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INVESTIGATING GRANDIOSE NARCISSISM AS A PERSONALITY PROCESS

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INVESTIGATING GRANDIOSE NARCISSISM AS A PERSONALITY PROCESS

by

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DECLARATION OF CO-AUTHORSHIP/PREVIOUS PUBLICATION

This dissertation is presented in an integrated article format (multiple manuscript option), such that the document proceeds from an introduction through a series of published manuscripts and ends with a general discussion. This dissertation includes three original manuscripts, two of which are already published in peer-reviewed journals and a third which is accepted and in-press at a peer-reviewed journal. Manuscript 1 (Chapter 2) has been published in a top social psychology journal, *Personality and Social Psychology Bulletin* (Impact factor: 2.909; Ranking: Psychology, Social 7 out of 62). The full citation is:

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Pertinently, I must acknowledge the contributions of my doctoral supervisor, Dr. Christian Jordan, who is my co-author on all three of the manuscripts presented in this dissertation. Each of these manuscripts contributes collectively to my dissertation.

ABSTRACT

Though grandiose subclinical narcissism has predominantly been studied in structural terms—focused on individuals' general tendencies to be more or less narcissistic—narcissism may also function as a personality process (i.e., narcissism fluctuates within-individuals across contexts or situations). Narcissism has also been conceptualized as a dynamic self-regulatory system, a set of coherent, mutually-reinforcing attributes, which orients individuals toward positive self-feelings (e.g., Campbell & Foster, 2007). In this dissertation, I empirically examine the possibility that narcissism has a meaningful process or state component and is more context-dependent than previously assumed. Manuscript 1 found that making people feel more connected to others (by increasing empathic concern or priming interdependent self-construal) reduced their endorsement of narcissistic tendencies and, in turn, negated some of the negative aspects associated with narcissism (e.g., fame seeking). Using a daily diary methodology, in Manuscripts 2 and 3, it was found that there is a modest, yet meaningful, amount of within-person variability in people's narcissistic tendencies. This variability existed across different samples of participants, different time periods (i.e., 10 and 14-days), and across different assessments and conceptualizations of narcissism. Importantly this variability was psychologically meaningful, in that people's narcissism shifted in accordance with their daily experiences (e.g., positive agentic events) or their daily psychological well-being (e.g., life satisfaction, positive affect). Together these manuscripts provide some initial evidence that grandiose narcissism can vary within individuals and that this variability can meaningfully fluctuate across different situational affordances (e.g., when feeling powerful or more connected to other people). Indeed narcissism may function as a dynamic self-regulatory system orienting individuals toward self-enhancement and positive self-views.

STATEMENT OF ORIGINALITY

This is to certify that the content of this dissertation is my own work except where due reference is made. It is being submitted to Wilfrid Laurier University as part of my PhD degree requirements. It has not been and shall not be submitted for the award of any degree or diploma at any other institution of higher learning.

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CHAPTER 1 – INTRODUCTION

INVESTIGATING GRANDIOSE NARCISSISM AS A PERSONALITY PROCESS

Grandiose narcissism is marked by an over-inflated sense of self-worth, unrealistic, grandiose self-views, a strong self-focus and a sense of entitlement (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). For many years, researchers have been interested in studying narcissism, as a personality trait, largely because it is a unique blend of adaptive (e.g., leadership, charisma, extroversion) and maladaptive qualities (e.g., exploitativeness, entitlement). Narcissists tend to be extremely extraverted, confident, charismatic, high in self-esteem (e.g., Campbell, 1999; Carroll, 1987) and this makes them initially well-liked by others (e.g., Back et al., 2010; Leckelt et al., 2015; Paulhus, 1998). Although narcissism may be adaptive in some ways (e.g., Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), it is associated with numerous maladaptive qualities; narcissists are more dishonest, greedy, insincere, antisocial, aggressive and hostile, particularly when threatened, than non-narcissists (Bushman & Baumeister, 1988; Miller & Maples, 2010; Miller & Campbell, 2008; Paulhus, 2001). Given that grandiose narcissism predicts both positive and negative outcomes, it may be important to understand the situational determinants of people's narcissistic tendencies.

