A CONTEXTUALIZED MEASURE OF NARCISSISM IN ORGANIZATIONS

by

LANE ELIZABETH SIEDOR

(Under the Direction of W. Keith Campbell)

ABSTRACT

The personality trait narcissism has been a focus of organizational researchers for several decades. Despite this large body of research, the exact role narcissism plays in organizational contexts remains unclear. There are a number of explanations for the lack of clarity regarding narcissism in the workplace including the lack of precision with the current measurement tools. The existing scales used to measure narcissism need refinement for several reasons including the weak psychometric properties of the scales and the lack of context-relevant items. Across two studies and three samples, this paper presents a newly developed narcissism measure that is both psychometrically sound and contextually relevant for the workplace.

INDEX WORDS: Narcissism, Workplace behaviors, Contextualized scale

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DEDICATION

This thesis is dedicated to my parents, Jo Lynn and Collin Siedor. Without my mother's unwavering patience and ingrained apperception of problems that just need to be heard, not solved, I would have given up a long time ago. My mother is a magician- she has made me believe women are extraordinary and resilient, made me see my unreliability as spontaneity, and transformed my heedlessness into creativity. Because of my mother, I will always eat an elephant one bite at a time, just as she has.

> *'As was your mother, you have been given the fatal gift of genius. Because of it, your life will not be an easy one- nor must you expect it to be. You must remember always that great gifts come at great cost.'*

Without my father's guidance and tried-and-true advice, this paper- the ideas, the construction, the language- would still resemble a high school term paper, and not a good one at that. I'm the daughter of a writer, a journalist… an eternally curious mind. A man who always wanted girls, who introduces himself as a feminist at dinner parties, and who never misses a UConn women's basketball game. Because of my father, I am both stubborn and malleable, both bold and pensive. And because of him, I will one day teach my children to, '*work hard, be safe, and have fun*.'

> *'Ma'am, if I told the truth, the whole truth, and nothing but the truth, I would be God.'*

You both have given me the skill to get neutral… or try to, anyway… and to find the balance between self-effacement and self-possession.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

The personality trait of narcissism has been a focus of organizational researchers for several decades. Within organizations, two critical components influence how individuals behave: the institutional structure and the people themselves (Baumeister, 1989). Furthermore, because jobs are increasingly dependent on social collaboration and teamwork due to the changing nature of work (Sullivan, 1999), how individuals treat one other has a growing impact on employee experiences (Frone, 2000). According to findings released by the Gallup poll from a survey of over one million employees across almost 200 organizations globally, employee engagement- a critical component of organizational performance- is determined by factors such as feeling heard and supported, being recognized or praised, and development (O'Boyle & Harter, 2013).

Both of these generalized factors- engagement and social interaction- are potentially impacted by the narcissistic behaviors of direct reports, peers, and managers. Narcissistic individuals are more likely to act in self-serving ways and disregard the feelings of others (Campbell, Hoffman, Campbell, & Marchisio, 2011), which disrupts the social norms in workplace environments. Specifically, narcissism has been linked to speaking over people, rather than listening (Ames, Maissen, & Brockner, 2012); becoming angry and acting in aggressive or violent ways (Penney & Spector, 2002); stealing credit from others and claiming more credit than is accurate or fair (Paulhus, Harms, Bruce, & Lysy, 2003; Morf & Rhodewalt, 2001); and failing to develop or mentor their subordinates (Eby, Butts, Lockwood, & Simon, 2004;

Campbell et al., 2011). As such, narcissistic individuals are a direct threat to the experiences of the employees around them and thus the success of the organization.

While research on narcissism in organizations has been accelerating since the 1980s, there are still many challenges facing organizational scholars. First, the most commonly used measure, the NPI, does not capture narcissistic vulnerability. Despite this, vulnerability is often considered a critical component of the trait (Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011; Cain, Pincus, & Ansel, 2008). Second, the currently available narcissism measures are not designed specifically for organization contexts. Non-context specific measures allow for generalization of results but lack precision for understanding the nuances associated with narcissism within organizations. Thus, we are proposing a new measure of narcissism that captures both grandiose and vulnerable forms and is contextualized to organizations. Before discussing the scale development in detail, we will provide a brief overview of narcissism and its role in organizational contexts.

Defining Narcissism

Narcissism is a relatively stable personality trait characterized by a grandiose and inflated self-concept (Campbell et al., 2011). The *Diagnostic and Statistical Manual of Mental Disorders* (4th ed. [DSM- IV]; American Psychiatric Association, 1994) describes narcissism as a persistent display of grandiosity, self-focus, and self-importance (note, however, our focus is only on the trait of narcissism, not the personality disorder). Because of these characteristics, narcissistic individuals tend to see themselves as special or entitled and are drawn to positions of leadership and power (Brunell, Gentry, Campbell, Hoffman, Kuhnert, & Demarree, 2008; Campbell, Rudich, & Sedikides, 2002; Rhodewalt & Morf, 1995; Campbell, Bonacci, Shelton, Exline, & Bushman, 2004). Additionally, narcissistic individuals are prone to acting in manipulative and

self-serving ways to maintain their positive self-views and to protect their self-esteem. As such, much of their self-regulatory behavior is designed to make themselves look and feel better, even if it comes at the expense of others (Campbell et al., 2011).

Further, narcissism is currently seen as containing two distinct types: *grandiose* and *vulnerable* (Miller et al., 2011). These distinct types are associated with unique and at times opposite outcomes, which can convolute our understanding of narcissism at a general level. Vulnerable narcissism is more strongly associated with etiological antecedents such as childhood abuse, anxiety, depression, and maladaptive attachment orientations, than those who display grandiose narcissism (Miller et al., 2011). Thus, vulnerable narcissists are more likely to need psychological treatment for their disorder, whereas grandiose narcissists are often untreated a (Miller et al., 2011). Grandiose narcissists, on the other hand, are bold, assertive, and prone to seek attention and acclaim. Though grandiose narcissism is likely more common in organizational leadership roles, vulnerable narcissism is still important to consider.

Recent research has expanded upon this two-factor model in attempts to synthesize the incongruous results across the literature regarding the composition and structure of narcissism (Krizan & Herlache, 2017; Miller, Lynam, Hyatt, & Campbell, 2017). These approaches focus on three rather than two factors of narcissism, arguing that both grandiose and vulnerable narcissism share a core of self-importance and entitlement, but differ in their relation with extraversion (grandiose) and neuroticism (vulnerable).

Miller and colleagues (2017) use the Five Factor Model as a basis for understanding narcissism, where both grandiosity and vulnerability share an association with (low) agreeableness, but differ in their relations with agentic extraversion and neuroticism. This Integrative Model suggest that grandiose and vulnerable narcissism might be best understood by

examining core traits of assertive extraversion, low agreeableness, and neuroticism, with grandiose narcissism related to the first two and vulnerable narcissism to the latter two.

Similarly, Krizan and Herlache (2017) propose the Narcissism Spectrum Model (NSM), which elegantly integrates conflicting models of narcissism by ordering its composite traits on a continuum consisting of a three-vector axis. On this axis, adjacent traits are more alike than non-adjacent traits, and the common trait across all vectors is entitled self-importance. The NSM posits that narcissism is comprised of a higher-order factor, entitled self-importance, which can be broken down into two separate, second-order traits: *boldness* and *reactivity*. Boldness most closely resembles grandiose narcissism but also includes aspects of, "approach-dominant personality/temperament and a self-regulatory style focused on self-enhancement benefits over costs revealed by boastful, assertive, and exhibitionistic social behavior," (p. 10). Reactivity, on the other hand, most closely resembles vulnerable narcissism, or, "a stress-prone and volatile disposition dominated by high avoidance (relative to approach) motivation and manifested in detecting and combating threats to self-image," (p. 9). Boldness and reactivity are made up of various lower order traits- some distinct, some similar- but the major communality is the higher-order trait, entitled self-importance. The power of the NSM model lies in the flexibility of the spectrum- the spectrum accounts for relationships between lower-order traits that are generally thought to be theoretically discrete, yet often display relatedness in empirical tests. Though this model is brand new, its flexibility aptly synthesizes a somewhat chaotic body of literature and will likely change how the structure of narcissism is viewed and measured.

Narcissism in Organizations

Narcissism is often seen as a trade-off for workplace performance; some aspects may be advantageous, especially for the individual, whereas others can be costly (Campbell & Campbell,

2009). This inconsistency produces mixed findings and confusion across the research. The confusion is twofold. First, narcissism is related to both positive (i.e., leader emergence) and negative (i.e., CWB) outcome variables. These conflicting relationships make it difficult to make general claims regarding the depravity of narcissism. Second, in some cases, the confusion is amplified because narcissism demonstrates mixed relationships with the *same* variable across the research.

Due to these mixed findings, the general inimical nature of narcissism in organizations is often debated. Below we describe these relationships, beginning with the most robust relationships (i.e., OCB/CWB) and ending with the more empirically debated relationships (i.e., Leader Performance).

Counterproductive Workplace Behaviors. CWBs constitute an array of voluntary, deviant workplace behaviors that detract from, and are in conflict with, performance goals (Robinson & Bennett, 1995). Specifically, Spector and colleagues (2006) state that counterproductive workplace behaviors include actions such as purposefully wasting employers' materials, taking longer breaks than allowed, inflating the number of hours worked, and being abusive towards coworkers (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006).

Because of the self-serving nature of counterproductive workplace behaviors, CWBs have been commonly examined in relation to narcissism. Narcissism is associated with low levels of agreeableness and high levels of callousness, suggesting that narcissistic individuals may have an inclination for treating others poorly. The link between narcissism and CWBs has, in fact, been measured directly. Penney and Spector (2002) suggest that, "narcissistic individuals will be more likely to encounter information or situations that challenge their positive self-appraisals. In response to these… ego threats, these individuals will likely experience negative

emotions, such as anger, frustration, or hostility, that in turn leads to aggression" (pg. 131). In other words, because narcissistic individuals are more susceptible to ego threats they are more likely to engage in CWBs, resulting from their negative emotions. Thus, narcissism is associated with a high frequency of CWBs, as reported by the narcissistic individual themselves and their supervisors (Judge, LePine, & Rich, 2006).

Organizational Citizenship Behaviors. OCBs are behaviors that contribute to and improve organizational functioning but are distinct from task performance (Hoffman, Blair, Meriac, & Woehr, 2007). OCBs are behaviors that go above and beyond the social norms and expectations related to workplace environments to facilitate organizational goals. Because of the inherently positive and social nature of OCBs, narcissistic individuals demonstrate poor organizational citizenship behaviors (Penney & Spector, 2002). This relationship exists for two reasons. First, because narcissists are often callous, they are prone to ignore social norms and expectations because they generally lack consideration for others. Second, narcissists have a propensity to exploit others and thus are likely to take advantage of individuals in the workplace—the exact opposite of positive or supporting behaviors (i.e., OCBs).

