2

<table>
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<th>Variable</th>
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<td>&gt;0.001</td>
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Table 3.
Exploratory Factor Analysis for Integrity Including Reverse Scored Items. N=250.

<table>
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<tr>
<th>Item</th>
<th>Factor1</th>
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*Note.* Significant Item loadings are in bold. R indicates the item was reverse scored.
Table 4.
Exploratory Factor Analysis for Integrity Without Reverse Scored Items. N=250.

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Table 4 (continued).

| Moral Identity 8 | 0.11 | **0.46** | -0.05 | 0.36 |

*Note.* Significant Item loadings are in bold. R indicates the item would be reverse scored (item scored were not reversed).
Table 5.
Exploratory Factor Analysis for Corruption. N=250

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Table 5 (continued).

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<tr>
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*Note. Significant Item loadings are in bold. R indicates the item was reverse scored.*
Table 6

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<td>2. OCB</td>
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<td></td>
<td></td>
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</tr>
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<td>3. Humility</td>
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<td>0.38**</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>4. Moral Identity</td>
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<td>-0.26**</td>
<td>0.27**</td>
<td>0.71**</td>
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<td></td>
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<tr>
<td>5. Self-Control</td>
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<td>0.72</td>
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<td>0.22**</td>
<td>0.42**</td>
<td>0.33**</td>
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</tr>
<tr>
<td>6. Sociability</td>
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<td>0.70</td>
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<td>0.25**</td>
<td>0.39**</td>
<td>0.23**</td>
<td>0.51**</td>
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<td>7. Moral Disregard</td>
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<td>8. Entitlement</td>
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<td>0.26**</td>
<td>0.57**</td>
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</tr>
<tr>
<td>9. Impulsivity</td>
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<td>10. Age</td>
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<td>-0.06</td>
<td>0.13*</td>
<td>0.30**</td>
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<td>-0.34**</td>
<td>-0.29**</td>
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Note. *p < .05, **P < .001. Coefficient alphas are on the diagonal.
Table 7

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<td>&gt;0.001</td>
</tr>
<tr>
<td>Moral Identity</td>
<td>-0.27</td>
<td>0.04</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Self-Control</td>
<td>-0.15</td>
<td>0.04</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Sociability</td>
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<td>0.04</td>
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<td>0.03</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Entitlement</td>
<td>0.40</td>
<td>0.03</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Impulsivity</td>
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<td>0.03</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.27</td>
<td>0.04</td>
<td>&gt;0.001</td>
</tr>
</tbody>
</table>
Figure 1. Proposed indirect hierarchical model of integrity.
Figure 2. Proposed indirect hierarchical model for corruption.
Figure 3. Indirect hierarchical Confirmatory Factor Analysis of integrity items from Exploratory Factor Analysis.
Figure 4. Indirect hierarchical Confirmatory Factor Analysis of corruption Exploratory Factor Analysis items.
APPENDIX
A Framework for Integrity with...Integrity: Clarifying the Construct’s Content domain, factor structure, and association with Counterproductive Work Behaviors and Organizational Citizenship Behaviors

By
Joshua S. Andrews

A thesis proposal submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the degree of Masters of Science Psychology

Raleigh, North Carolina
2017

APPROVED BY:

____________________________  __________________________
Dr. Sarah Desmarais            Dr. Bart Craig

____________________________
Dr. Samuel Pond, III
Chair of Advisory Committee
ABSTRACT

ANDREWS, JOSHUA. A Framework for Integrity with…Integrity: Clarifying the Construct’s Content domain, factor structure, and association with Counterproductive Work Behaviors and Organizational Citizenship Behaviors. (Under the direction of Dr. Samuel Pond).

Integrity tests have become popular tools in employee selection, but researchers still seem to lack a thorough understanding of the construct’s definition. Most research on integrity in the field of I/O Psychology uses an inductive approach to measurement creation. This approach, however, has failed to produce enough knowledge about the actual construct integrity and its potential outcomes. The following paper identifies the major problems with commercial integrity tests by proposing a deductive approach for measuring integrity as it applies to organizations. Based on a thorough literature review, I propose a framework for conceptualizing integrity that leads to testable hypotheses concerning relevant outcome criterion and an analysis plan for testing these hypotheses.
A Framework for Integrity with…Integrity: Clarifying the Construct’s Content Domain, Factor Structure, and Association with Counterproductive Work Behaviors and Organizational Citizenship Behaviors

The implementation of integrity tests became increasingly popular in employee screening after the Employee Polygraph Protection Act in 1988. Integrity tests are popular tools for employee screening and job selection (Fine, Horowitz, Weigler, & Basis, 2010), with estimates that organizations administer around 5 million integrity tests annually (Camara & Schneider, 1994; Fine et al., 2010). In the field of I/O psychology, research tends to use inductive approaches when defining integrity, mainly focusing on its relationships with CWBs. With regard to employee selection, practitioners often measure variables that relate highly to CWBs and combine them into commercially marketable instruments known as integrity tests (Berry, Sackett, & Wiemann, 2007). Dustbowl empiricism largely is the base of this approach to measurement design (Latham, 2012; Miner, 2005).

Researchers have designed integrity instruments to predict CWBs (Fine et al., 2010), which is a distinctly different approach from designing a measure for the construct of integrity. The former approach implies a purely inductive process, one that neglects the use or building of theory (Miner, 2005; Miner, 2006). As such, research on the topic has fallen into the typical pitfalls of dustbowl empiricism (Latham, 2012). Specifically, the construct’s content domain is ambiguous and researchers understand its relationship with outcome variables only through empirical ties and validity coefficients. The most basic research questions are still unanswered: What is integrity and how do we measure it?

I/O psychologists have yet to generate a cohesive theory for the construct of integrity, particularly with regard to employee selection. The purpose of this study is to identify and
address some fundamental issues in integrity research and to take a deductive approach to defining the latent construct of integrity as it applies to organizations. I propose a more comprehensive framework for understanding the construct of integrity, its content domain, and its criterion space to guide future research on the topic and to help create consensus in the field.

Before beginning a discussion of where research on integrity should proceed, it is prudent to discuss the major conceptual issues plaguing the field. In the proceeding sections, I will address these issues concerning the major commercial integrity tests. Following this, I will propose a new framework for examining the construct of integrity that will integrate existing theory and research on the topic. Finally, I will make hypotheses to test empirically the proposed framework and relationships.

**Conceptual Issues in Integrity Research**

In her dissertation, Ones (1993) conducted a broad review of commercial integrity measures at the test level using both primary and meta-analytic data. Ones (1993) notes that integrity tests are classified into two categories: overt measures and personality-based measures. Researchers often refer to the latter as covert measures because their relevance to honesty and integrity is not immediately clear to test takers (Barrett, 2001). According to Ones, Viswasvaran, and Schmidt (2003 p. 23-24), overt measures of integrity are measures that predict “attitudes regarding dishonest behaviors”, while personality-based (covert) measures of integrity are “intended to predict a broad range of counterproductive behaviors at work… using personality scale items.” Ones (1993) conducted Confirmatory Factor Analyses to test the relatedness of overt and covert integrity tests by using each test as a singular indicator of the latent construct. Ones concluded that overt integrity tests measure a
single common construct and that covert integrity test measure a distinct yet related construct; however, she labeled each of these reportedly distinct constructs as conscientiousness. Furthermore, Ones concluded that these individual constructs were related via a superordinate construct, which she also labeled conscientiousness. The overt/covert classification system ignores the content of integrity tests in favor of non-transparent testing instruments and has failed to create a unique interpretation of integrity. Ones (1993) interpretation hinges on conscientiousness as the overarching construct that connects overt and covert tests. I do not believe this interpretation supports the inference that overt and covert tests both measure integrity; rather, they both measure conscientiousness. Indeed, researchers have met with disagreement over the interpretation of commercial integrity test content and validity evidence (Camara & Schneider, 1995; Ones, Viswesvaran, & Schmidt, 1995).

Camara and Schneider (1995 p. 459) doubt the assertion that researchers fully understand the underlying structure of integrity, claiming that the construct has become increasingly broadened in scope. Due to the broad conceptualization of the construct, the authors question whether commercial measures are actually measuring integrity, and if their validity evidence holds merit. Essentially, the authors are critiquing the pure inductive reasoning behind integrity tests, which are driven almost exclusively by criterion-related validity studies. Indeed, criterion-related validity assessments are particularly useful in atheoretical and empirically driven research designs (Carmines & Zeller, 1979); this is not new information. Furthermore, ensuring that a scale accurately measures the target construct is the most difficult part of survey research (Barrett, 1972; Hinkin, 1995; Hinkin, 1998). Therefore, Camara and Schneider (1995) raise very reasonable concerns about the actual
measurement of integrity, yet these concerns have gone relatively unanswered.