Personality and social psychologists have typically treated grandiose subclinical narcissism as a stable individual difference, such that some people are more narcissistic than others (see Campbell & Miller, 2011). My dissertation, however, explores the possibility that narcissism functions as a personality process or as a personality state, such that people's narcissism may wax and wane across different situations. Specifically, I suggest that while not everyone might be a narcissist, everyone does have the propensity to behave in more or less narcissistic ways across time and in different contexts. To examine this possibility, in my dissertation, I begin by experimentally examining factors that can causally affect people's narcissistic tendencies in order to investigate the context-dependent nature of narcissism

(Manuscript 1). Next, I adopt a daily diary methodological approach to quantify the degree of within-person variability in people's narcissistic tendencies across time and to investigate whether the within-person variability in people's narcissism is psychologically meaningful (Manuscript 2 and 3).

Narcissism as a Dynamic Self-regulatory System

Grandiose narcissism is typically considered a fixed individual difference such that some people are more narcissistic than others; however, more recent models of narcissism conceptualize it as a dynamic self-regulatory system, a coherent set of characteristics, abilities, strategies, and behaviors that reinforce people's positive self-views (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). Morf and Rhodewalt (2001) initially proposed a dynamic self-regulatory processing model of narcissism. This model suggests that narcissists use a series of social-affective-cognitive self-regulatory strategies to maintain their positive self-views and receive social validation. That is, narcissists will strategically select who they associate with (interpersonal processes) or engage in self-evaluation maintenance (e.g., selective recall of past outcomes; intrapersonal processes) as a way to maintain their positive self-conception. Plenty of research has examined the ways in which narcissists use intra-psychic strategies to maintain their grandiose and overly-positive self-views. For example, narcissists strongly display the 'better-than-average' effect and rate themselves more positively than others on agentic traits (e.g., attractive, clever; Gabriel, Critelli, & Ee, 1994; Jones & Brunell, 2014). Narcissistic students also indicate that they will attain higher final academic grades than they ultimately do attain (Farwell & Wohlwent-Lloyd, 1998). Narcissists use other people to enhance their self-esteem; for example, narcissists prefer self-oriented (vs. other-oriented) romantic partners to the extent

that they provide a source of self-esteem (e.g., trophy spouses; Campbell, 1999). These inter- and intrapersonal processes are employed to enhance or maintain one's grandiose self-image.

Campbell and Foster (2007) later proposed the extended agency model of narcissism. They conceptualized narcissism as a coherent set of intra- and interpersonal self-regulatory processes that operate like a system to generate positive feelings of "narcissistic esteem." Aspects of the system include the fundamental qualities of narcissism (e.g., approach orientation, concerns with agency rather than communion), narcissists' interpersonal skills (e.g., charisma, charm, social confidence), intrapsychic self-regulation strategies (e.g., self-serving biases) and interpersonal strategies (e.g., self-promotion). These aspects are mutually reinforcing and reciprocal such that activating one aspect of the system should activate other aspects and, conversely, if one aspect of the system is down-regulated (e.g., enhancing a communal rather than agentic focus), this should deactivate other aspects of the system. Thus the components of this narcissistic system and the self-regulatory strategies frequently adopted by narcissists are both causes and consequences of narcissists' inflated, grandiose self-views.

Taken together, these models suggest that narcissism may be more context-dependent than previously assumed. One way to examine this possibility is to causally affect the narcissistic self-regulatory system in order to situationally increase or reduce state narcissism. In Manuscript 1, I test the possibility that increasing communal (vs. agentic) focus causes changes in state narcissism.

Process Approaches to Personality

In addition to experimentally examining state changes in people's narcissism, another way to examine the possibility that narcissism functions as a dynamic personality state is to directly examine state narcissism over time. Researchers could begin to conceptualize narcissism

as a personality process by examining the extent to which people behave more or less narcissistically from moment-to-moment or according to situational affordances.

Fleeson's (2001) density distribution approach to personality is a particularly useful framework for investigating personality processes. Fleeson suggests that personality consists of both traits and states: Personality traits reflect general tendencies of behaving in particular ways, whereas personality states reflect within-person variability in behavior across contexts or situations. That is, individual differences consist of density distributions. Over time, people's behavior forms a distribution, which contains average or mean levels as well as characteristic variability around the mean. Process approaches to personality emphasize the variability within the distribution, as well as people's average trait levels. Rather than presuming the variability around people's average trait levels is measurement error, Fleeson (2001, 2004) has systematically examined the within-person variability in people's personality tendencies over time and determined that this variability may be psychologically meaningful (see also McCabe & Fleeson, 2012).