Self-enhancement. A second relationship that is relatively less disputed is the relationship between narcissism and self-enhancement. As mentioned earlier, narcissists are often motivated by self-enhancement goals. For these reasons, narcissists spend an extraordinary amount of time making themselves look good. One self-enhancement strategy commonly studied is the self-serving bias- a strategy to enhance the self by taking credit for positive outcomes and blaming external factors for negative outcomes (Heider, 1958). For example, a student who fails an exam might claim the test was too hard or unfair, rather than attributing their performance to their own behavior (i.e. not studying enough; McAllister, 1996). Narcissists are more likely to demonstrate

the self-serving bias (Campbell, Reeder, Sedikides, & Elliot, 2000; Rhodewalt, & Eddings, 2002). This relationship has been observed in workplace settings in so far as narcissistic individuals maintain positive self-views relating to workplace characteristics (e.g. leadership) and, in many cases, these views are inaccurate compared to peer ratings (Judge et al., 2006). Furthermore, on individual tasks, narcissistic individuals will take credit for success and blame contextual factors for failure (Rhodewalt, & Eddings, 2002). These tendencies have numerous workplace related outcomes, such as promoting narcissists on the basis of false merits or increasing negative attitudes towards narcissistic coworkers, thus creating hostile work environments.

Leader Emergence. Another relationship that is by-in-large agreed upon, is the relationship between narcissism and leader emergence (Brunell et al., 2008). The positive relationship between narcissism and leader emergence exists for three reasons. First, narcissistic individuals are often described as charismatic, confident, and outgoing (i.e., extraverted; Furnham, Crump, & Richie, 2013; Brunell et al., 2008; Grijalva, Harms, Newman, Gaddis, & Fraley, 2015). These characteristics are strongly associated with perceptions of leadership, which enable them to be readily considered for leadership roles (Rosenthal & Pittinsky, 2006; Judge, Bono, Ilies, & Gerhardt, 2002; Schnure, 2010). Second, narcissistic qualities are advantageous during the selection process. Specifically, narcissism predicts both interview performance and assessment center performance such that in both cases, narcissistic individuals are more likely to be hired than non-narcissistic individuals (Brunell et al., 2008; Paulhus, Westlake, Calvez, & Harms, 2013). Third, narcissistic individuals often emerge as leaders because they have a greater desire to lead and are more motivated to be in positions of leadership. Narcissistic individuals are attracted to celebrity and power, so their desire to lead stems from the high-profile nature of

leadership positions and the authority over others (Judge et al., 2006; Morf & Rhodewalt, 2001; Raskin, Novacek, & Hogan, 1991). Thus, in addition to narcissistic individuals' charismatic style and propensity to excel in selection scenarios, they might be more likely to attain leadership positions because of their desire to be in leadership roles.

Leadership Performance. One relationship that remains highly disputed is the relationship between narcissism and leader performance. Although narcissistic individuals are more likely to occupy leadership positions, the relationships between narcissism and performance is unclear. In some instances, narcissism can contribute to positive outcomes. For example, in a study of over one hundred CEOs, CEO narcissism positively predicted certain aspects of performance, such as challenging the status quo or acquiring other companies (Chatterjee & Hambrick, 2007). Despite this, however, this same study concluded that in general, CEO narcissism was negatively related to firm performance (Chatterjee & Hambrick, 2007). Other studies have shown similar mixed results, such as one study that found narcissism self-ratings positively predict leadership performance, whereas other-ratings produced a negative relationship (Judge et al., 2006). Additionally, among U.S. presidents- perhaps the most premier leadership position in the world- grandiose narcissism was positively related to leadership performance (Watts et al., 2013). Specifically, grandiose narcissism was associated with subjective measures of leader performance, such as persuasiveness, crisis management, collaboration, and strategic vision, as well as objective measures of success (i.e., winning more votes and legislative productivity; Watts et al., 2013). With regard to other aspects of leadership, however, narcissism shows no relationships. For example, one study found that narcissism was unrelated to influencing others, a characteristic strongly tied to leadership (Ames et al., 2012).

What's more, in a meta-analysis conducted by Grijalva and colleagues (2015), narcissism predicted leader emergence but did not have a significant impact on leader performance. Despite the meta-analytic findings, the authors do note the numerous empirical studies linking narcissism with both negative and positive workplace outcomes, suggesting that the relationship between narcissism and leader performance is still unclear. The null results reported in the meta-analysis may be caused by several reasons- namely a mix of positive, negative, or curvilinear relationships across the literature resulting in a null relationship and the meta-analytic level. At the very least, however, a more encompassing explanation for the null relationship found in the meta-analysis is needed.

In summary, the research shows a clear divide regarding the effects of narcissism in the work place. In some cases, and especially in the short term, narcissism may be advantageous. However, other relationships, such as with CWBs and leader performance, suggest that narcissism has no effect or is harmful.

Explaining the Mixed Findings

Clearly the role of narcissism in organizations is complex. Narcissism can be good, unethical and bad, variable, or even curvilinear. Though narcissism is affecting organizations (Campbell, et al., 2011), the full understanding of the impact remains unclear. Specifically, it is unclear when or why narcissism becomes harmful or beneficial. There are several different explanations for the cause of these mixed findings. First, the consequences of narcissism may vary over time, such that in the short-term narcissism is adaptive whereas in the long term it can be costly. In the beginning, narcissists appear attractive to individuals because of their grandiose ideas and charisma. However, because of narcissists' self-enhancement techniques and

willingness to manipulate and exploit, it's unlikely that these opinions stay favorable in the long term.

A second explanation for the mixed findings is the distinct typologies of trait narcissism: bright side and dark side (Hogan & Kaiser, 2005; Judge et al., 2006). From this perspective, there are aspects of narcissism that are advantageous (i.e., bright), especially for leadership positions. The narcissistic personality profile overlaps with a leader profile with regards to extroversion, innovative thinking, and social dominance (Judge, Piccolo, & Kosalka, 2009). Because of this overlap, a large body of research has been dedicated to teasing apart the positive and negative aspects of narcissistic leadership. To date, there is some evidence to suggest there may be a bright side of narcissism that is distinct and can exist independently from the dark side of narcissism. That is, there are individuals that demonstrate narcissistic qualities that are beneficial to leading without exhibiting as many of the more negative traits (Judge et al., 2009). The defining characteristic separating the bright from the dark is most likely the exploitative qualities abundant in darker sides of narcissism.

Finally, a third explanation for the mixed findings may be because of curvilinear relationships between narcissism and performance. This explanation posits that milder levels of the trait may be advantageous but extreme levels may be harmful (Grijalva et al., 2015). Such is the case for the relationship between narcissism and leadership effectiveness (Grijalva et al., 2015), though these findings stand to be replicated and extended to other constructs.

While these explanations of the mixed findings are real and useful to consider, they are confounded by limitations of measurement. These limitations include poor psychometric qualities of the existing scales, confusion of the construct being measured (i.e., vulnerable vs. grandiose), as well as a lack of contextualization in narcissism measures. Thus, the inability of

researchers to fully understand and replicate the relationships between narcissism and various workplace outcomes, may be due, in part, to the way narcissism is measured. As such, the purpose of this paper is to develop a new research tool that minimizes some of the issues noted in current narcissism measurement.

Developing a Contextualized Scale of Narcissism at Work

Psychometric Properties of Existing Measures. To more clearly understand the impact of narcissism in the workplace, a psychometrically sound, contextualized instrument would be useful. The NPI is the most commonly used scale for measuring narcissism (Raskin & Terry, 1988; Ackerman et al., 2011). There are three chief concerns raised against the NPI. First, the NPI was originally developed based on criterion for Narcissistic Personality Disorder (NPD). NPD lies at the extreme end of the trait. Interestingly, however, narcissism is often evaluated and researched at the sub-clinical (i.e., less extreme) level. Because narcissism tends to be normally distributed within the general population (Campbell & Foster, 2007), items based only on the extreme manifestation of narcissism may not be appropriate for a non-extreme sample (Campbell & Foster, 2007).

A second major concern with the NPI is the unclear factor structure. The dimensionality of the NPI, and narcissism more broadly, remains highly disputed (Ackerman et al., 2011; Krizan & Herlache, 2017). In their original paper, Raskin and Terry (1988) used principal components analyses to uncover seven dimensions that composed their 40-item scale. Those dimensions were Authority, Exhibitionism, Superiority, Vanity, Exploitativeness, Entitlement, and Self-Sufficiency. A review of the literature reveals that this 7-factor structure is quite uncommon. Instead, a composite score for the NPI is more prevalent in research (Brown & Zeigler-Hill, 2004; Farwell & Wohlwend-Lloyd, 1998; Rhodewalt & Morf, 1995). Another commonly used

structure of narcissism is the 2-factor structure, as mentioned above (i.e., Vulnerable and Grandiose; Miller & Campbell, 2008; Miller et al., 2011). Finally, Ackerman and colleagues (2011) uncovered a 3-factor structure of the NPI using an oblique, exploratory factor analysis. Those factors were Leadership/Authority, Grandiose/Exhibitionism, and Entitlement/Exploitativeness. What's more, these authors note numerous other examples of empirical results with different factor solutions (Ackerman et al., 2011). Clearly, no one factor structure can be agreed upon. Lacking a clear factor structure is a sign of larger psychometric issues including disagreement on the exact trait-composite definition of narcissism. As such, most of the scholars exploring the factor structure of the NPI have suggested the scale be revised (Ackerman, Donnellan, Roberts, & Fraley, 2015; Rosenthal, Montoya, Ridings, Rieck, & Hooley, 2011).

A third major complaint of the NPI is exclusion of vulnerable narcissism from its measurement (Brown, Budzek, & Tamborski, 2009). Research has found that the NPI only assesses the grandiose aspects of narcissism, and mostly excludes the second type, vulnerable narcissism (O'Boyle, Forsyth, Banks, & McDaniel, 2012). In many cases, the decision to exclude vulnerable narcissism from measurement is rooted in the disagreement regarding what is critical to the theoretic construct of narcissism- debates which go back almost a century to the early case studies of prototypical narcissistic individuals (Krizan & Herlache, 2017). Furthermore, vulnerable narcissism is often at odds with grandiose narcissism, complicating analytic results. Despite these controversies, excluding vulnerable narcissism entirely is problematic because to many groups of experts, vulnerable narcissism is theoretically central to the trait (Ackerman, Hands, Donnellan, Hopwood, & Witt, 2016).

Thus, a new scale that is less extreme, demonstrates a reliable factor structure, and includes vulnerability could greatly improve the accuracy and consistency by which we examine the relationship between narcissism and various workplace-relevant variables.

Benefits of Contextualized Measures. A second solution to uncovering the true impact of narcissism in organization is to create a workplace-specific (i.e., contextualized) measure. Contextualizing item content provides unique benefits. The value of contextualizing measures is rooted in Person-Situation Interaction Theory (Mischel, 1973). Person-Situation Interaction Theory posits that all individuals possess certain traits regardless of the environment, yet the expression of those traits *does* depend on the environment. As such, in any given situation, a person's personality is an interaction between his or her inherent traits and the context he or she is in.

Person-Interaction Theory first influenced contextualized scale development with the introduction of frame of references training (FOR; Schmit, Ryan, Stierwalt, & Powell, 1995). FOR was first used because researchers felt that personality measures assessed global personality and not contextualized personality. The FOR framework posits that individuals will be more accurate in their assessment of themselves when they are given a specific context or frame of reference to think of. Thus, global personality measures were assumed to be weaker predictors of job performance than their contextualized counterparts. Since then, researchers have gone on to empirically support this assumption that contextualized measures produce incremental validity in predicting job performance, above and beyond non-contextualized (global) measures (Bing, Whanger, Davison, & VanHook, 2004; Shaffer & Postlewaite, 2012). In a recent study analyzing personality and performance, Shaffer and Postlewaite (2012) concluded that contextualized

measures were more valid and thus inherently better predictors of performance across all personality dimensions tested.