**Issue 1: Content Validity**

Addressing concerns over the content of integrity, Wanek et al. (2003) conducted a study to illuminate the structure and similarities of the major commercial integrity tests. Building on the previous research of Ones (1993), Wanek et al. (2003) conducted an item-based analysis on the same data set of commercial integrity measures. The authors sorted 798 items and produced 23 composites based on similarities in item theme. The authors then conducted a principle-components analysis (PCA) with promax oblique rotation on the composites and interpreted a 4-component solution: anti-social behavior, socialization, positive outlook, and orderliness/diligence. A major limitation to this study is that the individual items are unavailable for review; thus, it is difficult for outside authors to interpret the appropriateness of the assigned factor labels. Furthermore, the author’s inductive approach does little to expand upon the content domain of existing measures, or to offer a theoretical basis for the suggested factor structure. Thus, while this study provides some useful insight into current measures, it falls short of offering a theoretical structure for integrity.

My primary concern with Wanek et al.’s (2003) study is the lack of theoretical approach used in the measurement analysis. The authors used a PCA technique to analyze their data, which is a data reduction technique. A PCA creates a linear combination of variables that best accounts for explained variance, i.e. descriptive linear composites that do not assume a common factor. Hence, the factors produced by Wanek et al. (2003) are not based on a theoretical underlying construct, but on reduction of the original items into composites that best explain the total variance. Given that a component is, typically, the
weighted sum of observed variables, a PCA creates a formative measurement device (Conway & Huffcutt, 2003). While a PCA may have been appropriate for the authors’ intentions, it still represents an atheoretical approach that researchers sometimes misuse in place of a Factor Analysis (FA) approach (Conway & Huffcutt, 2003). The FA approach differs mathematically and conceptually from a PCA approach; it is designed to account for the covariance among variables and to test an underlying theoretical structure. Based on the data-analysis approach by Wanek et al. (2003), I have several concerns about the factors produced by their analysis; I am not convinced that they are representative of integrity from a theoretical perspective.

Firstly, anti-social behavior is an outcome of integrity and not a measure of the latent construct itself. The original 23 thematic composites, which Wanek and colleagues sorted prior to the PCA, contained items sampling past behaviors such as: drugs/alcohol/tobacco use, theft admission, and driving violations (Wanek et al., 2003). While past delinquent behavior may be a strong predictor of future delinquent behavior, it does not measure the latent construct integrity. The relationship between past delinquency and future delinquency is likely explained by the underlying construct. I would argue that this factor should instead target anti-social traits as predictors of anti-social behavior. Secondly, socialization is not an appropriate composite title or construct for measuring an individual’s integrity. Socialization is a developmental process and a type of social learning (Bandura & Walters, 1963); it is not representative of an inherent quality or trait. Therefore, it is difficult to interpret what a socialization factor would measure in an individual. Thirdly, I question whether positive outlook or orderliness/diligence are representative of integrity. I do not understand how these two constructs relate to any classic definition of integrity, such as a sense of honesty and fair
play (Kaiser & Hogan, 2010). As a final criticism, I must question the conceptual overlap between other broad personality measures and the integrity measures presented by Ones (1993) and Wanek et al. (2003). The authors defend integrity tests as related to but neither identical nor interchangeable with other personality related constructs; however, I am still concerned about issues of discriminate validity.

**Issue 2: Convergent/Discriminate Validity**

The conceptual overlap between commercial integrity measures and broad measures of personality (such as the Big-Five) is already well established (Hogan & Brinkmeyer, 1997: Ones, 1993, Wanek et al., 2003). The vague conceptual terrain of commercial integrity measures has lead some authors to question the lack of conceptual distinction between integrity tests and other broad measures of personality (Camara and Schneider, 1995). These criticisms concern content contamination, which is an issue that questions the value of criterion-related validity. Wanek et al. (2003) correlated their 4-component solution with a broad measure of personality, the Big-Five, and found support for the claim that integrity tests tapped into Conscientiousness, Agreeableness, and Emotional Stability, specifically in this order of magnitude.

Wanek et al.’s (2003) study confirms the overlap between the 4 principle components of integrity measures and the five factors of personality. The authors claim that their findings support the central role of conscientiousness, agreeableness, and emotional stability in integrity tests, because they all correlate highly with the four components of integrity that they had identified. The authors further note that, although they had lower correlations, extraversion and intelligence had a relationship with each integrity factor that was still significantly greater than zero (Wanek, et al., 2003).
study is that it still uses an inductive approach based on the existing commercial measures of integrity. The 4-component solution suggests high overlap with other broad personality instruments. Researchers have examined broad personality measures, such as the Big-Five Inventory (John, Naumann, & Soto, 2008), as antecedents to an array of behaviors, including all three aspects of Rotundo and Sackett’s (2002) tripartite model of performance: CWBs (Bolton, Becker, & Barber, 2010), OCBs (Chiaburu, Oh, Berry, Li, & Gardner, 2011), and Task Performance (Neal, Yeo, Koy, & Xiao, 2012). Many employee selection practitioners already understand the value of personality measures, and most already use them, which would suggest that contaminated integrity measures have limited added value for selection. In fact, Camara and Schneider (1994) assert that no studies have indicted incremental validity evidence from incorporating integrity tests into other selection systems. Thus, it is difficult to seat current integrity measures within a nomological network of existing measurements.

**Issue 3: False Positives**

Researchers have reported that integrity tests have strong criterion-related validity (Ones, Viswesveren, & Schmidt, 1993; Schmidt & Hunter, 1998). Researchers have examined the relationship between integrity tests and outcomes such as job performance (Ones, Viswesveren, & Schmidt, 1995), training performance (Schmidt & Hunter, 1998), absenteeism (Ones, Viswesveren, & Schmidt, 2003), and CWBs (Fine et al., 2010). Researchers even suggest that integrity test have more criterion-related validity support for predicting overall job performance than most other selection tools (Ones et al., 1995). However, some researchers have criticized integrity tests for failing to accurately predict their originally intended outcomes, ethical behavior. Camara and Schneider (1994) indicate that 95.6% of integrity tests takers who fail for selection purposes are incorrectly categorized...
as dishonest, i.e. false positives. Fine et al. (2010) also note that, despite having strong psychometric properties, integrity tests still suffer from high rates of false positives. This high rate of false positives is likely the result of content contamination caused by the overly broad scope of integrity measures.

The Problem: Lack of Theoretical Models and Deductive Reasoning

Researchers of commercial integrity tests have produced a preponderance of evidence that their measures are valid predictors of overall job performance and CWBs (Iddekinge, Roth, Raymark, & Olde-Dusseau, 2012; Ones et al., 1995; Ones et al., 2003; Schmidt & Hunter, 1998; Wanek et al., 2003). However, research seems to avoid addressing Camara and Schneider’s (1995) astute criticism; integrity tests are grounded in criterion-related validity evidence and lack a theoretical structure. The disregard of theory concerning integrity instruments is cause for alarm. Inferences about criterion-related validity are dependent upon a clear specification of content domain and the degree to which a measure accurately represents the construct domain (Linn, 1980). Without a thorough understanding of the construct, criterion related validity evidence is meaningless. Validating the inference that a predictor measure is actually related to the performance domain requires support for all three types of validity: construct, content, and criterion. This constitutes the accepted Unitarian perspective of validity (Binning & Barrett, 1989). Nonetheless, proponents of criterion-referenced measures seldom take this fact seriously (Linn, 1980). It is time for researchers to take the aforementioned issues seriously. A theoretical framework for integrity that is unique from other broad range measures of personality is long overdue. Addressing these conceptual issues requires establishing the foundational components of any scale development, an operational definition for the construct. Given the preponderance of inductive approaches
applied to the topic, I believe it's best to take a deductive, more theoretical, approach to measurement design.

**Conceptualizing Integrity: A Deductive Approach**

A deductive approach to scale development uses a classification schema or typology of the construct prior to data collection so that underlying theory and frameworks can guide the approach. This approach requires a thorough understanding of the literature that pertains to the integrity construct (Hinkin, 1995). The first step when using a deductive approach is to propose an operational definition for the target construct. Typically, this definition provides a foundation for researchers to generate measurement items (Hinkin, 1998); however, generating items will not be necessary for the current study. Numerous existing scales measure the various aspects of integrity. In lieu of generating new items, I will select existing measures that adequately fulfill the content domain. To accomplish this, I must first clarify a conceptual distinction and establish a theoretical definition for integrity as it applies to organizations.

**Conduct Versus Character**

In Psychology, researchers have divided integrity into two distinct aspects or definitions. The first refers to being honest, fair, and having strong moral principles (Kaiser & Hogan, 2010). This interpretation suggests that integrity is a quality of an individual, i.e. an individual who is honest and fair has integrity. The second distinction refers to state of being undivided, or internal consistency of words and action (Kaiser & Hogan, 2010), i.e. an individual behaves with integrity. This interpretation suggests that integrity represents expected behaviors; a person high on integrity would have low discrepancy between expected and actual behavior. This bi-model conceptualization has been referred to as the
conduct-character distinction (Kaiser & Hogan, 2010; Northouse, 2006) and it seems to have caused confusion in operationalizing integrity. In general, researchers and philosophers have yet to successfully integrate the conduct-character distinctions into a unified theory of integrity (Cox, La Caze, & Levine, 2013). The answer to this conundrum lies in the heuristic device Lewin’s Equation.