Indeed, the Big 5 personality traits (i.e., openness, neuroticism, agreeableness, extroversion, and conscientiousness) display considerable within-person variability in daily measures, suggesting that they manifest differentially in behavior across situations (e.g., Church et al., 2013; Fleeson, 2001, 2004). Furthermore, Fleeson (2007) found that contextual factors influence the manifestation of people's personality tendencies; for example, as an interaction partner's friendliness increased, individuals' state extroversion and agreeableness increased as well. Explaining the link between situational cues and personality is an important aim for personality psychologists, yet researchers have only recently begun to systematically examine intra-individual variability in personality constructs (e.g., Baird, Le, & Lucas, 2006; Bleidorn,

2009; Church et al., 2013; Fleeson, 2001; Fournier, Moskowitz, & Zuroff, 2008; Kernis & Waschull, 1995; La Guardia & Ryan, 2007; Leikas, Lonnqvist, & Verkasalo, 2012).

By adopting a process or density distribution approach to narcissism, in Manuscript 2 and 3, I systematically investigate the extent to which people vary in their narcissistic tendencies over time and across different situational constraints. Thus my dissertation empirically examines whether narcissism functions, in part, as a personality process. Is there short-term, within-person variability in narcissism? Does everyone have the propensity to be more or less narcissistic at different times or in different contexts? In what contexts do people exhibit more or less state narcissism?

Dissertation Overview

My research focuses on the novel hypothesis that narcissism has a process or state component such that people's narcissistic tendencies vary across contexts. There are three primary goals of my dissertation: (1) To understand whether narcissism behaves like a regulatory system, consistent with the extended agency model; (2) To determine the degree of within-person variability in people's narcissistic tendencies across time; (3) To determine whether the within-person variability in people's narcissism is psychologically meaningful.

In Manuscript 1 (Giacomin & Jordan, 2014, *Personality and Social Psychology Bulletin*), I investigate whether narcissism behaves like a self-regulatory system by examining whether shifting people's focus to be more or less communal (vs. agentic) results in situational changes in narcissism. I conduct a series of experiments examining how experiences of empathy and primes of interdependent self-construal causally affect people's narcissistic tendencies. I predict that people will report less narcissism after being induced to experience empathic concern or in response to interdependent self-construal primes. Such findings suggest the possible utility of

examining situational changes in narcissism in order to curtail some of the detrimental consequences typically associated with narcissism. Although this research begins to corroborate a context-dependent model of grandiose narcissism, the following two manuscripts investigate state narcissism using a more direct, systematic approach.

Rather than view variability around individuals' mean-level of grandiose narcissism as unpredictable error, I suggest that such variability might be systematically studied. In the second manuscript (Giacomin & Jordan, 2016, *Journal of Personality*), we used a daily diary methodology to measure state narcissism across a 10-day period, in order to examine whether there is significant variability in narcissism and whether this variability relates systematically to other psychological states (i.e., self-esteem, stress) and agentic and communal daily events. In Manuscript 3 (Giacomin & Jordan, in press, *Journal of Research in Personality*), I replicate and extend the findings of Manuscript 2 in order to further assess the degree of within-person variability across three different measures of state narcissism and to further examine the psychological states associated with fluctuations in daily narcissism (i.e., subjective well-being).

Together, these three manuscripts contribute to a growing understanding that narcissism does indeed function as a dynamic personality process. Though some people are, in general, more narcissistic than others, narcissism functions as a personality process that waxes and wanes across contexts. Furthermore, understanding the factors that contribute to such variability may help us to better understand the antecedents and consequences of narcissism and provide novel insights into the intra- and interpersonal dynamics of narcissism.

CHAPTER 2 - MANUSCRIPT 1[a]

DOWN-REGULATING NARCISSISTIC TENDENCIES:

COMMUNAL FOCUS REDUCES STATE NARCISSISM

[a] This manuscript is published in *Personality and Social Psychology Bulletin*. Copyright agreement is provided within Appendix A.