A second added benefit to contextualized scales is the decrease of within-person variability in responding (Lievens, De Corte, & Schollaert, 2008). When an individual takes a self-assessment, their responses may not replicate perfectly every time for every question. When responses vary, within-person reliability of the estimate decreases. Reliability is crucial in order to draw accurate conclusions about an individual's level of a trait. Recent research has shown that contextualizing item content helps individuals be more consistent in their responses and thus increases the reliability of the measure. Lievens and colleagues (2008) found that the higher the specification of the context, the higher the reliability across all domains of personality.

The Present Study

To better understand the impact of narcissism on organizations, we propose to develop a new scale that contextualizes features of narcissism to be workplace relevant and does so in a psychometrically sound way. To do so, we first conducted a pilot study to generate an initial bank of items. Then we conducted follow up studies to refine the items, confirmed the factor structure, and obtained initial validity estimates.

CHAPTER 2

STUDY 1 METHOD

Participants and Procedure

Participants (n = 200) for this study came from Amazon's Mechanical Turk (MTurk). MTurk is an online research pool consisting of individuals interested in completing research for monetary compensation. To be a participant on MTurk, individuals must be at least 18 years of age. Additionally, we qualified that participants be located in the United States. Participants were 53.4% male, 82.7% white, and with an average age of 33 years old (M = 33.07, SD = 9.65). Most respondents were of full-time workers and on average had been with their company for four years, an adequately representative workplace sample. Further, data regarding the validity of MTurk samples indicates that respondents are representative of the general population (Goodman, Cryder & Cheema, 2013; Paolacci & Chandler, 2014).

Measures Used for Item Generation

In order to develop our initial bank of items, we generated items relevant to the workplace in two specific ways. First, we took existing measures of narcissism (listed below) and adapted the relevant items for workplace contexts. Second, we had subject matter experts (SMEs) review the content of the adapted items and generate additional items to fill the gaps not covered by the adaptation of the original scales. The resulting pilot study consisted of 152 items relating to narcissism in the workplace. All items were scored on a 1-5 Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The Narcissistic Personality Inventory: The narcissistic personality inventory (NPI; Raskin & Terry, 1988) is a 40-item, self-report measure of narcissism. Items from the NPI were adapted to fit workplace settings. For example, the items, "I try not to be a show off" and "I am assertive" from the NPI were adapted to "I will usually show off if I get the chance" and "I'm assertive when I'm doing my job," respectively, for this scale. In some cases, there was no appropriate adaptation to be made because the question was not relevant to the workplace. An example of an item of this nature is, "My body is nothing special." Reverse coded items were not included in this sample of items.

The reliability of the NPI subscales vary from unacceptable to strong with coefficient alphas in the .5-.9 range and only marginally adequate test-retest reliability α=.70 (del Rosario & White, 2005). The subscale reliabilities of the NPI are even weaker. Del Rosario and White (2005) found that the only subscale with adequate levels of reliability was the Authority subscale of the 7-factor model of narcissism (e.g., Authority, Exhibitionism, Superiority, Entitlement, Exploitativeness, Self-sufficiency, and Vanity; Raskin & Terry, 1988). Emmons (1984) provides evidence for a 4-factor model of the NPI. Those factors include Leadership/Authority, Superiority/Arrogance, Self-Absorption/Self-Admiration, and Exploitativeness/Entitlement. Emmons (1984) found the coefficient alphas for those subscales to be 0.86, 0.79, 0.69, 0.69, and 0.74, respectively (del Rosario & White, 2005).

Hyper Sensitive Narcissism Scale (HSNS). The Hyper Sensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997) is a ten item self-report measure of hyper sensitive narcissism with two sub-factors- Oversensitivity to Judgement and Egocentrism (Fossati et al., 2009). This scale demonstrates acceptable reliability with alpha estimates in the .6 to .7 range (Fossati et al., 2009).

Five Factor Narcissism Inventory- Short Form (FFNI-SF). The FFNI-SF is a 60-item abbreviation of the FFNI extended scale (Glover et al., 2012; Sherman et al., 2015). The FFNI-SF consists of three empirically derived subscales: Exploitative Entitlement, Extraversion, and Neuroticism. The scale typically demonstrates acceptable reliabilities (i.e., .85-.92; Miller et al., 2016).

Pathological Narcissism Inventory (PNI). The PNI (Pincus, Ansell, Pimentel, Cain, Wright, & Levy, 2009) is a 52-item self-repot measure that consists of two higher0order factors and seven lower-order factors of pathological narcissism. The higher-order factor *narcissistic grandiosity* includes the lower-order facets of Entitlement Rage, Exploitativeness, Grandiose Fantasy, Self-sacrificing Self-enhancement. The higher-order factor *narcissistic vulnerability* includes, Contingent Self-esteem, Hiding the Self, Devaluing. Coefficient alpha estimates for this scale range from .75 to .95 (Pincus et al., 2009).

Maladaptive Covert Narcissism Scale (MCNS). The MCNS is a 23-item scale developed with the intent to expand upon the HSNS (Hendin & Cheek, 1997). Coefficient alpha estimates are in the .85-.89 range (Hendin & Cheek, 1997).

Psychological Entitlement Scale (PES). The Psychological Entitlement Scale is a 9-item self-report measure of entitlement (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004). The PES is a single factor inventory with coefficient alpha estimates in the in .8-.9 range (Campbell et al., 2004).

Additional Items: Additional items were created by a panel of three SMEs based on their understanding of narcissism in workplace contexts. All SMEs study narcissism extensively in their research. The additional items were intended to include more questions related to how narcissism is manifested in the workplace that are otherwise not covered in the original scales.

An example item created by the SME panel is, “I deserve a higher salary than my coworkers in similar positions as me.” All items were scored on a 1-5 Likert scale ranging from strongly disagree (1) to strongly agree (5). In total, 152 items were generated for the pilot study.

CHAPTER 3

STUDY 1A RESULTS

Initial Descriptives

Basic descriptive statistics were computed for all 152 items of the developmental study. Immediately, items with extremely high means (above 4) and extremely low means (below 1.5) were removed from consideration because they lack adequate information regarding the uniqueness of respondents (i.e., there is no meaningful variation in scores, thus they did not provide valuable information regarding the respondent). In addition, items were removed based on extremely small (i.e., less than .5) or large (i.e., greater than 4) standard deviations. Skew and kurtosis were considered after factor analytic information was gathered.

Exploratory Factor Analyses

Next, we conducted a principal axis factoring, exploratory factor analysis (EFA) without rotation, as recommended by Brown (2006). No rotation was necessary because the number of factors had yet to be determined thus there was no information regarding the relationship between the factors. Therefore, there was no indication which rotation would be most appropriate. To determine how to move forward, we examined the scree plot and eigenvalues, which is common practice in determining the factor structure of the data (Brown, 2006). The scree plot for this EFA can be seen in Figure 1. Based on the "elbow" of the scree plot, as recommended by Floyd and Widaman (1995), a 4-factor structure was most appropriate for the data.

After reducing the number of items based on item means, we followed up with an exploratory factor analysis on the remaining items, however, this time we included a rotation method based on the factor solution provided above. Based on Brown's (2009) recommendations, we conducted a principal axis factoring with oblique rotation to account for the small-to-medium sized factor correlations. We also tested whether a maximum likelihood extraction was appropriate for the data. In general, the maximum likelihood and principal axis factoring techniques produced similar results but, heeding Brown's (2009) advice, due to the complications associated with maximum likelihood and the similarity between our results for the two techniques, we decided to move forward with principal axis for the extraction technique.

Moving forward with a principal axis factoring extraction EFA with oblique rotation, we attempted to prune items based on the covariance matrix and based on the theoretical content that should be included in the scale. From this process, we discerned that either a three or four factor solution should be considered. Simple structure was achieved with a 3-factor solution (see Table 1), however, our SMEs concluded that we were missing critical theoretical content related to the true construct of narcissism. Specifically, we were missing item content related to grandiosity and attention seeking. As such, we reviewed the original item content and included items relating to grandiosity and attention seeking that were removed based on factor structure restrictions. After adding the additional items, we reran the EFA which produced a 4-factor solution (see Table 2). Those factors can be interpreted as Exploitative Entitlement, Leadership, Vulnerability, and Exhibitionism. Eigenvalues for these factors can be seen in Table 3 and inter-factor correlations can be seen in Table 4. Based on the acceptable simple structure produced and the content validity of the 4-factor solution, we concluded that the 4-factor solution was appropriate for replication in Study 1b.

Conclusions from Study 1A

In sum, we found that the 4-factor model was most appropriate for the data based on examinations of multiple EFAs and based on the content that it is critical to the narcissism construct. These findings are exciting for organizational purposes though they are clearly still in their infancy. In order to bolster these findings, we attempted to cross validate the factor structure in an additional sample (Study 1b).

Table 1.

Factor Loadings for the 3-factor Model.

Item	Factor 1	2	3
When I receive negative feedback from my coworkers I get angry and it can become difficult to control my temper.	.83		
I get upset when my coworkers don't notice how nicely I dress for work.	.79		
I try to avoid spending time with people who are beneath me at my company if possible.	.79	-.20	
I have at times gone into a rage when not treated rightly at work.	.71		
I typically get very angry when I'm unable to get what I want from my coworkers.	.65	.23	
I only associate with people of my caliber at work.	.64		
I deserve special treatment at my job.	.63		
I resent my coworkers who have what I lack.	.60		
My coworkers say I brag too much.	.56		
I am disappointed when people don't notice me at work.	.51	.36	
I see myself as a good leader at work.			.84
Leadership at work comes easy for me.			.78
I am comfortable taking on positions of authority at work.			.77
I have a natural talent for influencing my coworkers.			.73
People always seem to recognize my authority at work.			.69
I'm assertive when I'm doing my job.			.46
I like to take responsibility for making decisions at work.		.25	.65
When I realize my coworkers know I have failed at something at work, I feel humiliated.		.70	
I feel very insecure about whether I will achieve much in my career.		.53	-.21
I feel foolish when I make a mistake in front of my coworkers.		.80	
I feel awful when I get put down in front of my coworkers.		.76	
I tend to feel humiliated when my coworkers give me negative feedback.		.65	
Defeat or disappointment at work usually shames or angers me, but I try not to show it.		.71	
I am especially sensitive to success and failure at work.		.73	

Note: Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

Table 2.

Factor Loadings for the 4-factor Model.

Item	Factor			
	1	2	3	4
When I receive negative feedback from my coworkers I get angry and it can become difficult to control my temper.	.82			
I try to avoid spending time with people who are beneath me at my company if possible.	.83			
I get upset when my coworkers don't notice how nicely I dress for work.	.75			
I'm willing to exploit others to further my own career goals.	.68			
I have at times gone into a rage when not treated rightly at work.	.73			
I typically get very angry when I'm unable to get what I want from my coworkers.	.65		.28	
I deserve special treatment at my job.	.59			
I only associate with people of my caliber at work.	.67			
I often think that my coworkers aren't telling me the whole truth.	.60		.25	
I resent my coworkers who have what I lack.	.58			
I am comfortable taking on positions of authority at work.		.79		
People always seem to recognize my authority at work.		.58		
Leadership at work comes easy for me.		.72	-.20	
I'm assertive when I'm doing my job.		.44		
I see myself as a good leader at work.		.85		
I like to take responsibility for making decisions at work.		.62		
I have a natural talent for influencing my coworkers.		.69		
I aspire for greatness at work.		.63	.23	
I am an extraordinary employee.		.67		

Table 2 cont.