Essentially, researchers have failed to identify and distinguish between integrity as a personal characteristic and the behavioral outcomes of integrity, i.e. does a person have integrity or do they behave with integrity? Consider Kurt Lewin’s Equation: \( B = f(P, E) \). Behavior \( B \) is the outcome of a function between personal-characteristics \( P \), the environment in which the behavior takes place \( E \), and the interaction of \( P \) to \( E \) (“.”). Having integrity refers to \( P \) and “.”, while behaving with integrity refers to \( B \). Thus, the conduct-character distinction is less of a distinction and more of a realization that character alone does not predict behavior. Hence, predicting integrity-related behaviors \( B \) requires assessing \( P \), \( E \), and “.”. This is to say, behavior regarding integrity is dependent upon three components: the individual’s attributes, the individual’s attitudes, and the context (atmosphere) in which the behavior takes place. Attributes and attitudes are internal person-related variables, while context is an external variable that depends upon a specific organization and job setting. The purpose of the current study is to focus on attributes and attitudes \( (P \) and “.”) as they represent the latent construct of integrity. In the end, integrity alone may be insufficient for predicting behavior due to the influence of environmental variables.

A Definition of Integrity

Now that I have established integrity as a person-related construct, I must provide an
operational definition to define the boundaries of the construct. I define integrity, as it applies
to organizations and employee selection, as

- a set of psychological characteristics and attitudes within an individual that drives
  him or her to accept and abide by the values, norms, and rules of the organization and
  the society it resides in, and to behave as a good organizational citizen by being
  moral, fair, sociable, and considerate of the organization’s— and its constituent’s—best
  interests.

I derive this definition of integrity from the comments of Kaiser and Hogan (2010) and from
my review of the Stanford Encyclopedia of Philosophy’s in-depth entry on integrity (Cox, et
al., 2013). Integrity has been equated highly with morality or moral character (Kaiser &
Hogan, 2010). Integrity drives an individual to be honest, sociable, and fair and to act in
accordance with social values, norms, and rules. Integrity influences the way an individual
views the world and his or her conception of right and wrong, i.e. morality. The organization
and surrounding society encompass the environmental variable and specify the types of
behaviors to be expected. A person of low integrity would be dishonest, unsociable, and a
rule-breaker, more likely to engage in counter-productive behaviors at work. A person of
high integrity would be fair and sociable, perhaps more likely to engage in contextual or
citizenship behaviors at work.

**Behavioral Outcomes of Integrity**

Research in our field has focused exclusively on the predictive validity of integrity
measures, but without a thorough enough understanding of the underlying construct to guide
the selection of appropriate criteria. Concerning my re-defining of integrity, I propose that
both counterproductive work behaviors (CWBs) and organizational citizenship behaviors (OCBs) are potential outcomes of integrity for reasons described below.

**Counterproductive work behaviors.** Counterproductive work behaviors include a range of behaviors that are oppositional to the organization’s goals including: theft of company materials, work withdrawal, sabotage of equipment, and physical violence against organizational members. Research has examined a wide variety of antecedents to CWBs, including both person and contextual factors (Greenberg, 2002). As a formative construct, CWBs are a set of unique, but commonly associated, behavioral categories that tend to have high perceptions of co-occurrence (Gruys, 1999). This finding suggests that CWBs might share common antecedents or predictors. The current study operationalizes CWBs using the definition from Spector, Fox, Penny, Bruursema, Goh and Kessler (2006), CWB’s are “volitional (as opposed to accidental or mandated) and harm or intend to harm organizations or organizational stakeholders…” (p. 447). The defining features of CWBs in this definition are that the behaviors are voluntary and that they potentially harm the organization. Distinguishing between accidental and intentional behavior is important. Because accidental behaviors are outside of an individual’s control, they are not influenced by an individual’s characteristics and are therefore not relevant. Under this operational definition, CWBs have a very clear link to integrity. Individuals with low integrity may be unsociable and have less regard for fairness or rule following; hence, they would be more likely to violate social norms, values, and rules in the form of CWBs compared to individuals higher in integrity.

**Organizational citizenship behaviors (OCBs).** Researchers in I/O Psychology have predominantly viewed integrity as a dark-side measure, focusing on the outcomes of low integrity like CWBs, job performance, and turnover (Iddekinge, et al., 2012). If integrity
drives an individual to play fair and to be sociable, it is logical to hypothesize that high integrity individuals might be more likely to engage in contextual helping behaviors that are beneficial to the organization at large. This would be particularly true if the values of the organization support pro-social behaviors. High integrity may lead to positive behavioral outcomes such as organizational citizenship behaviors (OCBs); however, the small body of research on integrity and OCBs is often inconsistent and produces confusing results due to previous conceptual issue in defining integrity. This has led to inconsistent empirical research on the topic of integrity and OCBs (Tomlinson, Lewicki, & Ash, 2014).

Organizational citizenship behaviors are contextual performance behaviors that often fall outside of normally required task performance. Borman (2004, p. 238) defines this as “…behaviors that are not directly related to the main task activities but are important because they support the organizational, societal, and psychological context…” This includes behaviors such as coaching and mentoring coworkers, tidying-up around the office, and expressing appreciation to other co-workers (Fox, Spector, Goh, Bruursema, and Kesler, 2012). One issue for the present study is that some researchers have criticized OCB measures for having an unclear content domain (Podsakoff, MacKenzie, Paine, & Bachrach, 2000) that can overlap with measures of CWBs through the use of reversed scored items that essentially target CWBs (Fox, et al., 2012). Previously, researchers viewed OCBs and CWBs as non-orthogonal, because many antecedents had opposite correlations with the two constructs. However, Fox, et al. (2012) challenge this assumption, suggesting that the non-orthogonal relationship is the result of construct contamination with CWB scales. As a result, they designed a measure of OCBs that minimizes overlap with CWB scales. This psychometrically improved measure allows for the examination of both OCBs and CWBs as
separate and distinct criterion related to integrity. I believe a relationship between integrity and OCBs is both plausible and overlooked. A sociable individual who is considerate of the organization’s best interests seems likely to show appreciation to coworkers and to coach or mentor others. Individuals with high integrity are good organizational citizens; they seek to preserve the important organizational, societal, and psychological contexts that support the organization.

**A Hierarchical Framework for Integrity**

Integrity encompasses personal attributes and attitudes, which in turn influence an individual’s acceptance of values, norms, and rules. I believe that integrity is a hierarchical construct that drives several subordinate constructs. A recent profile analysis by Cohen, Panter, Turan, Morse, and Kim (2014) offers valuable insight into the content of integrity, or moral character. Cohen et al. (2014) conducted longitudinal research over the course of 12 consecutive weeks to create latent profiles for moral character. They conducted three studies on separate participant pools; study one had 1,020 participants, study two had 494 participants, and study three had 665 participants. Participants represented a diverse group of full-time employees from all 50 United States. Furthermore, participants represented all 23 occupations reported by the U.S. Bureau of Labor Statistics. In each study, Cohen et al. (2014) found 3 latent profiles representing low, average, and high moral character.

Cohen et al. (2014) ran regression analyses on data from studies one and two with moral character profile as a predictor of self-reported CWBs and OCBs. In each study, individuals with high moral character reported fewer CWBs and more OCBs than individuals with average moral character. Individuals with average moral character reported fewer CWBs than individuals with low moral character; in study one they also reported less OCBs.
In study three, researchers used delinquency and approval of unethical negotiation tactics as outcome variables. Researchers found the same relationships between these criterion and moral character profile as they did in studies one and two. Based on the findings from Cohen et al. (2014), and the provided definition of integrity, I have distilled several measurable constructs that model the content of integrity: sociability, anti-social traits, self-control, moral identity, and moral disengagement. Figure 1 illustrates the proposed model of integrity, which is an indirect hierarchical model (Gignac, 2008). Figure 2 illustrates the extended framework for integrity. In the following sections I explain the content and rational for each of the subordinate constructs included in integrity and make hypotheses concerning their empirical relationship to expected outcomes.

**Sociability.** In the general philosophical literature, integrity involves an aspect of self-integration, the process of integrating various parts of the self into a harmonious whole (Cox et al., 2013). In the context of employee selection, self-integration represents the likelihood that an individual will accept (integrate) the norms, values, and rules of the organization–and the society that houses it–into their own behavior. The underlying psychological construct influencing the self-integration process is socialization. Socialization is “the process whereby an individual learns to adjust to a group (or society) and behave in a manner approved by the group” (Encyclopedia Britannica). The socialization process typically occurs during childhood and adolescence, as a result of social learning, when it influences moral judgments (Bandura, 1969) and personality development (Bandura & Walters, 1963). Thus, socialization is not a skill or trait, but a process that results in attributes like social skills. These social skills allow an individual to successfully navigate the surrounding social/cultural terrain. The underlying trait associated with social skills is trait
emotional intelligence (EI), specifically the social skills factor (Perez, Petrides, & Furnham, 2005). The trait EI theory and model suggests that EI is a personality trait located at lower levels of the personality hierarchy (Petrides & Furnham, 2001), i.e. a more narrow than broad trait.