Abstract

Narcissism has been conceptualized as a set of coherent, mutually-reinforcing attributes that orients individuals toward self-enhancement and positive self-feelings (e.g., Campbell & Foster, 2007). In this view, reducing one element of narcissism—such as a greater concern for agency than communion—may situationally reduce narcissism in a state-like manner. Across five studies, we found that increasing communal focus toward others decreases state narcissism. In Study 1, participants induced to feel empathy reported less narcissism. In Studies 2-4, participants primed with interdependent self-construal reported less state narcissism than control participants and those primed with independent self-construal. Furthermore, in Study 4, changes in state narcissism mediated changes in desire for fame and perceptions that others deserve help. Thus, changes in one element of narcissism may situationally reduce narcissistic tendencies. These findings suggest that narcissism is more state-like and context-dependent than previously assumed.

INTRODUCTION

Narcissism is marked by an over-inflated sense of self-worth. It is associated with unrealistic, grandiose self-views, a strong self-focus and sense of entitlement (Campbell & Foster, 2007; Morf & Rhodewalt, 2001).[1] Although narcissism may be adaptive in some ways (e.g., Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), it is associated with numerous maladaptive qualities; narcissists are more dishonest, greedy, insincere, and antisocial than non-narcissists (Miller & Maples, 2010). Given that narcissism may be on the rise among younger generations (e.g., Twenge, Konrath, Foster, Campbell, & Bushman, 2008), it is important to better understand the intra- and interpersonal dynamics of narcissism. In the present studies, we test whether a more communal focus on other people situationally reduces narcissistic tendencies. In doing so, we test whether narcissism is more state-like and context-dependent than previously assumed.

Narcissism and a Lack of Communal Focus

Bakan (1966) argued that human motives and behavior can be divided into two broad domains: The communal domain represents a desire to relate to and co-operate with others and includes qualities like warmth, nurturance, and caring whereas the agentic domain represents a desire to assert one's self and includes qualities like ambition, confidence and independence. We consider communal focus to be an umbrella term that encompasses a variety of motives and processes, such as compassion, gratitude, collectivism, agreeableness, empathy, perspective taking, and interdependent self-construal. Agency and communion are typically viewed as orthogonal, such that an individual can be motivated by both agency and communion (Frimer,

[1] We focus on narcissism as a sub-clinical personality dimension, rather than Narcissistic Personality Disorder or pathological narcissism (Wink, 1991; Pincus et al., 2009). We study narcissism as a continuous variable; although we occasionally refer to "narcissists" we use this as shorthand to denote individuals high in narcissism.

Walker, Dunlop, Lee, & Riches, 2011; Trapnell & Paulhus, 2012; Wiggins, 1991). Narcissists, however, focus substantially more on agentic than communal concerns.

Although narcissists are known for their grandiosity, an equally central aspect of narcissism is a disregard of others (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). Early psychodynamic theories of narcissism argued that it reflects too much attachment of libidinal energy on the self and not enough on others (Ronningstam, 2010). Recent research supports the idea that narcissists care more about themselves than others. Narcissists are more concerned with possessing agentic (e.g., skill and competence) than communal qualities (e.g., warmth and nurturance; Campbell, Rudich, & Sedikides, 2002). They are more interested in attention and admiration than intimacy and closeness (Campbell, 1999; Campbell & Foster, 2002), lower in agreeableness (Miller & Campbell, 2008; Paulhus, 2001), less empathetic and compassionate toward others (Wai & Tiliopoulos, 2012; Watson & Morris, 1991) and more aggressive (e.g., Bushman & Baumeister, 1998) than those lower in narcissism. Narcissists also demonstrate more independent and less interdependent self-construals than those lower in narcissism (Konrath, Bushman, & Grove, 2009). Given the tendency for narcissists to be more concerned with agency than communion, in the current studies, we examine whether increasing communal focus can cause state changes in narcissism. Some models of narcissism suggest this possibility.

State Narcissism

Many theorists approach narcissism as a personality process rather than an immutable individual difference. Early theorists of narcissism, such as Freud and Rank, conceptualized narcissism as a dimensional personality trait but also "a process or state" (Levy, Ellison, & Reynoso, 2011, pp. 4-5). Consistent with these conceptualizations, a number of recent models of narcissism view it as a coherent set of characteristics, abilities, strategies, behaviors and

emotions that mutually reinforce one another and orient individuals toward self-enhancement and positive self-feelings (e.g., Campbell & Foster, 2007; Morf & Rhodewalt, 2001).