Factor Loadings for the 4-factor Model.

Item	Factor			
	1	2	3	4
When I realize my coworkers know I have failed at something at work, I feel humiliated.			.71	
I feel very insecure about whether I will achieve much in my career.		-.26	.47	
I feel foolish when I make a mistake in front of my coworkers.			.74	
I feel awful when I get put down in front of my coworkers.			.83	
I tend to feel humiliated when my coworkers give me negative feedback.			.61	
I am especially sensitive to success and failure at work.			.63	
I need my coworkers to acknowledge me.			.41	.44
I like to show off at work.	.39			.42
I like to be the center of attention at work.	.35		-.20	.60
I like to be complimented at work.	-.31			.74
I like being the most popular person at in the office.				.68
I like being noticed by my coworkers.				.72

Note: Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

Table 3.

Eigenvalues and Variance Explained for Each Factor.

	Factor			
	1	2	3	4
Eigenvalue	7.69	5.28	3.31	1.55
Variance Explained	27.80	17.05	10.66	4.99

Table 4.

EFA Inter-factor Correlations.

	Factor			
	1	2	3	4
1	1.00			
2	.03	1.00		
3	.24	-.22	1.00	
4	.45	.30	.32	1.00

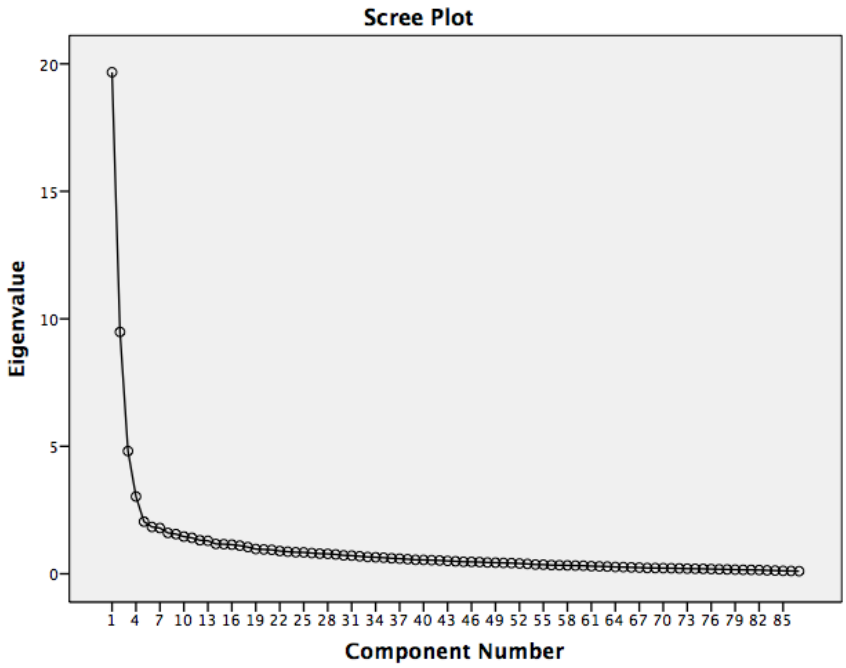

Figure 1.

Scree Plot for the Selected 87 Items.

Note: Number of items = 87. Principal axis factoring with no rotation.

CHAPTER 4

STUDY 1B METHODS

Participants and Procedure

Participants (n = 200) for this study came from Amazon's Mechanical Turk (MTurk). Again, to participate, participants were required to be located in the United States and currently holding at least a part time job. Participants were 55% male, 83% white, and with an average age of 33 years old (M=33.53, SD=10.45). Most participants were full time employees and had been with their company for four years. Participants completed a survey with the items we generated in Study 1a as well as basic demographic information. We allowed an hour for participants to complete the survey and they were compensated $1.00.

CHAPTER 5

STUDY 1B RESULTS

Descriptives and Exploratory Factor Analysis

Basic descriptives for the items selected in Study 1b can be seen in Table 5. In general, all items obtained reasonable means and standard deviations and were within the normal range (i.e., between -2 and 2) for skew and kurtosis. In order to cross validate the EFA results we obtained in Study 1a, we conducted a principal axis factoring EFA with an oblique rotation on the Study 1b data. The results of this EFA can be found in Table 6. The items did not exactly replicate in the second sample- the EFA produced a five-factor solution instead of four. With a closer look, we observed that the fifth factor was mostly a noise factor, with loadings no greater than .38. As such we concluded that the additional fifth factor would require further validation in a third sample before removing any additional items. Therefore, we used the items listed in Table 6 and attempted to validate them in a third sample.

Conclusions from Study 1b

Initial psychometric results indicate that the 4-factor solution is likely best for this model, however, supplementary analysis is needed to replicate these results and further reduce the number of items. The purpose of Study 2 is threefold: First, to further remove items from the scale (i.e., roughly 20); second, to confirm the factor structure determined in Study 1 using a confirmatory factor analysis; and third to provide validity evidence for the contextualized scale. To do so, we administered a survey to an additional 430 participants from Amazon's Mechanical Turk. In this survey, we included the 31 items that were found after our initial round of item

deleting in study 1. Next, we conducted a confirmatory factor analysis to validate the factor structure of the new scale and further delete items based on the CFA results (i.e., factor loadings, residuals, etc.). Additionally, we tested for validity evidence of the new scale. In this survey, we included scales that establish various types of validity: Convergent validity will be examined against the NPI-13, and the personality constructs extraversion and agreeableness. Criterion-related validity will be assessed concurrently using OCBs and CWBs.

Hypothesis 1: The proposed contextualized narcissism at work scale will best fit a four-factor solution discovered in Study 1.

Research Question 1: Does the proposed contextualized narcissism at work scale demonstrate reasonable validity evidence (i.e., convergent and criterion-related)?

Table 5.

Study 1b Descriptives

Item	*Mean*	*SD*	*Skew*	*Kurtosis*
When I receive negative feedback from my coworkers I get angry and it can become difficult to control my temper.	2.01	1.04	.88	-.02
I try to avoid spending time with people who are beneath me at my company if possible.	1.96	.98	1.02	.62
I get upset when my coworkers don't notice how nicely I dress for work.	1.79	.97	1.39	1.62
I'm willing to exploit others to further my own career goals.	2.14	1.10	.83	-.17
I have at times gone into a rage when not treated rightly at work.	2.01	1.15	1.07	.26
I typically get very angry when I'm unable to get what I want from my coworkers.	2.17	1.05	.71	-.34
I deserve special treatment at my job.	2.19	1.05	.73	.01
I only associate with people of my caliber at work.	2.32	1.06	.54	-.51
I often think that my coworkers aren't telling me the whole truth.	2.59	1.13	.37	-.71
I resent my coworkers who have what I lack.	2.18	1.04	.72	-.23
I am comfortable taking on positions of authority at work.	3.63	1.03	-.76	.11
People always seem to recognize my authority at work.	3.17	1.03	-.33	-.56

Table 5 cont.

Study 1b Descriptives

Item	*Mean*	*SD*	*Skew*	*Kurtosis*
Leadership at work comes easy for me.	3.41	.99	-.46	-.25
I'm assertive when I'm doing my job.	3.66	.94	-.68	.14
I see myself as a good leader at work.	3.55	1.01	-.69	-.07
I like to take responsibility for making decisions at work.	3.61	.96	-.71	.12
I have a natural talent for influencing my coworkers.	3.23	1.04	-.40	-.57
I aspire for greatness at work.	3.62	1.02	-.71	.12
I am an extraordinary employee.	3.38	1.00	-.28	-.37
When I realize my coworkers know I have failed at something at work, I feel humiliated.	3.06	1.15	-.23	-.98
I feel very insecure about whether I will achieve much in my career.	2.46	1.12	.44	-.72
I feel foolish when I make a mistake in front of my coworkers.	3.30	1.17	-.52	-.67
I feel awful when I get put down in front of my coworkers.	3.22	1.19	-.42	-.79
I tend to feel humiliated when my coworkers give me negative feedback.	2.64	1.19	.26	-1.00
I am especially sensitive to success and failure at work.	3.01	1.16	-.13	-.89
I need my coworkers to acknowledge me.	2.69	1.13	.08	-1.08
I like to show off at work.	2.24	1.12	.64	-.50
I like to be the center of attention at work.	2.28	1.07	.66	-0.30
I like to be complimented at work.	3.35	1.08	-.51	-.44
I like being the most popular person at in the office.	2.59	1.14	.31	-.73
I like being noticed by my coworkers.	3.19	1.06	-.44	-.59

Table 6.

Study 1b EFA Results

Item	Factor 1	2	3	4	5
When I receive negative feedback from my coworkers I get angry and it can become difficult to control my temper.	.74				
I try to avoid spending time with people who are beneath me at my company if possible.	.83				
I get upset when my coworkers don't notice how nicely I dress for work.	.77				.21
I'm willing to exploit others to further my own career goals.	.72				
I have at times gone into a rage when not treated rightly at work.	.72				
I typically get very angry when I'm unable to get what I want from my coworkers.	.67		.24		
I deserve special treatment at my job.	.63				
I only associate with people of my caliber at work.	.66				
I often think that my coworkers aren't telling me the whole truth.	.56		.27		
I resent my coworkers who have what I lack.	.62				
I am comfortable taking on positions of authority at work.		.76			
People always seem to recognize my authority at work.		.57			
Leadership at work comes easy for me.		.74			
I'm assertive when I'm doing my job.		.45			
I see myself as a good leader at work.		.82			
I like to take responsibility for making decisions at work.		.62			
I have a natural talent for influencing my coworkers.		.70			
I aspire for greatness at work.		.56			.38
I am an extraordinary employee.		.58			.34

Table 6 cont.

Study 1b EFA Results

	Factor				
Item	1	2	3	4	5
When I realize my coworkers know I have failed at something at work, I feel humiliated.			.68		
I feel very insecure about whether I will achieve much in my career.			.54		
I feel foolish when I make a mistake in front of my coworkers.			.77		
I feel awful when I get put down in front of my coworkers.			.77		
I tend to feel humiliated when my coworkers give me negative feedback.			.62		
I am especially sensitive to success and failure at work.			.66		
I need my coworkers to acknowledge me.			.39	.29	
I like to show off at work.	.48			.27	.31
I like to be the center of attention at work.	.49			.44	
I like to be complimented at work.	-.26			.75	
I like being the most popular person at in the office.	.29			.58	
I like being noticed by my coworkers.				.67	

Note: Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

CHAPTER 6

STUDY 2 METHODS

Participants and Procedure

Participants (n=430) were recruited through Mechanical Turk. Of the sample, 54% were male, the average age was 36 (M = 35.73, SD = 27.18), and 80.5% of the sample was white. Additionally, we collected further demographic information that indicated a clear majority of the sample had at least a bachelor's degree (i.e., 87.3%), worked an average of roughly 40 hours a week (M = 39.35, SD = 8.42), and most participants (91%) managed at least 20 subordinates. Among the participants, the average reported income for 2016 was $43,000 ($M$ = 43,048.23, SD = 28,643.32).

Measures

Narcissism at Work. Narcissism at work was measured using the 31 items developed in studies 1a and 1b (i.e., the narcissism and work scale).