Researchers have linked EI factors to both CWBs and OCBs, albeit in non-U.S. worker samples (Jung & Yoon, 2012; Singh & Dubey, 2015). Supporters of the trait EI model assert its importance in predicting organizational outcomes including job performance, work engagement, CWBs, and OCBs (Petrides, Mikolajczak, Mavroveli, Sanchez-Ruiz, Furnham, & Perez-Gonzales, 2016). A study by Jung & Yoon (2012) found that three factors of trait EI were significantly and negatively related to CWBs. Those same three factors were also significantly and positively related to OCBs. Researchers have also produced strong incremental validity evidence for EI when correlated with similar constructs, such as conscientiousness (Singh & Dubey, 2015). The findings from Singh and Dubey (2015) are particularly relevant to the current proposal.

Singh and Dubey (2015) collected data on a sample of 117 managerial workers of various private organizations in India. The authors measured the participants’ EI using the Trait Emotional Intelligence Questionnaire (TEIQue) and correlated these scores with self-reported OCBs. The authors present correlations between the composite EI score, conscientiousness, and each of the OCB composites: sportsmanship, civic virtue, courtesy, and altruism. The first important finding is that trait EI has a stronger correlation with OCBs (total score) than conscientiousness. The correlation between EI and conscientiousness is .27, suggesting these concepts are related but certainly distinct from one another. The correlation between EI and OCBs is .41, suggesting a moderate to strong relationship. The second
important finding is that EI had the strongest relationship to the sportsmanship OCB composite (.38), while having a non-significant relationship with altruism. I believe this pattern of relationships to be consistent with my definition of integrity; sportsmanship has more to do with fair play than altruism. Based on these findings, I am convinced that trait EI is measuring the appropriate content for the sociability factor of integrity. Therefore, I make the following Hypotheses.

**Hypothesis 1a.** Sociability will be negatively associated with CWBs.

**Hypothesis 1b.** Sociability will be positively associated with OCBs.

**Anti-social traits.** While sociability drives an individual to follow prescribed norms, values, and rules as an important part of the social fabric, anti-social traits drive an individual to break these prescriptions. Anti-social characteristics, such as Machiavellianism, narcissism, and psychopathy, are associated with white-collar crime (Ragatz, Fremouw, & Baker, 2012) and CWBs (O’Boyle, Forsyth, Banks, & McDaniel, 2012). These anti-social traits are negative indicators of integrity in that they are likely to decrease as the superordinate trait increases. Integrity drives an individual to adhere to norms, values, and rules, even if these norms, values, or rules are counter to the individual’s preferences. An individual who lacks integrity would have less regard for rules or socialization and would be more interested in self-indulging behaviors. These individuals are also more likely to view themselves as exempt from, or otherwise above, the standard social and organizational procedures.

The dark-triad is a jargon term that describes the combination of three heavily studied anti-social traits: Machiavellianism, narcissism and psychopathy (Paulhus & Williams, 2002). Research attention has focused on these three traits as they relate to undesirable
behavior (Jonason & Webster, 2010). Traditionally the dark triad has been composed of three separate measures (with some overlap), that add up to over 90 items across the three scales (Paulhus & Williams, 2002). However, research on these scales provides evidence that they are indicators of the same latent construct (Jonason & Webster, 2010). Jonason and Webster (2010) sought to create a composite scale for the dark triad. Across three studies, their measurement produced high model fit, high reliability, and high discriminate validity compared to other personality measures, such as the Big-Five. The resulting 12-item scale (The Dirty Dozen) shows high potential as a composite measure, but the authors did not produce criterion related evidence with regard to CWBs or OCBs specifically.

Research suggests that Machiavellianism, narcissism, and psychopathy are predictors of immoral behavior (Mandell 2006: Ragatz et al. 2012; Scherer, Baysinger, Zolynsky, & LeBreton, 2013). Individuals high on these traits hold beliefs that norms/values/rules do not apply to them, or they are otherwise unconcerned with these behavioral regulations. It is logical to assume that these traits would negatively influence one’s likelihood to accept organizational or societal values and would thus be negative indicators of integrity. In the context of an organization, this will manifest as increased CWBs. The relationship between anti-social traits and OCBs is less clear; an individual of low integrity may engage in contextual performance if they expect a personal gain. Based on this logic, I make the following hypothesis regarding integrity and CWBs and research question regarding anti-social traits and OCBs.

**Hypothesis 2.** The dark triad (Machiavellianism, narcissism, psychopathy) will be positively associated with CWBs.
Research question 1. Does a significant association exist between the dark triad (Machiavellianism, narcissism, psychopathy) and OCBs?

Self-control. Individuals high in integrity are able to control their behavior so that it adheres to societal norms, values, and rules. Self-control inhibits behavior long enough that an individual can engage in conscious moral cognition; individuals who lack self-control are impulsive. Impulsive individuals are prone to rapid, unplanned, reactions to stimuli with diminished regard to consequences (Morean, et al., 2012; Black & Reynolds, 2016). Researchers have studied impulsivity and self-control as antecedents to a wide range of undesirable behaviors, including: heavy substance use (Leeman & Potenza, 2012), drunk driving (Moan, Nordstrom, & Storvoll, 2013) and intimate partner violence (Shorey, Brasfield, Febres, & Stuart, 2011). Individuals with high self-control are able to inhibit impulsive behavior; consequently, they are more likely to engage in ethical reasoning before acting. Cohen et al. (2014) included self-control in their profile analysis of moral character. In study two, which included the self-control scale, self-control had a significant and negative correlation with CWBs as well as a significant and positive correlation with OCBs. Based on these findings, I make the following hypotheses concerning self-control and CWBs/OCBs.

Hypothesis 3a. Self-control will be negatively associated with CWBs.

Hypothesis 3b. Self-control will be positively associated with OCBs.

Moral identity. Moral identity is a construct that represents a particular facet of self-identity, the importance of moral behavior to one’s self-concept. Aquino and Reed (2002 p.1423) define moral identity as a “self-regulatory system that motivates moral action”, i.e. a motivating force that links self-concept to moral behavior. Blasi (1983) believed that moral
identity represented a deep-rooted commitment to morality, such that acting in a manner inconsistent with this identity would disrupt one’s self-concept. Based on this idea, Blasi (1984) proposed the self-model of moral action. This model supposes that individuals consciously deliberate right from wrong and then decide if an action is acceptable, or required, based on their beliefs (Black & Reynolds, 2016).

Aquino and Reed (2002) created the moral identity scale (MIS), which purports to measure the importance an individual places on morality as a part of his or her self-identity. Researchers on moral identity have used Aquino and Reed’s (2002) scale frequently in recent studies; however, others have criticized this measure for failing to cover the full content domain of the target construct (Black & Reynolds, 2016). In their recent study, Black and Reynolds (2016) help to make an important clarification about the construct. They propose that an important part of the construct is self-consistency, which researchers have often not measured in conjunction with moral identity. Blasi (2005) believed that integrity was comprised of two aspects: moral identity and moral responsibility, i.e. a desire to be consistent with one’s identity. However, the authors note, “Both integrity and self-consistency can be separate from adherence to accepted moral norms” (Black & Reynolds, 2016 p. 121). Hence, this component of integrity targets an individual’s personal desire to be—and to behave—morally, rather than his or her likely adherence to imposed rules.

Black and Reynolds (2016) improved upon this past measure with the creation of the Moral Identity Questionnaire (MIQ), which targeted both the importance individuals place on their own moral principles and the importance they place on acting accordingly. They conceptualized these two facets as “moral self” and “moral integrity”, where moral integrity represents the desire to be consistent (Black & Reynolds, 2016 p. 121). Furthermore, they
found that the MIQ measured moral identity independently of religious or political views. This fact is important to consider because some researchers have criticized commercial integrity measures for being biased against religious individuals (Lilienfeld, Alliger, & Mitchell, 1995). Hence, the MIQ has greater content coverage and discriminant validity compared to the MIS and appears the better option for measuring the construct.

Black and Reynolds did not correlate their measure with any outcome criterion such as OCBs or CWBs; however, they did examine the MIQ’s relationship with other scales purporting to measure the same or a similar construct. This included the MIS by Aquino and Reed (2002), which correlated at .57 with the MIQ (Black & Reynolds, 2016). A moderately strong correlation such as this suggests that the MIQ is measuring the construct in a similar manner to the MIS. There have been studies that link the MIS positively with pro-social behaviors (Aquino & Reed, 2002; Cohen et al., 2014) and negatively with CWBs (Andrews, Thompson, & Williams, 2016; Cohen et al., 2014). Based on this evidence, I make two hypotheses about the relationship between moral identity and the outcome criterion of OCBs and CWBs.

**Hypothesis 4a.** Moral identity will be negatively associated with CWBs.

**Hypothesis 4b.** Moral identity will be positively associated with OCBs.

**Moral disengagement.** Moral disengagement is a construct derived from Bandura’s social learning theory (Bandura, 1990; Bandura, 2002) and represents a cognitive process involved in ethical decision-making. Moral disengagement allows one to “cognitively restructure” (Bandura, 2002 p.101) unethical decisions so that they appear less harmful. This cognitive process permits an individual to behave in an unethical manner without feeling distress (Moore, Detert, Trevino, Baker, & Mayer, 2012). In other words, morally
disengaging helps a person to reduce cognitive dissonance (Festinger, 1957) by framing an unethical action as somehow unrelated to typical moral guidelines. According to Bandura’s theory, there are eight major mechanisms through which a person can morally disengage: moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, dehumanization, and attribution of blame (Bandura, 1990).