In their extended agency model, Campbell and Foster (2007) propose that narcissism contains four core elements: (1) entitled and inflated self-views, (2) desire for self-esteem, (3) approach orientation, and pertinently (4) greater concern with agency than communion (also see Foster & Brennan, 2010). These elements are mutually reinforcing and connected by positive feedback loops. Thus, they tend to fuel one another. But an additional implication of this model is that a reduction in any of the elements—such as an increase in communal, rather than agentic, concern—could situationally reduce narcissism. Thus, a specific prediction, consistent with early psychodynamic models, is that narcissism can be state-like and fluctuate across situations. In the present studies, we test whether increases in communal focus cause reductions in state narcissism. In doing so, we examine the as yet untested prediction that narcissism is context-bound and fluctuates across situations.

Can Communal Focus Reduce State Narcissism?

Recent research suggests that changes in communal focus can reduce some consequences of narcissism. Konrath, Bushman, and Campbell (2006) found that increasing participants' sense of personal connection to an interaction partner (by being told they shared the same birthday or fingerprint type) reduced narcissistic aggression towards that partner. Finkel, Campbell, Buffardi, Kumashiro, and Rusbult (2009) found that "communal activation"—priming communal thoughts or motives—caused narcissistic individuals to become more committed to romantic partners. Thus, encouraging greater concern with communal qualities can reduce some specific interpersonal consequences of narcissism.

We extend this work by testing whether a more communal focus causes reductions in state narcissism. We do so by examining the effects of communal focus on the endorsement of narcissistic tendencies on a widely-used measure of narcissism, the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). This measure includes items reflecting core aspects of narcissism, such as grandiosity, entitlement, exploitativeness, and superiority. We thus extend earlier research by focusing on a wider array of core narcissistic tendencies, which we conceptualize as state narcissism. The present studies are, to our knowledge, the first to examine state changes in narcissism. In doing so, we hope to align narcissism research more with context-sensitive models of personality (e.g., Cervone & Shoda, 1999; McConnell, 2011; Mischell & Shoda, 1995). Past research demonstrates that narcissists flexibly adopt different self-enhancement strategies as a function of situational affordances (e.g., Rhodewalt & Morf, 2005). We extend this work by testing whether there are situational factors that reduce the functioning of narcissistic tendencies overall. By doing so, we demonstrate the state-like, or context-dependent, character of narcissism.

The Current Research

In the present studies, we operationalize communal focus in terms of empathic concern and interdependent self-construal. In Study 1, we manipulate empathy toward a person in distress. In Studies 2–4, we prime independent or interdependent self-construal. We expect that enhanced empathy or interdependent self-construal will decrease state narcissism. Such findings would suggest that increasing communal focus can reduce state narcissism. They would also, notably, demonstrate context-dependent variability in narcissism.

Study 1

We begin by examining whether empathy situationally reduces narcissism. A lack of empathy, in some conceptualizations, is a defining aspect of narcissism (e.g., American Psychiatric Association, 2000). Narcissists are generally low in empathic concern (e.g., Wai & Tiliopoulos, 2012). We conceptualize empathy as reflecting a communal focus; empathy is predominantly other-focused, involves feeling vicarious emotion that is shared with another person, and tends to be more altruistic than egoistic (Batson, Fultz, & Schoenrade, 1987). We thus examine whether encouraging empathy toward a person in distress causes decreases in state narcissism.

We manipulated empathy by having participants read about a drunk-driving accident. Participants were instructed to read the story objectively (low empathy) or by taking the perspective of the suffering protagonist (high empathy; see Batson, Sager, Garst, Kang, & Rubchinsky, 1997). We then measured state narcissism by adapting the NPI to include state instructions. We expected that experiencing greater empathy would reduce endorsement of the narcissistic tendencies reflected in NPI items. We also assessed state self-esteem to examine whether our predicted effects were specific to narcissism or extend to self-esteem.