Narcissism. Narcissism was assessed using the Narcissistic Personality Inventory-13 (NPI-13; Gentile, Miller, Hoffman, Reidy, Zeichner, & Campbell, 2013) is a 13-item, self-report measure of narcissism. The NPI-13 is a forced choice measure where participants are asked to pick the statement that best represents them between a pair of statements. Example item pairs include the following: a.) "I find it east to manipulate people," or b.) "I don't like it when I find myself manipulating people;" a.) "I expect a great deal from other people," or b.) "I like to do things for other people;" a.) "I try not to be a show off," or b.) "I will usually show off if I get the chance." Coefficient alpha for this study was found to be .81.

Personality. Personality was measured using the International Personality Item Pool's public version of Goldberg's (1999) Big-Five personality measure. The Goldberg (1999) IPIP is 50-item personality measure that assesses the five dimensions of personality: agreeableness, extraversion, conscientiousness, neuroticism, and openness. Coefficient alpha for the aforementioned dimensions were .86, .91, .91, .89, and .81 respectively. Participants are asked to indicate how accurately a statement represents them on a Likert-type scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*). Sample statements include, "Often feel blue," "Have a vivid imagination," "Am not interested in abstract ideas," and, "Get chores done right away."

Job Satisfaction. Job satisfaction was measured using the 6-item Index of Job Satisfaction (Brayfield & Rothe, 1951). Participants are asked to report on how interesting their job is to them (e.g., "My job is usually interesting enough to keep me from getting bored"), how much they enjoy their work compared to other activities (e.g., "I enjoy my work more than my leisure time"), and how happy their work makes them (e.g., "I feel that I am happier in my work than most other people"). There were 6 questions total that were measured on a 5-point Likert-type scale ranging from 1 (*not at all like my job*) to 5 (*very much like my job).* Coefficient alpha was found to be .93 for this study.

Organizational Citizenship Behaviors. Organizational citizenship behaviors (OCB) was measured using a 21-item, three-dimension scale developed by Williams and Anderson (1991). The three-dimensions include behaviors directed towards other individuals (i.e., OCB-I, or OCB-*individual*), behaviors directed towards the organization (i.e., OCB-O, or OCB-*organization*), and behaviors that are related to one's job and is a part of their job responsibilities (i.e., IRB, or in-role behaviors). Each dimension consists of seven items that are rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Example items for OCB-I include,

"Help others who have been absent," "Goes out of way to help new employees," and, "Passes along information to coworkers." Example items for OCB-O include, "Attendance at work is above the norm," and, "Adheres to informal rules devised to maintain order." Example items for IRB include, "Adequately completes assigned duties," "Meets formal performance requirements of the job," and "Engages in activities that will directly affect his/her performance." Coefficient alpha for the three dimensions- OCB-I, OCB-O, IRB- were found to be .87, .89, and .94 respectively.

Counterproductive Workplace Behaviors. Counterproductive Workplace Behaviors (CWB) were measured using the Bennett and Robinson (2000) workplace deviance scale. This scale assesses two dimensions of counterproductive workplace behavior: behaviors directed towards individuals (i.e., CWB-I) and behaviors directed towards the organization (i.e., CWB-O). Example items of CWB-I include, "Made fun of someone at work," "Made an ethnic religious, or racial remark at work" and, "Played a mean prank on someone at work." Example items of CWB-O include, "Taken property from work without permission," "Falsified a receipt to get reimbursed for more money than you spend on business expenses," and, "Intentionally worked slower than you could have worked." All items are assessed on a 5-point Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Coefficient alpha was found to be .95 for both dimensions in this study.

Helping and Voice Behaviors. Helping and voice behaviors were measured using the Van Dyne and LePine (1998) helping and voice extra-role behavior scale. This scale assesses an individual's propensity for helping co-workers with work-related tasks beyond what is expected of them (i.e., extra-role), as well as behaviors that require an individual to voice opinions that drive organizational performance forward. Sample items include, "I volunteer to do things for

this work group," "I assist others in this group with their work for the benefit of the group," "I communicate my opinions about work issues to others in this group even if my opinion is different and others in this group disagree with me," and, "I speak up in this group with ideas for new projects or changes in procedures." All items were assessed on a 5-point Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Coefficient alpha was found to be .96 for this study.

CHAPTER 7

STUDY 2 RESULTS

Initial Descriptives and Confirmatory Factor Analyses

Means, standard deviations, skew, and kurtosis were all within the normal range for the proposed items (Table 7). Confirmatory factor analyses were conducted in the R software using the package "lavaan" which mimics the statistical software MPlus for estimating results. Our initial CFA on all 31 items, using a 4-factor structure, produced good fit (CFI = .90, TLI =.89, RMSEA = .068, SRMR = .077, AIC= 34539.0). This further bolstered our confidence that a 4-factor solution best fit the data. Given our goal to reduce the number of items to 20, we used the CFA results as well as theory to guide item deletion. After deleting 11 items, we ran a confirmatory factor analyses on the final 20 items. This model produced good fit (CFI = .93, TLI =.92, RMSEA = .067, SRMR = .062, AIC= 22972.93). The final list of items as well as the factor they load on can be seen in Table 8. The measurement model can be seen in Figure 2 and inter-factor correlations can be seen in Table 9. As mentioned previously, the resulting factor solution provides four factors- Exploitative Entitlement, Leadership, Vulnerability, and Exhibitionism.

However, to further strengthen our confidence in the 4-factor model, we ran several model comparisons, testing the 4, 3, and 1-factor solutions. The 3-factor solution specified that Exploitative Entitlement and Exhibitionism form a joint factor. We decided to test this 3-factor solution based on the high inter-factor correlation (see Table 9), suggesting that Exploitative Entitlement and Exhibitionism were similar- if not the same- factor. Leadership and

Vulnerability were left as distinct factors resulting in the following 3-factors: Exploitative Entitlement and Exhibitionism combined, Leadership, and Vulnerability. These comparisons were tested in both the study 2 sample as well as the combined sample from studies 1a and 1b. Model fit comparisons can be seen in Table 10. Additionally, the change in chi-square tests of significance for all model comparisons can be seen in Table 11. Across both samples (i.e., combined studies 1a and 1b and study 2), the model fit of the 4-factor solution provided better fit than 3 and 1-factor solutions. Furthermore, the chi-square test comparing the models confirmed that the model fit of the 4-factor solution was significantly better than the alternative models. Thus, hypothesis 1 was supported.

Validity Evidence

In order to establish construct validity, we needed to show that the nomological network of our new scale fits with the nomological network of trait narcissism. Exact predictions of the nature of the relationships between the validity constructs and the dimensions of the proposed scale can be seen in Figure 3. Unfortunately, however, because we elected to include the dimension Vulnerability in our scale, our inter-factor correlations were in some cases negative (see Table 9). Thus, at the full scale level, the relationships between the new narcissism at work scale and various constructs did not demonstrate the relationship we predicted at the full-scale level (i.e., no relationship between narcissism at work full scale and OCB- I ($r = .02$, $p > .05$)). Therefore, the scale was broken out by the four dimensions and validity evidence was assessed against each individual dimension.

Convergent validity was assessed against the NPI-13 as well as the personality dimensions agreeableness and extraversion. As can be seen in Table 12, the narcissism at work full-scale ($r = .47$, $p < .01$), and the dimensions of Exploitative Entitlement ($r = .40$, $p < .01$),

Leadership (r = .31, p < .01), and Exhibitionism (r = .58, p < .01), all demonstrate high positive correlations with the NPI-13, as expected. Vulnerability, on the other hand was unrelated to the NPI-13 (r = -.01, p > .05). Given that the Narcissistic Personality Inventory does not capture the vulnerability aspect of trait narcissism, it makes sense that the dimension is unrelated to the NPI-13. As such, convergent validity evidence was established for the proposed scale.

Criterion-related validity was assessed against OCB and CWB, two commonly studied outcomes of narcissism in workplace contexts. Despite these predictions, the relationships between the full-scale and sub-dimensions of the narcissism at work scale with OCB-I, O, and IRB, were mixed. In most cases, the variables demonstrated the expected relationships with OCBs- Exploitative Entitlement was negatively related to both OCB-I (r = -.32, p < .01), OCB-O (r = -.34, p < .01), and IRB (r = -.40, p < .01); Vulnerability was negatively related to OCB- I (r = -.15, p < .01), OCB-O (r = -.15, p < .01), and IRB (r = -.15, p < .01). Exhibitionism demonstrated the expected relationship with OCB-O (r = -.17, p < .01), and IRB (r = -.16, p < .01) but was unexpectedly unrelated to OCB-I (r = -.03, p > .05). Likewise, the proposed full-scale was also unrelated to OCB- I (r = -.02, p > .05), but negatively related to OCB-O (r = -.24, p < .01), and IRB (r = -.25, p < .01), as expected. Interestingly, however, the sub-dimension Leadership demonstrated a strong positive relationship with OCB-I (r = .50, p < .01), and null relationships with OCB-O (r = .07, p > .05), and IRB (r = .09, p > .05).

As expected, both CWB-I and CWB-O demonstrated strong positive correlations with the proposed full-scale (CWB-I, r = .35, p < .01; CWB-O, r = .32, p < .01), as well as three of the four sub-dimensions- Exploitative Entitlement (CWB-I, r = .42, p < .01; CWB-O, r = .32, p < .01), Vulnerability (CWB-I, r = .19, p < .01; CWB-O, r = .24, p < .01), and Exhibitionism (CWB-I, r = .27, p < .01; CWB-O, r = .22, p < .01). Surprisingly, though, the sub-dimension

Leadership demonstrated a null relationship with CWB-I (r = -.08, p > .05), and CWB-O was negatively related to Leadership (r = -.11, p < .05). As such, the evidence for criterion-related validity was mixed, especially with regard to the sub-dimension Leadership for both OCB and CWB, but largely the findings supported our expectations.

Incremental Validity

In addition to convergent and criterion-related validity, we also tested incremental validity using hierarchical linear regression on the dependent variables OCB-I, O, and IRB and CWB-I and O, comparing the NPI-13 with the narcissism at work scale. 25 hierarchal regressions were assessed for the narcissism at work full-scale and four sub-dimensions across five outcome variables (i.e., 5x5). In 20 of the 25 cases, the addition of the narcissism at work scale significantly increased the amount of variance explained by the model above and beyond the NPI-13 (see Tables 14 and 15). However, in some instances the inclusion of the narcissism at work scale did not increase the predictive validity of the model. Neither the narcissism at work full-scale nor the Exhibitionism sub-factor significantly demonstrated incremental validity when predicting OCB-I. Exhibitionism also failed to provide incremental validity beyond the NPI-13 in predicting IRB. Additionally, the narcissism at work full-scale failed to establish incremental validity in predicting CWB-O. Finally, the Leadership sub-dimension did not demonstrate incremental validity when predicting CWB-I. However, tests of incremental validity are especially stringent because they include the two measures of theoretically similar constructs in the same model. Additionally, besides these five cases, the narcissism at work scale provided incremental validity beyond the NPI, further suggesting the benefit of the new contextualized measure.