Essentially, moral disengagement serves to make exceptions to an individual’s existing moral guidelines. For example, Bandura (1990) suggests that moral disengagement explains how soldiers are able to kill in times of war without battling their moral selves; the context of war allows an individual to disengage the circumstance of killing from its typical moral ramifications. Disengaging thoughts, once accepted, become attitudes about the acceptability of certain behaviors. Attitudes, beliefs, and thoughts individuals have regarding the acceptability of certain behaviors can predict future criminal behaviors (Kaplan, 1975; Knight, Garner, Simpson, Morey, & Flynn, 2006). Propensity to morally disengage represents the existence of attitudes that reflect moral disengagement mechanisms. An attitude is an evaluative judgment that, while more malleable than traits, cannot be properly defined as a state variable because it lacks the accompanying experiential component (Plemmons & Weiss, 2013). Hence, propensity to morally disengage is an attitudinal measure that purports to measure the existence of disengaging attitudes within an individual as representative of their future likelihood to disengage. Previously, researchers have found that measures for attitudes reflecting the eight mechanisms of moral disengagement load unto a common latent factor, which they called propensity to morally disengage (Moore et al., 2012). In their study, Moore et al. (2012) found that propensity to morally disengage
significantly correlated with: self-reported lying/cheating/stealing (.31), responses to an ethically charged hypothetical situation (.23), and self-interest based decision-making (.23). The authors suggest that propensity to morally disengage predicts cognition underlying unethical behavior in an array of contexts. Study three from Cohen et al. (2014) confirms that propensity to morally disengage is positively associated with delinquency and acceptance of unethical negotiation tactics in an organizational work sample. Andrews et al., (2016) found that moral disengagement was significantly associated with CWBs in a U.S. worker sample gathered via MTurk. Based on these previous research findings, I make the following hypothesis.

**Hypothesis 5a.** Moral disengagement will be positively associated with CWBs.

Researchers have not tested any links between moral disengagement and OCBs; a search of PsycInfo using the words “moral disengagement” and “organizational citizenship behaviors” results in no empirical studies. Nonetheless, I wonder if a relationship may exist. It may be that moral disengagement also functions to justify the nonperformance of contextual behaviors. For example, it is possible that an individual may think to him or herself, “I don’t need to tidy up after myself because it is someone else’s job to do that (or because no one else is).” Based on the limited exploration of this topic, I propose a second research question.

**Research question 2.** Does a significant association exist between moral disengagement and OCBs?
Methods

Sample

The population of interest for this study is U.S. workers. Participants will be volunteers from Amazon.com’s Mechanical Turk (MTurk), who I will compensate for participating in the survey. Participants must be 18 or older and have worked full time (29 + hours per week) for at least one year to participate in the survey. I will recruit 500 participants to take part in this study.

Materials and Procedures

Participants will respond to an anonymous online survey posted on Qualtrics. Participants will access the survey through an invite-only link accessible via an MTurk HIT (Human Intelligence Task). Participants will receive an electronic consent form and must provide consent to continue in the study. They will then complete the items in the survey. Following this, the participants will receive an electronic debriefing form, which will thank them for participating in the study and provide directions for receiving compensation.

Measures

The following are previously published scales that purport to measure their corresponding constructs. These scales are the property of their individual authors and are available for academic and research purposes.

Counterproductive work behaviors checklist (CWB-C). I will use Spector et al.’s (2006) 33-item measure to survey participants about their counterproductive work behaviors. Participants will respond to the prompt “How often have you done each of the following things on your job(s) within the past year?” I have made a slight alteration to the original scale prompt. I have changed the ending of the prompt from “…on your present job?” to
“…on your job(s) within the past year?” I do this for two reasons. First, an individual’s ability to accurately recall beyond this time may be limited. Second, I am interested in an individual’s tendencies across organizational settings. Individuals may have multiple employers or may have switched jobs within the timeframe. Furthermore, participants may have a job termination within the timeframe, perhaps for CWBs. I am asking individuals to report tendencies across jobs/employers for a specific timeframe, the past year. Participants will answer the survey items using a Likert scale (1=Never, 2=Once or twice, 3=Once or twice per month, 4=Once or twice per week, 5=Everyday). Example item: “purposely wasted your employer’s materials/supplies.” A list of all items is in Appendix A. Spector et al. (2009) reported an alpha coefficient of .90.

Organizational citizenship behaviors checklist (OCB-C). I will use Fox et al.’s (2012) 20-item measure to survey participants about their organizational citizenship behaviors. Participants will respond to the prompt “How often have you done each of the following things on your job(s) within the past year?” For identical reasons, I make the same alteration to this prompt that I make to the CWBs measure. I also make an alteration to the wording of item 14, which I change from “Took a phone message for an absent or busy co-worker” to “Handled client services for…” I make this change because phone messages may be outdated by email; handling client services for a co-worker may be similar and more current to most occupations. Participants will answer the survey items using a Likert scale (1=Never, 2=Once or twice, 3=Once or twice per month, 4=Once or twice per week, 5=Everyday). Example item: “Took time to advise, coach, or mentor a co-worker.” All items are listed in Appendix B. Fox et al. (2012) reported an alpha coefficient of .94.
**Trait emotional intelligence questionnaire-short form (TEIQue-SF).** I will use the TEIQue-SF (Petrides, 2009) Sociability and Emotionality scales, consisting of 14 items altogether, to survey participants about their sociability. Participants will respond to the prompt “Please indicate how much you agree with the following statements” via Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example items: “I’m usually able to influence the way other people feel” (Sociability) and “Expressing my emotions with words is not a problem for me.” (Emotionality). A list of all items is in Appendix C. Cooper and Petrides (2010) reported alpha coefficients between .87 and .89 for the TEIQue-SF across two studies.

**The dirty dozen.** I will use Jonason and Webster’s (2010) 12-item dark triad measure to survey participants about their anti-social traits. Participants will respond to the prompt “Please indicate how much you agree with the following statements” via Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example items: “I tend to want others to admire me”. A list of all items is in Appendix D. Jonason and Webster (2010) reported a test-retest correlation of .89 and a corrected test-retest correlation of .91.

**Brief self-control scale (BSCS).** I will use Morean, et al.’s (2014) abbreviated 7-item Brief Self-Control Scale to measure participants’ perceived self-control. Participants will respond to the prompt “Please indicate how much you agree with the following statements” via a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample item: “I often act without thinking through all the alternatives.” A list of all items is in Appendix E. Morean et al. (2014) reported an average alpha coefficient of .72 for the BSCS.
**Moral identity questionnaire (MIQ).** I will use Black and Reynolds’ (2016) 20-item Moral Identity Questionnaire to survey participants about their moral identity. Participants will respond to the prompt “Please indicate how much you agree with the following statements” via Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample item: “Not hurting other people is one of the rules I live by.” A list of all items is in Appendix F. Black and Reynolds (2016) reported an alpha coefficient of .90.

**Propensity to morally disengage.** I will use Moore et al.’s (2012) 8-item propensity to morally disengage measure to survey participants about their morally disengaging attitudes. Participants will respond to the prompt “Please indicate how much you agree with the following statements” via Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example item: “people can’t be blamed for doing things that are technically wrong when all their friends are doing it too”. A list of all items is in Appendix G. Moore et al. (2012) reported an alpha coefficient of .77 for the 8-item measure.

**The big five inventory.** I include the Big-Five inventory (John & Srivastava, 1999) as a referent scale. With this inclusion, I can test the discriminate validity of integrity as well as its potential for incremental validity in predicting CWBs and OCBs beyond other personality traits. I will use the 44-item Big-Five Inventory (John & Srivastava, 1999; John, Naumann, & Soto, 2008) to survey participants’ broad personality traits. This scale measures five broad personality traits: agreeableness (e.g., ‘Is helpful and unselfish with others”), conscientiousness (e.g. “does a through job”), neuroticism (e.g., “can be tense”), openness to experience (e.g., “is curious about many different things”), and extraversion (e.g., “is talkative”) (Bolton et al., 2010). Participants will respond to the prompt “Please indicate how much you agree with the following statements. “I see myself as someone who…” via a Likert
scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items: “is a reliable worker”, and “is inventive.” A list of all items is in Appendix H. Bolton et al. (2010) reported alpha coefficients of .86 (Extraversion), .74 (Agreeableness), .77 (Conscientiousness), .85 (Neuroticism), and .77 (Openness).

Attention checks. I will add attention check items to ensure that participants are thoroughly reading each item prior to responding. These items will ask participants to select a certain response option to proceed with the survey. Example item: “For this question, select the option, “agree””. If a participant fails an attention check item, the survey platform will immediately remove the participant and send him or her to a debriefing screen that will explain the circumstances of the removal. By removing participants immediately, I ensure minimal loss of time for the participant. I will not pay participants who fail any attention check items; the instructions preceding the survey will inform participants that they must read each question carefully before answering.