Additional Correlational Analyses

In addition to the validity tests, we also analyzed the relationship between the narcissism at work scale and job satisfaction, helping extra-role behaviors, and conscientiousness. Job satisfaction was unrelated to the full-scale measure of narcissism at work ($r = .04$, $p > .05$) and was also unrelated to the sub-dimension Exhibitionism ($r = .07$, $p > .05$). The Leadership sub-dimension demonstrated a strong positive relationship with job satisfaction ($r = .51$, $p < .01$). On the other hand, both Exploitative Entitlement and Vulnerability demonstrated negative correlations with job satisfaction (Exploitative Entitlement, $r = -.12$, $p < .05$; Vulnerability, $r = -.30$, $p < .01$).

Helping and voice extra-role behaviors also produced variant results across the narcissism at work full-scale and four sub-dimensions. The full-scale demonstrated a negative relationship with helping and voice extra-role behaviors ($r = -.10$, $p < .05$). At the sub-dimension level, the results were again mixed. Helping and voice behaviors were negatively associated with both Exploitative Entitlement ($r = -.30$, $p < .01$) and Vulnerability ($r = -.26$, $p < .01$), yet positively related to Leadership ($r = .37$, $p < .01$), and unrelated to Exhibitionism ($r = -.02$, $p > .05$).

In addition to the personality traits used for validity assessments, we also examined the relationship between narcissism and conscientiousness. The relationship between conscientiousness and the narcissism at work full-scale was found to be significant and negative ($r = -.22$, $p < .01$) and the relationships between conscientiousness and the three sub-dimensions were mixed (i.e., both positive and negative) but all were significant- Exploitative Entitlement ($r = -.42$, $p < .01$), Vulnerability ($r = -.36$, $p < .01$), and Exhibitionism ($r = -.15$, $p < .01$) were all found to be negatively related to conscientiousness, whereas Leadership was found to be positively related ($r = .42$, $p < .01$), Interestingly, narcissism as captured by the NPI-13 was

unrelated to conscientiousness (r = -.07, p > .05), which suggests that the proposed scale behaves differently than other traditional measures of narcissism, perhaps because of the contextualized nature of the new scale.

Finally, we tested facet level comparisons of the narcissism at work scale (full-scale and four sub-dimensions) with the NPI-13 (see Table 13). The NPI-13, when not treated as a unidimensional scale, is comprised of three sub-facets: Leadership/Authority, Grandiose/Exhibitionism, and Exploitative/Entitlement. The narcissism at work scale demonstrated strong positive correlations with the NPI-13 at the full-scale level (r = .47, p < .01), and across three of the four sub-dimensions: Exploitative Entitlement (r = .40, p < .01), Leadership (r = .31, p < .01), and Exhibitionism (r = .53, p < .01). As expected, the Vulnerability dimension of the narcissism at work scale did not demonstrate a relationship with the NPI-13, likely because the NPI-13 intentionally excludes vulnerability related content from the scale. Across the facets of the NPI-13, Exploitative Entitlement appeared to be a mix of all three NPI facets, but correlated most strongly with Exploitative/Entitlement (r = .43, p < .01). Leadership was most strongly correlated with the NPI-13 facet Leadership/Authority (r = .38, p < .01), as expected. While Vulnerability was not significantly correlated with the NPI-13, it did demonstrate a strong positive relationship with one of the three NPI-13 facets, Exploitative/Entitlement (r = .16, p < .01). Exhibitionism was strongly correlated with all three NPI-13 facets but was most strongly related to both Grandiose/Exhibitionism and Exploitative/Entitlement (r = .44, p < .01; r = .43, p < .01, respectively).

Study 2 Conclusions

Based on the results from study 2, our hypothesized 4-factor model was confirmed and demonstrated good fit. Additionally, we were able to remove a number of items to produce a 20-item scale with 5 items per dimension.

Validity evidence was mixed- we found strong evidence for convergent validity. However, criterion-related validity produced unexpected results- in some cases, the evidence for criterion-related validity was opposite of the relationships we would expect, especially regarding the Leadership sub-dimension. Despite this, most relationships with our criterion-related validity variables did demonstrate the expected strength and direction. As such, we found some support for criterion-related validity as well as some evidence that suggests our new measure behaves differently than traditional measures of narcissism.

Additional correlations revealed that the narcissism at work scale demonstrates mixed relationships with job satisfaction and helping extra-role. Both the Exploitative Entitlement and Vulnerability dimensions were negatively related to job satisfaction and helping behaviors, yet the Leadership dimension demonstrated a strong positive correlations with both job satisfaction and helping behaviors. Once again suggesting the Leadership dimension is at odds with traditional measures of narcissism.

Table 7

Study 2 descriptives

Item Content	*Mean*	*SD*	*Skewness*	*Kurtosis*
When I receive negative feedback from my coworkers I get angry and it can become difficult to control my temper.	1.97	1.17	1.06	.03
I try to avoid spending time with people who are beneath me at my company if possible.	1.79	1.04	1.33	1.07
I get upset when my coworkers don't notice how nicely I dress for work.	1.68	1.11	1.60	1.48
I'm willing to exploit others to further my own career goals.	1.88	1.22	1.16	.04
I have at times gone into a rage when not treated rightly at work.	1.74	1.17	1.42	.78
I typically get very angry when I'm unable to get what I want from my coworkers.	1.76	1.12	1.36	.73
I deserve special treatment at my job.	1.87	1.20	1.18	.14
I only associate with people of my caliber at work.	1.76	1.11	1.36	.80
I often think that my coworkers aren't telling me the whole truth.	2.23	1.21	.57	-.88
I resent my coworkers who have what I lack.	1.93	1.17	1.19	.43
I am comfortable taking on positions of authority at work.	3.59	1.20	-.69	-.49
People always seem to recognize my authority at work.	3.24	1.11	-.38	-.59
Leadership at work comes easy for me.	3.37	1.21	-.42	-.80
I'm assertive when I'm doing my job.	3.62	1.14	-.68	-.34
I see myself as a good leader at work.	3.59	1.18	-.65	-.42

Table 7 cont.

Study 2 descriptives

Item Content	*Mean*	*SD*	*Skewness*	*Kurtosis*
I like to take responsibility for making decisions at work.	3.67	1.14	-.74	-.20
I have a natural talent for influencing my coworkers.	3.37	1.13	-.41	-.56
I aspire for greatness at work.	3.63	1.17	-.63	-.43
I am an extraordinary employee.	3.48	1.13	-.47	-.43
When I realize my coworkers know I have failed at something at work, I feel humiliated.	2.69	1.21	.16	-1.05
I feel very insecure about whether I will achieve much in my career.	2.45	1.25	.42	-1.00
I feel foolish when I make a mistake in front of my coworkers.	2.93	1.29	-.10	-1.21
I feel awful when I get put down in front of my coworkers.	3.07	1.32	-.21	-1.18
I tend to feel humiliated when my coworkers give me negative feedback.	2.53	1.22	.37	-.92
I am especially sensitive to success and failure at work.	2.90	1.21	-.02	-1.04
I need my coworkers to acknowledge me.	2.54	1.17	.28	-.91
I like to show off at work.	2.31	1.18	.52	-.80
I like to be the center of attention at work.	2.19	1.15	.76	-.32
I like to be complimented at work.	3.43	1.11	-.70	-.19
I like being the most popular person at in the office.	2.50	1.19	.28	-.95
I like being noticed by my coworkers.	2.98	1.16	-.27	-.85

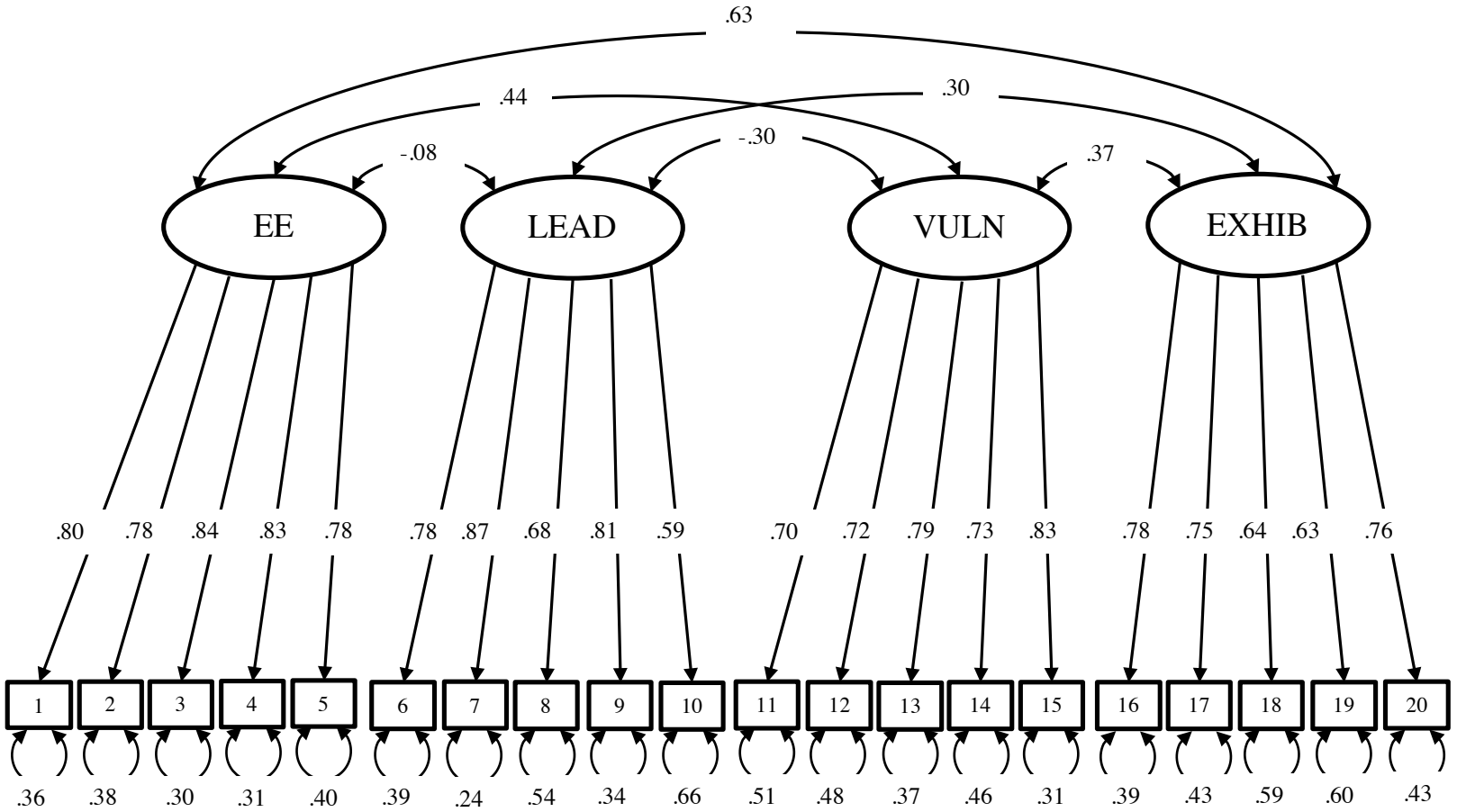

Figure 2.