Demographic information. Participants will be asked to report their age, sex, gender, national residency, hours worked per week, organizational tenure, and occupation(s). A list of all items is in Appendix I.

Presentation of Measures

The electronic survey will present OCB and CWB items to participants first. An overall prompt will precede this section: “Please answer the following questions honestly; remember that your answers are anonymous.” This is to encourage participants to answer honestly to CWB items, even though they describe socially undesirable behaviors. OCB and CWB items appear in random order. Following this, all measures pertaining to integrity will
be presented in random order. Finally, the survey will present all personality questions in random order.

**Proposed Analyses**

I will use several General Linear Modeling (GLM) approaches to test the stated hypotheses and claims. First, I will use a factor analytic approach to test the proposed framework for the higher order construct of integrity. Then, I will enter the resulting factors into a regression analysis to test hypothesis 1a-5a and inform research questions 1-2. Lastly, I will use a stepped regression procedure to test the newly formed integrity factors for their unique ability to predict CWBs and OCBs beyond the facets of personality.

**Factor Analysis Approach**

The factor analytical approach will test the proposed structure of a superordinate integrity construct by examining the data from a viewpoint similar to that of Wanek et al. (2003), with some necessary alterations. The first major difference in the proposed study is that each participant will complete every survey item. The second major difference is that I will not use a PCA technique. The PCA approach is more appropriate for inductive studies because it is a variable reduction procedure. It should be used a) when variables are highly correlated and b) when the researcher wants to reduce the variables into a smaller number of principle components that still account for most of the explained variance. The PCA procedure was appropriate for Wanek et al. (2003) who wanted to reduce the large amount of existing integrity items into more manageable components; however, this procedure is inappropriate for the proposed study. I will instead take a factor analytical approach using Exploratory Factor Analysis (EFA) followed by a Confirmatory Factor Analysis (CFA). The
EFA approach is appropriate when the researcher believes that the measured variables could be a linear combination of an underlying latent construct, in this case integrity.

I will use a holdout sample to conduct the EFA/CFA procedure; I will use half of the participants (n=250) to conduct an EFA and the remaining half will be used in the subsequent CFA. The CFA procedure will confirm that the factor structure from the EFA will continue to produce good model fit when tested on another sample. This procedure effectively tests the proposed multidimensional factor structure of integrity represented in Figure 1.

**Linear Regression Approach**

Following the FA procedure, I will then run the factors from the EFA/CFA procedure as predictors in a regression analysis with CWBs and OCBs as outcomes. I will conduct analyses between the independent variables and each dependent variable (CWBs/OCBs) separately. This procedure will test hypotheses 1a-5a and provide insight into research question 1 and 2.

**Stepped Linear Regression Approach**

The final analysis will utilize the factors from the EFA/CFA procedures in a stepped regression model. I will conduct analyses between the independent variables and each dependent variable (CWBs/OCBs) separately. In step 1, I will enter the five factors of personality into the model. In step 2, I will enter the factors of integrity into the model. This will test whether or not the integrity measures can explain additional variance in CWBs and OCBs beyond that of other personality measures.
References


Figure 1. Proposed superordinate framework for integrity.
Figure 2. Proposed relationships between integrity factors and OCBs/CWBs
Appendix A  
Counterproductive Work Behavior Scale items  

Prompt: “How often have you done each of the following things on your job(s) within the past year?”
Scale Anchors: 1 (Never), 2 (Once or twice), 3 (Once or twice per month), 4 (Once or twice per week), 5 (Everyday).

1. Purposely wasted your employer’s materials/supplies
2. Purposely damaged a piece of equipment or property
3. Purposely dirtied or littered your place of work
4. Came to work late without permission
5. Stayed home from work and said you were sick when you were not
6. Taken a longer break than you were allowed to take
7. Left work earlier than you were allowed to
8. Purposely did your work incorrectly
9. Purposely worked slowly when things needed to get done
10. Purposely failed to follow instructions
11. Stolen something belonging to your employer
12. Took supplies or tools home without permission
13. Put in to be paid for more hours than you worked
14. Took money from your employer without permission
15. Stole something belonging to someone at work
16. Told people outside the job what a lousy place you work for
17. Started or continued a damaging or harmful rumor at work
18. Been nasty or rude to a client or customer
19. Insulted someone about their job performance
20. Made fun of someone’s personal life
21. Ignored someone at work
22. Blamed someone at work for error you made
23. Started an argument with someone at work
24. Verbally abused someone at work
25. Made an obscene gesture (the Finger) to someone at work
26. Threatened someone at work with violence
27. Threatened someone at work, but not physically
28. Said something obscene to someone at work to make them feel bad
29. Did something to make someone at work look bad
30. Played a mean prank to embarrass someone at work
31. Looked at someone at work’s private mail/property without permission
32. Hit or pushed someone at work
33. Insulted or made fun of someone at work
Appendix B
Organizational Citizenship Behavior Checklist
Fox, Spector, Goh, Bruursema, and Kessler (2012)

Prompt: “How often have you done each of the following things on your job(s) within the past year?”
Scale Anchors: 1 (Never), 2 (Once or twice), 3 (Once or twice per month), 4 (Once or twice per week), 5 (Everyday).

1. Picked up meal for others at work.
2. Took time to advise, coach, or mentor a co-worker.
3. Helped co-worker learn new skills or shared job knowledge.
4. Helped new employees get oriented to the job.
5. Lent a compassionate ear when someone had a work problem.
6. Lent a compassionate ear when someone had a personal problem.
7. Changed vacation schedule, workdays, or shifts to accommodate co-worker’s needs.
8. Offered suggestions to improve how work is done.
9. Offered suggestions for improving the work environment.
10. Finished something for co-worker who had to leave early.
11. Helped a less capable co-worker lift a heavy box or other object.
12. Helped a co-worker who had too much to do.
13. Volunteered for extra work assignments.
14.Handled client services for absent or busy co-worker.
15. Said good things about your employer in front of others.
16. Gave up meal and other breaks to complete work.
17. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.
18. Went out of the way to give co-worker encouragement or express appreciation.
19. Decorated, straightened up, or otherwise beautified common workspace.
20. Defended a co-worker who was being ‘put-down’ or spoken ill of by other co-workers or supervisor.
Appendix C
TEIQue-SF Sociability and Emotionality Scales
Petrides (2009)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

Sociability
1. I can deal effectively with people.
2. I would describe myself as a good negotiator.
3. I often find it difficult to stand up for my rights. (R)
4. I tend to “back down” even if I know I’m right. (R)
5. I’m usually able to influence the way other people feel.
6. I don’t seem to have any power at all over other people’s feelings. (R)

Emotionality
1. Expressing my emotions with words is not a problem for me.
2. I often find it difficult to show my affection to those close to me. (R)
3. I often find it difficult to see things from another person’s viewpoint. (R)
4. I’m normally able to “get into someone’s shoes” and experience their emotions.
5. Many times, I can’t figure out what emotion I’m feeling. (R)
6. I often pause and think about my feelings.
7. Those close to me often complain that I don’t treat them right. (R)
8. I find it difficult to bond well even with those close to me. (R)
Appendix D
The Dirty Dozen (Dark Triad)
Jonason & Webster (2010)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I tend to manipulate others to get my way.
2. I have used deceit or lied to get my way.
3. I have used flattery to get my way.
4. I tend to exploit others towards my own end.
5. I tend to lack remorse.
6. I tend to be unconcerned with the morality of my actions.
7. I tend to be callous or insensitive.
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 E
Brief Self-Control Scale (BSCS)
Morean, DeMartini, Leeman, Pearlson, Anticevic, Krishnan, Krystal, & O’Malley (2014)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I am good at resisting temptation.
2. I do certain things that are bad for me, if they are fun. (R)
3. People would say that I have iron self-discipline.
4. Pleasure and fun sometimes keep me from getting work done. (R)
5. I am able to work effectively toward long-term goals.
6. Sometimes I can’t stop myself from doing something, even if I know it is wrong. (R)
7. I often act without thinking through all the alternatives. (R)
Appendix F
Moral Identity Questionnaire
Black & Reynolds (2016)

Prompt: “Please indicate how much you agree with the following statements.”

Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I try hard to act honestly in most things I do
2. Not hurting other people is one of the rules I live by
3. It is important for me to treat other people fairly
4. I want other people to know they can rely on me
5. I always act in ways that do the most good and least harm to other people
6. If doing something will hurt another person, I try to avoid it even if no one would know
7. One of the most important things in life is to do what I know is right
8. Once I’ve made up my mind about what is the right thing to do, I make sure I do it*
9. As long as I make a decision to do something that helps me, it does not matter much if other people are harmed (R)
10. It is ok to do something I know is wrong if the rewards for doing it are great (R)
11. If no one is watching or will know, it does not matter if I do the right thing (R)
12. It is more important that people think you are honest than being honest (R)
13. If no one could find out, it is okay to steal a small amount of money or other things that no one will miss (R)
14. There is no point in going out of my way to do something good if no one is around to appreciate it (R)
15. If a cashier accidentally gives me $10 extra change, I usually act as if I did not notice it (R)
16. Lying and cheating are just things I have to do in this world (R)
17. Doing things that some people might view as not honest does not bother me (R)
18. If people treat me badly, I will treat them in the same manner (R)
19. I will go along with a group decision, even if I know it is morally wrong (R)
20. Having moral values is worthless in today's society (R)**

* Altered from “Once I've made up my mind about what is the right thing to do, I make sure I do it
Appendix G
Moral Disengagement
Moore, Detert, Trevino, Baker, & Mayer (2012)

Prompt: “Please indicate how much you agree with the following statements.”

Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. It is okay to spread rumors to defend those you care about.
2. Taking something without the owner’s permission is okay as long as you’re just borrowing it.
3. Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit.
4. People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
5. People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.
6. Taking personal credit for ideas that were not your own is no big deal.
7. Some people have to be treated roughly because they lack feelings that can be hurt.
8. People who get mistreated have usually done something to bring it on themselves.
Appendix H
The Big-Five Personality Inventory
John & Srivastava (1999)

Prompt: “Please indicate how much you agree with the following statements. “I see myself as someone who…”

Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. Is talkative
2. Tends to find fault with others
3. Does a thorough job
4. Is depressed, blue
5. Is original, comes up with new ideas
6. Is reserved
7. Is helpful and unselfish with others
8. Can be somewhat careless
9. Is relaxed, handles stress well
10. Is curious about many different things
11. Is full of energy
12. Starts quarrels with others
13. Is a reliable worker
14. Can be tense
15. Is ingenious, a deep thinker
16. Generates a lot of enthusiasm
17. Has a forgiving nature
18. Tends to be disorganized
19. Worries a lot
20. Has an active imagination
21. Tends to be quiet
22. Is generally trusting
23. Tends to be lazy
24. Is emotionally stable, not easily upset
25. Is inventive
26. Has an assertive personality
27. Can be cold and aloof
28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited
32. Is considerate and kind to almost everyone
33. Does things efficiently
34. Remains calm in tense situations
35. Prefers work that is routine
36. Is outgoing, sociable
37. Is sometimes rude to others
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas
41. Has few artistic interests
42. Likes to cooperate with others
43. Is easily distracted
44. Is sophisticated in art, music, or literature

**BFI Scoring** ("R" denotes reverse-scored items):
Extraversion: 1, 6R, 11, 16, 21R, 26, 31R, 36
Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42
Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R
Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39
Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44
Prompt: “Please respond to the following demographic questions.”

1. What is your age in years?
2. What is your biological sex? (Male/Female)
3. What gender do you identify with? (Male/Female/Neither)
4. What country do you reside in?
5. How many hours do you typically work in a week?
6. Are you currently employed part-time (28 hours per week or less) or full-time (29+ hours per week)?
7. Have you worked full-time for at least one year? (Yes/No)
8. Do you have more than one employer? (Yes/No)
   a. If Yes: How many different employers do you have?
9. How long have you been with your current employer?
   a. If yes to question 8: How long have you been with your current employers?
      (Spaces provided for multiple entries)
10. Which of the following occupations best describes your work?
    a. Management Occupations
    b. Business and Financial Operations Occupations
    c. Computer and Mathematical Occupations
    d. Architecture and Engineering Occupations
    e. Life, Physical, and Social Science Occupations
    f. Community and Social Service Occupations
    g. Legal Occupations
    h. Education, Training, and Library Occupations
    i. Arts, Design, Entertainment, Sports, and Media Occupations
    j. Healthcare Practitioners and Technical Occupations
    k. Healthcare Support Occupations
    l. Protective Service Occupations
    m. Food Preparation and Serving Related Occupations
    n. Building and Grounds Cleaning and Maintenance Occupations
    o. Personal Care and Service Occupations
    p. Sales and Related Occupations
    q. Office and Administrative Support Occupations
    r. Farming, Fishing, and Forestry Occupations
    s. Construction and Extraction Occupations
    t. Installation, Maintenance, and Repair Occupations
    u. Production Occupations
    v. Transportation and Material Moving Occupations
Thesis Addendum

Letter to committee

Hello thesis committee members,

I want to thank you all again for your time and insight into my thesis project. I would like to make some changes to my thesis measures based on some of your comments during my proposal. I believe these alterations create better synergy between my operational definition of integrity and my proposed frameworks/analyses. I have attached a document outlining the alterations.

Changes

1. I have removed the negative indicators of integrity, anti-social traits and moral disengagement, from the integrity framework. Also, I have added humility to the integrity framework. I define integrity as a set of positive characteristics and the proposed framework should reflect this deductive operationalization.

2. I have removed reverse scored items from the integrity measures. These reverse scored items are actually measures of an oppositional (presumably non-orthogonal) construct. For example, reverse scored self-control items are actually measures of impulsivity. I want to avoid this type of contamination.

3. Anti-social traits and moral disengagement are still important constructs of interest. They are indicators of non-integrity, a construct that may be as nebulous as integrity. I will refer to this oppositional construct as corruption. Corruption seems to be what most commercial integrity tests actually measure. I am going to measure corruption as a distinct hierarchical construct that is the theoretical paradox to integrity. I will include two new measures in addition to anti-social traits and moral disengagement to cover the content domain of corruption: entitlement and impulsivity. These four measures of corruption are theoretically oppositional constructs to the four measures of integrity.
   a. Sociability → Anti-social Traits
   b. Humility → Entitlement
   c. Self-control → Impulsivity
   d. Moral Identity → Moral disengagement

4. If integrity and corruption are truly paradoxical, they will have a strong negative relationship to one another. I add an additional hypothesis concerning this relationship.

5. I will test individually the relationships between integrity and corruption with the behavioral measures (CWBs and OCBs). If integrity and corruption have a strong negative correlation, they should also have opposite relationships with OCBs and CWBs as well.
6. I have added a social desirability measure based on suggestions from the committee. Recently, some researchers have suggested that social desirability scales are actually measures of personality characteristics and may be linked to honesty-humility (de Vries et al., 2013. That is, people who are concerned with social norms and values may be more likely to respond in a desirable way. Given that I am unsure what the relationship may be, I have add a research question concerning the relationship between social desirability and integrity/corruption.

7. Finally, I remove personality from the study. In the thesis proposal document, there are no hypotheses or research questions referring to personality. This study should focus on clearly establishing the content domain of integrity before moving on to tests of incremental validity with other common assessment instruments. Furthermore, the inclusion of 44 additional items would likely cause too large of a response burden on participants.

I have created new construct models to present the updated frameworks for integrity and corruption and to present the larger model with stated hypotheses. I present these new models in the following pages. Following the figures are appendices with updated scale items.
Figure 1. Proposed superordinate framework for integrity.
Figure 2. Proposed superordinate framework for corruption.
Counterproductive Work Behavior Scale items

**Prompt:** “How often have you done each of the following things on your job(s) within the past year?”

**Scale Anchors:** 1 (Never), 2 (Once or twice), 3 (Once or twice per month), 4 (Once or twice per week), 5 (Everyday).

34. Purposely wasted your employer’s materials/supplies
35. Purposely damaged a piece of equipment or property
36. Purposely dirtied or littered your place of work
37. Came to work late without permission
38. Stayed home from work and said you were sick when you were not
39. Taken a longer break than you were allowed to take
40. Left work earlier than you were allowed to
41. Purposely did your work incorrectly
42. Purposely worked slowly when things needed to get done
43. Purposely failed to follow instructions
44. Stolen something belonging to your employer
45. Took supplies or tools home without permission
46. Put in to be paid for more hours than you worked
47. Took money from your employer without permission
48. Stole something belonging to someone at work
49. Told people outside the job what a lousy place you work for
50. Started or continued a damaging or harmful rumor at work
51. Been nasty or rude to a client or customer
52. Insulted someone about their job performance
53. Made fun of someone’s personal life
54. Ignored someone at work
55. Blamed someone at work for error you made
56. Started an argument with someone at work
57. Verbally abused someone at work
58. Made an obscene gesture (the Finger) to someone at work
59. Threatened someone at work with violence
60. Threatened someone at work, but not physically
61. Said something obscene to someone at work to make them feel bad
62. Did something to make someone at work look bad
63. Played a mean prank to embarrass someone at work
64. Looked at someone at work’s private mail/property without permission
65. Hit or pushed someone at work
66. Insulted or made fun of someone at work
Organizational Citizenship Behavior Checklist
Fox, Spector, Goh, Bruursema, and Kessler (2012)

Prompt: “How often have you done each of the following things on your job(s) within the past year?”
Scale Anchors: 1 (Never), 2 (Once or twice), 3 (Once or twice per month), 4 (Once or twice per week), 5 (Everyday).