Measurement model study 2

Table 8.
Item content for the final 20 items

Item Number	Item Content	Factor
1	I'm willing to exploit others to further my own career goals.	Exploitative Entitlement
2	I have at times gone into a rage when not treated rightly at work.	Exploitative Entitlement
3	I typically get very angry when I'm unable to get what I want from my coworkers.	Exploitative Entitlement
4	I deserve special treatment at my job.	Exploitative Entitlement
5	I only associate with people of my caliber at work.	Exploitative Entitlement
6	People always seem to recognize my authority at work.	Leadership
7	Leadership at work comes easy for me.	Leadership
8	I'm assertive when I'm doing my job.	Leadership
9	I have a natural talent for influencing my coworkers.	Leadership
10	I am an extraordinary employee.	Leadership
11	When I realize my coworkers know I have failed at something at work, I feel humiliated.	Vulnerability
12	I feel very insecure about whether I will achieve much in my career.	Vulnerability
13	I feel foolish when I make a mistake in front of my coworkers.	Vulnerability
14	I feel awful when I get put down in front of my coworkers.	Vulnerability
15	I tend to feel humiliated when my coworkers give me negative feedback.	Vulnerability
16	I need my coworkers to acknowledge me.	Exhibitionism
17	I like to show off at work.	Exhibitionism
18	I like to be the center of attention at work.	Exhibitionism
19	I like being the most popular person at in the office.	Exhibitionism
20	I like being noticed by my coworkers.	Exhibitionism

Table 9.

Inter-factor correlations

	ANTAG	LEAD	VULN	EXHI
ANTAG	(.91)			
LEAD	-.08	(.86)		
VULN	.44**	-.30**	(.87)	
EXHI	.63**	.30**	.37**	(.84)

Note: the values in the diagonal represent sub-scale reliabilities. ** Indicates the correlation is significant at the 0.01 level. * Indicates the correlation is significant at the 0.05 level.

Table 10.

Model fit for all CFA models

	RMSEA	*RMSEA CI*	*SRMR*	*TLI*	*CFI*	*df*
4-factor study 2	.07	(.061, .074)	.06	.92	.93	164
4-factor study 1 combined	.08	(.069, .083)	.08	.84	.87	164
3-factor study 2	.10	(.098, .111)	.10	.81	.83	167
3-factor study 1 combined	.09	(.079, .093)	.09	.80	.82	167
1-factor study 2	.19	(.179, .191)	.18	.39	.46	170

Table 11.

Model comparisons

Sample 2							
Comparison	Model	*df*	AIC	BIC	χ^2	$\Delta\chi^2$	Δdf
1	4-Factor	164	22999	23267	505.78		
	3-Factor	167	23431	23687	944.08	438.3**	3
2	3-Factor	167	23431	23687	944.08		
	1-Factor	170	25153	25397	2672.11	1728.03**	3
3	4-Factor	164	22999	23267	505.78		
	1-Factor	170	25153	25397	2672.11	2166.3**	6
Sample 1							
Comparison	Model	*df*	AIC	BIC	χ^2	$\Delta\chi^2$	Δdf
1	4-Factor	164	21402	21665	541.72		
	3-Factor	167	21515	21767	661.46	119.74**	3
2	3-Factor	167	21515	21767	661.46		
	1-Factor	170	22472	22711	1624.24	962.77**	3
3	4-Factor	164	21402	21665	541.72		
	1-Factor	170	22472	22711	1624.24	1082.5**	6

Table 12.

Correlations for validity evidence

	Narcissism at Work Full Scale	Exploitative Entitlement	Leadership	Vulnerability	Exhibitionism
OCB-I	-.02	-.32**	.50**	-.153**	-.03
OCB-O	-.24**	-.34**	.07	-.145**	-.17**
IRB	-.25**	-.40**	.09	-.15**	-.16**
CWB-I	.35**	.42**	-.01	.19**	.27**
CWB-O	.32**	.43**	-.11*	.24**	.22**
Voice Behaviors	-.10*	-.28**	.37**	-.26**	-.02
Neuroticism	.20**	.31**	-.41**	.45**	.10*
Extraversion	.15**	-.05	.55**	-.34**	.28**
Openness	-.15**	-.36**	.31**	-.22**	-.07
Agreeableness	-.34**	-.47**	.20**	-.29**	-.25**
Conscientiousness	-.22**	-.42**	.42**	-.36**	-.15**
NPI 13	.47**	.40**	.31**	-.01	.53**

Note: ** Indicates the correlation is significant at the 0.01 level. * Indicates the correlation is significant at the 0.05 level.

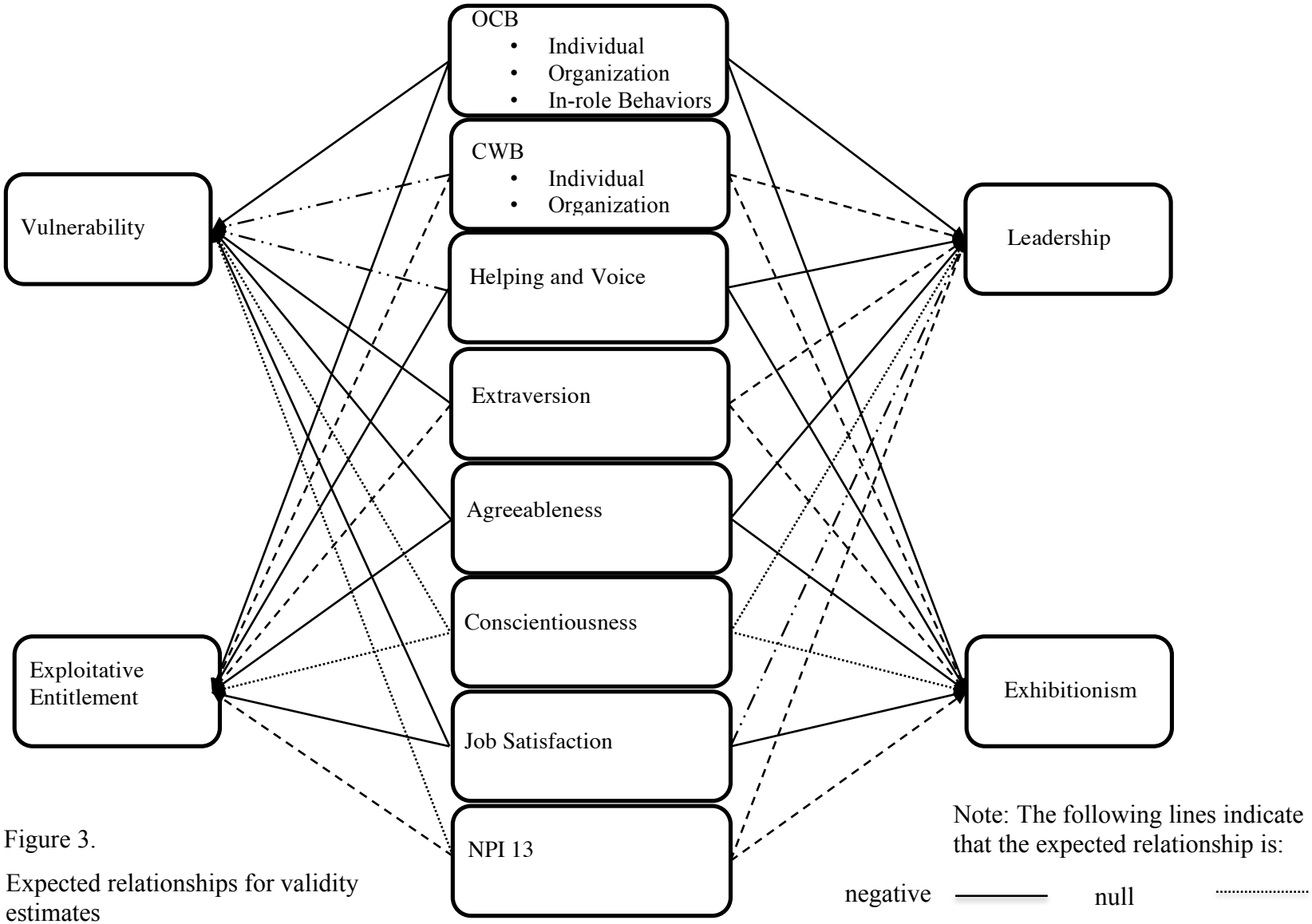

Figure 3.

Expected relationships for validity estimates

Table 13.

Facet level correlations for the NPI-13 and the Narcissism at Work Scale

	Narcissism at Work Full-scale	Exploitative Entitlement	Leadership	Vulnerability	Exhibitionism
NPI 13	.47**	.40**	.31**	-.01	.53**
Leadership Authority	.37**	.28**	.38**	-.08	.38**
Grandiose Exhibitionism	.32**	.26**	.21**	-.08	.44**
Exploitative Entitlement	.45**	.43**	.12*	.16**	.43**

Note: ** Indicates correlation is significant at the 0.01 level. * Indicates correlation is significant at the 0.05 level.

Table 14.
Incremental validity estimates for CWB

		CWB Individual						CWB Organization			
Step	Variable	β	R^2	ΔR^2	ΔF	Step	Variable	β	R^2	ΔR^2	ΔF
1a			.09	.09	39.61**	1a			.05	.05	22.91**
	NPI 13	.29**					NPI 13	.23**			
1b				.06	35.26**	1b			.11	.06	26.69**
	NPI 13	.16**					NPI 13	.10			
	NAW Full-scale	.27**					NAW Full-scale	.27			
2a			.09	.09	39.61**	2a			.05	.05	22.91
	NPI 13	.29**					NPI 13	.23**			
2b			.19	.11	56.22**	2b			.19	.14	70.55**
	NPI 13	.15**					NPI 13	.07			
	EE	.36**					EE	.40**			
3a			.09	.09	39.61**	3a			.05	.05	22.91**
	NPI 13	.29**					NPI 13	.23**			
3b			.31	.01	4.91*	3b			.09	.04	17.12**
	NPI 13	.32					NPI 13	.29**			
	Leadership	-.11					Leadership	-.20**			
4a			.09	.09	39.61**	4a			.05	.05	22.91**
	NPI 13	.29**					NPI 13	.23**			
4b			.12	.04	18.34**	4b			.11	.06	28.06**
	NPI 13	.29**					NPI 13	.23**			
	Vulnerability	.19**					Vulnerability	.24**			
5a			.09	.09	39.61**	5a			.05	.05	22.91**
	NPI 13	.29**					NPI 13	.23**			
5b			.10	.02	8.38**	5b			.06	.01	6.03*
	NPI 13	.21**					NPI 13	.15**			
	Exhibitionism	.16**					Exhibitionism	.14*			

Note: Note: ** Indicates correlation is significant at the 0.01 level. * Indicates correlation is significant at the 0.05 level.

Table 15.
Incremental validity estimates for OCB

		OCB Individual						OCB Organization			
Step	Variable	β	R^2	ΔR^2	ΔF	Step	Variable	β	R^2	ΔR^2	ΔF
1a			.01	0.01	3.94*	1a			.03	.03	11.59**
	NPI 13	-.10*					NPI 13	-.16**			
1b			.01	.00	.43	1b			.06	.03	14.96**
	NPI 13	-.11*					NPI 13	-.07			
	NAW Full-scale	.04					NAW Full-scale	-.21**			
2a			.01	.01	3.94*	2a			.03	.03	11.59**
	NPI 13	-.10*					NPI 13	-.16**			
2b			.11	.10	45.74**	2b			.12	.09	42.50**
	NPI 13	.04					NPI 13	-.03			
	EE	-.34**					EE	-.32**			
3a			.01	.01	3.94*	3a			.03	.03	11.59**
	NPI 13	-.10*					NPI 13	-.16**			
3b			.32	.31	194.02**	3b			.04	.02	6.99**
	NPI 13	-.27**					NPI 13	-.20**			
	Leadership	.58**					Leadership	.13**			
4a			.01	.01	3.94*	4a			.03	.03	11.59**
	NPI 13	-.10*					NPI 13	-.16**			
4b			.03	.02	10.47**	4b			.05	.02	9.68**
	NPI 13	-.01					NPI 13	-.17**			
	Vulnerability	-.15**					Vulnerability	-.15**			
5a			.01	.01	3.94*	5a			.03	.03	11.59**
	NPI 13	-.10*					NPI 13	-.16**			
5b			.01	.00	.35	5b			.04	.01	4.24*
	NPI 13	-.11*					NPI 13	-.10			
	Exhibitionism	.03					Exhibitionism	-.12*			

Table 15 cont.