21. Picked up meal for others at work.
22. Took time to advise, coach, or mentor a co-worker.
23. Helped co-worker learn new skills or shared job knowledge.
24. Helped new employees get oriented to the job.
25. Lent a compassionate ear when someone had a work problem.
26. Lent a compassionate ear when someone had a personal problem.
27. Changed vacation schedule, workdays, or shifts to accommodate co-worker’s needs.
28. Offered suggestions to improve how work is done.
29. Offered suggestions for improving the work environment.
30. Finished something for co-worker who had to leave early.
31. Helped a less capable co-worker lift a heavy box or other object.
32. Helped a co-worker who had too much to do.
33. Volunteered for extra work assignments.
34.Handled client services for absent or busy co-worker.
35. Said good things about your employer in front of others.
36. Gave up meal and other breaks to complete work.
37. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.
38. Went out of the way to give co-worker encouragement or express appreciation.
39. Decorated, straightened up, or otherwise beautified common workspace.
40. Defended a co-worker who was being ‘put-down’ or spoken ill of by other co-workers or supervisor.
TEIQue-SF Sociability and Emotionality Scales
Petrides (2009)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

Sociability
7. I can deal effectively with people.
8. I would describe myself as a good negotiator.
9. I often find it difficult to stand up for my rights (R)
10. I tend to “back down” even if I know I am right (R)
11. I’m usually able to influence the way other people feel.
12. I don’t seem to have any power at all over other people’s feelings (R)

Emotionality
9. Expressing my emotions with words is not a problem for me.
10. I often find it difficult to express my affection to those close to me (R)
11. I often find it difficult to see things from another person’s viewpoint (R)
12. I’m normally able to “get into someone’s shoes” and experience their emotions.
13. Many times I can’t figure out what emotion I am feeling (R)
15. Those close to me often complain that I don’t treat them right (R)
16. I find it difficult to bond well even with those close to me (R)
Expressed Humility
Owens, Johnson, and Mitchell (2013)

**Prompt:** “Please indicate how much you agree with the following statements.”

**Anchors:** 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I actively seek feedback, even if it is critical.
2. I admit it when I don’t know how to do something.
3. I acknowledge when others have more knowledge and skills than I do.
4. I take notice of others’ strengths.
5. I often compliment others on their strengths.
6. I show appreciation for the unique contributions of others.
7. I am willing to learn from others.
8. I am open to the ideas of others.
9. I am open to advice from others.
Shortened Brief Self-Control Scale (BSCS) Self-control Items
Morean, DeMartini, Leeman, Pearlson, Anticevic, Krishnan, Krystal, & O’Malley (2014)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

Brief Self-Control Scale
8. I am good at resisting temptation.
9. People would say that I have iron self-discipline.
10. I am able to work effectively toward long-term goals.
11. I do certain things that are bad for me, if they are fun. (R)
12. Pleasure and fun sometimes keep me from getting work done. (R)
13. Sometimes I can’t stop myself from doing something, even if I know it is wrong. (R)
14. I often act without thinking through all the alternatives. (R)
Moral Identity Questionnaire  
Black & Reynolds (2016)

**Prompt:** “Please indicate how much you agree with the following statements.”  
**Anchors:** 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

21. I try hard to act honestly in most things I do.
22. Not hurting other people is one of the rules I live by.
23. It is important for me to treat other people fairly.
24. I want other people to know they can rely on me.
25. I always act in ways that do the most good and least harm to other people.
26. If doing something will hurt another person, I try to avoid it even if no one would know.
27. One of the most important things in life is to do what I know is right.
28. Once I’ve made up my mind about what the right thing to do is, I make sure I do it.*
29. As long as I make a decision to do something that helps me, it does not matter much if other people are harmed. (R)
30. It is ok to do something I know is wrong if the rewards for doing it are great. (R)
31. If no one is watching or will know, it does not matter if I do the right thing. (R)
32. It is more important that people think you are honest than being honest. (R)
33. If no one could find out, it is okay to steal a small amount of money or other things that no one will miss. (R)
34. There is no point in going out of my way to do something good if no one is around to appreciate it. (R)
35. If a cashier accidentally gives me $10 extra change, I usually act as if I did not notice it. (R)
36. Lying and cheating are just things I have to do in this world. (R)
37. Doing things that some people might view as not honest does not bother me. (R)
38. If people treat me badly, I will treat them in the same manner. (R)
39. I will go along with a group decision, even if I know it is morally wrong. (R)
40. Having moral values is worthless in today's society. (R)

* Altered from “Once I’ve made up my mind about what is the right thing to do, I make sure I do it
The Dirty Dozen (Dark Triad)
Jonason & Webster (2010)

**Prompt:** “Please indicate how much you agree with the following statements.”

**Anchors:** 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

13. I tend to manipulate others to get my way.
14. I have used deceit or lied to get my way.
15. I have used flattery to get my way.
16. I tend to exploit others towards my own end.
17. I tend to lack remorse.
18. I tend to be unconcerned with the morality of my actions.
19. I tend to be callous or insensitive.
20. I tend to be cynical.
21. I tend to want others to admire me.
22. I tend to want others to pay attention to me.
23. I tend to seek prestige or status.
24. I tend to expect special favors from others.
Psychological Entitlement
Campbell, Bonacci, Shelton, Exline, & Bushman (2004)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I honestly feel I’m just more deserving than others.
2. Great things should come to me.
3. If I were on the titanic, I would deserve to be on the first lifeboat! *
4. I demand the best because I’m worth it.
5. I don’t necessarily deserve special treatment. (R)
6. I deserve more things in my life.
7. People like me deserve an extra break now and then.
8. Things should go my way.
9. I feel entitles to more of everything.
Shortened Barratt Impulsiveness Scale (BIS) Items
Morean, DeMartini, Leeman, Pearlson, Anticevic, Krishnan, Krystal, & O’Malley (2014)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

1. I plan tasks carefully. (R)
2. I am self-controlled. (R)
3. I concentrate easily. (R)
4. I am a careful thinker. (R)
5. I do things without thinking
6. I don’t pay attention
7. I say things without thinking
8. I act on the spur of the moment
Moral Disengagement*
Moore, Detert, Trevino, Baker, & Mayer (2012)

Prompt: “Please indicate how much you agree with the following statements.”
Anchors: 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

9. I think it is okay to spread rumors to defend those you care about.
10. I think taking something without the owner’s permission is okay as long as you’re just borrowing it.
11. Considering the ways people grossly misrepresent themselves, I think it’s hardly a sin to inflate your own credentials a bit.
12. I don’t think people should be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
13. I don’t think people should be blamed for doing things that are technically wrong when all their friends are doing it too.
14. I think taking personal credit for ideas that were not your own is no big deal.
15. I think some people have to be treated roughly because they lack feelings that can be hurt.
16. I think people who get mistreated have usually done something to bring it on themselves.

*Items changed to “I” statements to match other items. Additional words are phrasing added to items are bold.
Balanced Inventory of Socially Desirable Responding-Short (BISDR)
Hart, Ritchie, Hepper, & Gebauer (2015)

**Prompt:** “Please indicate how much you agree with the following statements.”

**Anchors:** 1 (Strongly Disagree), 2 (Disagree), 3 (Neither Disagree nor Agree), 4 (Agree), 5 (Strongly Agree).

* Items converted to I statements

1. I have not always been honest with myself. (R)
2. I always know why I like things.
3. It’s hard for me to shut off a disturbing thought. (R)
4. I never regret my decisions
5. I sometimes lose out on things because I can’t make up my mind. (R)
6. I am a completely rational person.
7. I am very confident in my judgments.
8. I have sometimes doubted my ability as a lover. (R) *
9. I sometimes tell lies if I have to. (R)
10. I never cover up my mistakes.
11. There have been occasions when I have taken advantage of someone. (R)
12. I sometimes try to get even rather than forgive and forget. (R)
13. I have said something bad about a friend behind his or her back. (R)
14. When I hear people talking privately, I avoid listening.
15. I never take things that don’t belong to me.
16. I don’t gossip about other people’s business.
11. What is your age in years?
12. What is your biological sex? (Male/Female)
13. What gender do you identify with? (Male/Female/Neither)
14. What country do you reside in?
15. How many hours do you typically work in a week?
16. Are you currently employed part-time (28 hours per week or less) or full-time (29+ hours per week)?
17. Have you worked full-time for at least one year? (Yes/No)
18. Do you have more than one employer? (Yes/No)
   a. If Yes: How many different employers do you have?
19. How long have you been with your current employer?
   a. If yes to question 8: How long have you been with your current employers? (Spaces provided for multiple entries)
20. Which of the following occupations best describes your work?
   a. Management Occupations
   b. Business and Financial Operations Occupations
   c. Computer and Mathematical Occupations
   d. Architecture and Engineering Occupations
   e. Life, Physical, and Social Science Occupations
   f. Community and Social Service Occupations
   g. Legal Occupations
   h. Education, Training, and Library Occupations
   i. Arts, Design, Entertainment, Sports, and Media Occupations
   j. Healthcare Practitioners and Technical Occupations
   k. Healthcare Support Occupations
   l. Protective Service Occupations
   m. Food Preparation and Serving Related Occupations
   n. Building and Grounds Cleaning and Maintenance Occupations
   o. Personal Care and Service Occupations
   p. Sales and Related Occupations
   q. Office and Administrative Support Occupations
   r. Farming, Fishing, and Forestry Occupations
   s. Construction and Extraction Occupations
   t. Installation, Maintenance, and Repair Occupations
   u. Production Occupations
   v. Transportation and Material Moving Occupations