Incremental validity estimates for OCB

		In-role Behaviors			
Step	Variable	B	R^2	ΔR^2	ΔF
1a			.04	.04	16.60**
	NPI 13	-.19**			
1b			.07	.03	15.72**
	NPI 13	-.09			
	NAW Full-scale	-.21**			
2a			.04	.04	16.60**
	NPI 13	-.19**			
2b			.16	.12	62.77**
	NPI 13	-.04			
	EE	-.38**			
3a			.04	.04	16.60**
	NPI 13	-.19**			
3b			.06	.02	10.49**
	NPI 13	-.24**			
	Leadership	.16**			
4a			.04	.04	16.60**
	NPI 13	-.19**			
4b			.06	.02	10.67**
	NPI 13	-.20**			
	Vulnerability	-.15**			
5a			.04	.04	16.60**
	NPI 13	-.19**			
5b			.04	.00	1.96
	NPI 13	-.15**			
	Exhibitionism	-.08			

Note: ** Indicates the correlation is significant at the 0.01 level. * Indicates the correlation is significant at the 0.05 level.

CHAPTER 8

GENERAL DISCUSSION

The trait narcissism is critical and exceedingly relevant to the workplace, yet, the exact function of narcissism in organizational contexts is somewhat unclear. In some cases, narcissism is a positive attribute in the workplace, whereas in other cases, it can be costly. There are some critical explanations for the mixed findings including narcissism's complex structural composition (i.e., grandiose and vulnerable), and, relatedly, the psychometric shortcomings of existing scales, as well as the previously untapped added value of contextualized measures. As such, calls to amend our understanding and measurement of narcissism have been numerous and widespread (Krizan & Herlache, 2017; Ackerman, Hands, Donnellan, Hopwood, & Witt, 2016). The proposed narcissism at work measure attempts to address some of these critical questions by both more clearly defining the exact structure and composition of narcissism at work, as well as enhancing the consistency of the results produced by the measure by contextualizing the items for the respective environment. Rooted in Person-Interaction Theory (Mischel, 1973), contextualizing measures to the environment in which the relationship is examined has proven to be a useful way to increase the reliability and validity of a measure (Lievens et al., 2008). These benefits of contextualizing measurement were found to be true for our measure, which largely provided incremental validity beyond the NPI-13.

In general, we find that our new scale- the narcissism at work scale- is an improvement over the NPI for workplace contexts for several reasons. Notably, our factor solution has largely been consistent across samples and resembles current research on the structure and composition

of narcissism (Krizan & Herlache, 2017; Miller et al., 2017). Specifically, a recent review paper published in early 2017, has integrated the complex and at times chaotic literature surrounding narcissism. The exact definition, both theoretically- relating to content, and structurally- relating to the factor structure, of narcissism is often debated (Ackerman et al., 2011; Ackerman et al., 2017; Miller et al., 2017). Included in this debate is identifying the lower-order traits that are most relevant to the construct versus those that are more peripheral, as well as understanding how those lower-order traits relate to one another. Krizan and Herlache (2017) synthesize the existing models of narcissism by introducing the Narcissism Spectrum Model (for review, see above). In this model, narcissism is made up of a higher-order trait, entitled self-importance, and two second-order traits, boldness and reactivity. However, based on the spectrum model, the phenotypic display of the second-order traits depends on the lower-order traits they are made up of. In some cases, the second-order traits may demonstrate similar relationships with lower-order traits, depending on where the lower-order trait lies on the spectrum. For example, both second-order factors, boldness and reactivity, share the lower-order trait of antagonism. In other cases, however, the second-order factors demonstrate distinct relationship with lower-order traits. For example, the lower order traits leadership and extraversion are distinct to boldness. Whereas the lower-order traits distinct to reactivity include negative affect and neuroticism (Krizan & Herlache, 2017; Miller et al., 2017). This model- reviewed by both Miller et al., (2017) and Krizan and Herlache (2017)- explains our findings quite well. Our findings suggest that narcissism in workplace contexts can be thought of as a composition of the traits exploitative entitlement, leadership, vulnerability, and exhibitionism. Based on the inter-factor correlations, Exploitative Entitlement is highly correlated with Vulnerability ($r = .44$, $p < .01$) and Exhibitionism ($r = .63$, $p < .01$), yet, Leadership- a trait distinct to boldness (i.e., grandiose

narcissism)- is negatively correlated with Vulnerability (r = -.30, p < .01) and positively correlated with Exhibitionism (r = .30, p < .01). This aligns with the NSM by demonstrating both boldness (i.e., grandiose) and reactivity (i.e., vulnerable) share antagonistic traits but do not overlap on all lower-order traits (i.e., leadership). Interestingly, however, Vulnerability and Exhibitionism demonstrate a positive correlation (r = .37, p < .01), which, prior to the NSM model would have been challenging for researchers to explain. However, given that the NSM allows for individuals to fall along a multi-dimensional continuum of lower-order traits, the NSM accounts for both cases where vulnerability and exhibitionism are distinct (i.e., occurring separately) as well as cases where they occur concurrently, or within the same individual.

There were some notable differences, however, between our findings and those of traditional narcissism measures. Most significant is the manifestation of the Leadership sub-dimension in workplace contexts. Traditionally, the Leadership Authority sub-facet of narcissism is strongly associated with negative outcomes such as antagonism, psychopathic fearless dominance and impulsive antisociality, Machiavellianism, and counterproductive behaviors (Ackerman et al., 2011). However, in our contextualized findings, leadership appears to be a positive attribute, demonstrating strong positive relationships with agreeableness, helping and voice extra-role behaviors, and organizational citizenship behaviors. This difference may arise from the change in context from everyday life to the workplace. In workplace settings, demonstrating strong leadership tendencies can be a benefit to both the organization and the individual. In everyday life, however, the desire to exercise authority and leadership over people is more likely to be maladaptive and unhealthy. Due to this distinction, we feel the context in which the leadership dimension of narcissism is measured should change expectations for the phenotypic expression of the trait. What's more, these findings further bolster the evidence

supporting the necessity of contextualized measures, given that similar traits manifest differently in different environments. Interestingly, though, this contextualized leadership trait may not be all positive- our results indicate that leadership is often comorbid with exhibitionistic tendencies ($r = .30$, $p < .01$), like showing off and seeking attention.

Limitations and Future Research

A notable limitation of our study is the lack of discriminant validity evidence tested in our studies. Due to measurement fatigue, we were unable to include a measure of discriminant validity in our study. Future research should attempt to identify, test, and analyze additional variables eligible to provide discriminant validity evidence.

Second, given the skewed perspective produced by self-report measures, especially considering the self-enhancing nature of narcissism, future research should attempt to replicate these findings with other-report data (Podsakoff & Organ, 1986; Campbell et al., 2000; Rhodewalt, & Eddings, 2002).

Third, though we do provide initial estimates of incremental validity produced by the narcissism at work scale, we recommend future research continue to provide evidence for the enhanced predictive ability of the narcissism at work scale. Particularly we recommend future research include the Hyper Sensitive Narcissism Scale (HSNS) to further validate the Vulnerability dimension, as well as other measures of narcissism, including the NPI-40, that cover a broader trait-spectrum than the NPI-13. Unfortunately, however, we were unable to include these additions to the present research given issues of scale length and participant fatigue.

Additionally, from a testing perspective, negative inter-factor correlations inherently produce complications and prevent researchers from adequately collapsing measures to the full-

scale level. This issue occurs with the NPI (e.g., Brown, Budzek, & Tamborski, 2009), but appears stronger with the new narcissism at work scale. The essence of this problem can be seen when comparing the relationships between the narcissism at work full-scale and various variables with the narcissism at work sub-dimensions and those same variables. In many cases, two sub-dimensions demonstrate opposite relationships with the same variable thus leading to a null relationship at the full-scale level. For example, we found that the narcissism at work full-scale was unrelated to OCB-I, an undeniably unexpected result. However, upon closer examination, most sub-dimensions of the scale were negatively related to OCB-I, as expected, but the sub-dimension Leadership demonstrated a strong positive relationship with OCB-I, thus producing the null results at the full-scale. Future research should further replicate these findings with regard to a.) the factor structure of the narcissism at work scale, including inter-factor correlations, as well as b.) the relationships that provide validity evidence.

Finally, our research did not test the exact extent to which our contextualized scale produces superior reliability over non-contextualized measures of narcissism. Future research should consider applying the method of Lievens et al., (2008), to directly test and compare the contextualized measure with a non-contextualized version.

Conclusions

Across two studies and three samples, we have provided initial evidence supporting the necessity of a contextualized measure for narcissism in the workplace. What's more, our 4-factor solution of Exploitative Entitlement, Leadership, Vulnerability, and Exhibitionism was largely replicated across all samples and fits exceedingly well with the most cutting-edge research regarding the structural composition of narcissism (Miller et al., 2017; Krizan & Herlache, 2017). Our narcissism at work scale provides advantages over and above traditional measures of

narcissism in so far as it is, a.) more psychometrically sound based on the replicability of the factor structure, b.) adds incremental validity over and above the NPI-13, and c.) includes the added benefits of contextualized scales. Thus, this paper provides a psychometrically and theoretically strong measure for narcissism at work.

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APPENDIX A

The Narcissism at Work Scale.

Instructions: When using the narcissism at work scale to measure workplace specific narcissism, participants should be asked to rate the extent to which the following statements represent them in their current job/workplace, measured on a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Item Content	Factor
I'm willing to exploit others to further my own career goals.	Exploitative Entitlement
I have at times gone into a rage when not treated rightly at work.	Exploitative Entitlement
I typically get very angry when I'm unable to get what I want from my coworkers.	Exploitative Entitlement
I deserve special treatment at my job.	Exploitative Entitlement
I only associate with people of my caliber at work.	Exploitative Entitlement
People always seem to recognize my authority at work.	Leadership
Leadership at work comes easy for me.	Leadership
I'm assertive when I'm doing my job.	Leadership
I have a natural talent for influencing my coworkers.	Leadership
I am an extraordinary employee.	Leadership
When I realize my coworkers know I have failed at something at work, I feel humiliated.	Vulnerability
I feel very insecure about whether I will achieve much in my career.	Vulnerability
I feel foolish when I make a mistake in front of my coworkers.	Vulnerability
I feel awful when I get put down in front of my coworkers.	Vulnerability
I tend to feel humiliated when my coworkers give me negative feedback.	Vulnerability
I need my coworkers to acknowledge me.	Exhibitionism
I like to show off at work.	Exhibitionism
I like to be the center of attention at work.	Exhibitionism
I like being the most popular person at in the office.	Exhibitionism
I like being noticed by my coworkers.	Exhibitionism