Method

Participants. Undergraduates (N = 209) participated in exchange for partial course credit. Four participants were excluded from analyses because they identified the purpose of the study in debriefing, leaving 205 participants (152 females, M_{age} = 18.85, SD = 1.84). Preliminary analyses in all studies revealed no gender effects and so gender is not discussed further.

Participants were recruited from a pool of individuals who completed mass testing at the beginning of the term. In all studies, we limited participation to individuals with non-Asian ethnicity; this restriction was made because Asian individuals are generally higher in

interdependence and lower in narcissism than non-Asian individuals (Foster, Campbell, & Twenge, 2003; Fukunishi et al., 1996). Thus, including Asian participants may have restricted our ability to influence these attributes and observe changes in them. We also did not have access to enough Asian participants to meaningfully test whether culture moderates our results.

Materials and Procedure. Participants completed the study online. They completed the tasks in the following order.

***Empathy Manipulation*.** Participants were randomly assigned to a high or low empathy condition. All participants read an article that describes a woman named "Karen Simmons" who was driving to work with her sister when their car was hit by a drunk driver. Karen suffered extensive injuries, confining her to a wheelchair; her sister was killed. The article describes Karen's struggles with physical and emotional trauma and rehabilitation. Participants received instructions (adapted from Batson et al., 1997) to either read the article as "objectively as possible" and to "remain detached" (low empathy) or "imagine how the person in the news story feels" and consider how the accident affected her (high empathy). See Appendix B for full instructions.

***Narcissism*.** Participants completed the NPI twice: once during pre-testing at the beginning of the academic term ($\alpha = .80$) and again following the empathy manipulation ($\alpha = .84$). The NPI consists of 40 forced-choice items, with one option being more narcissistic (e.g., "If I ruled the world it would be a better place") than the other (e.g., "The thought of ruling the world frightens the hell out of me"). Participants select the option they identify with most. We adapted the instructions on the post-manipulation NPI to reflect state changes (see Appendix C). Specifically, participants indicated the option they identified with most "right now," at the

current moment. We summed the number of narcissistic choices to create a state narcissism score.

Self-esteem. Participants completed the Rosenberg (1965) Self-Esteem Scale (RSES; see Appendix D) twice: once during pre-testing ($\alpha = .93$) and again following the empathy manipulation ($\alpha = .88$). This scale consists of ten items (e.g., "I take a positive attitude towards myself") and participants indicate how much they agree with each item from 1 (*strongly disagree*) to 7 (*strongly agree*). After the manipulation, we adapted the RSES with state instructions that asked participants to respond according to how they feel "right now." Items were averaged, with higher scores indicating higher state self-esteem.

Results

We expected empathy to cause people to demonstrate less state narcissism. To test this prediction, we conducted an ANCOVA with post-manipulation narcissism scores as our dependent measure, controlling for pre-manipulation narcissism. As predicted, participants in the high empathy condition scored lower on the NPI ($M = 14.50$, $SD = 6.49$) than those in the low empathy condition ($M = 15.56$, $SD = 7.28$), $F(1, 202) = 3.94$, $p = .049$, $\eta_p^2 = .02$ (see Table 1). We also tested whether the effect of empathy on narcissism depended on initial levels of narcissism. We regressed post-manipulation NPI scores on pre-test NPI scores (mean centered), condition (effect coded: 1 = high empathy, -1 = low empathy) and their interaction. As in the previous analysis, there was a main effect of condition, $t(201) = -2.03$, $p = .044$, and a main effect of pre-test NPI scores, $t(201) = 11.41$, $p < .001$. However, the interaction was not significant, $t(201) = -1.40$, $p = .162$. Thus, initial narcissism did not moderate the effect of empathy on state narcissism.

There were also no significant differences in state self-esteem across conditions, $F(1, 201) = 1.89$, $p = .170$, $\eta_p^2 = .01$, when controlling pre-test RSES scores. This suggests that empathy reduces state narcissism without reducing state self-esteem.

Discussion

Study 1 suggests that state narcissism can be reduced by increasing communal focus. Those made to feel more empathy for a suffering protagonist endorsed fewer narcissistic tendencies than those made to feel less empathy. Although the effect size was small, these results are theoretically significant because they demonstrate that empathy can cause changes in state narcissism. There was not, however, a concurrent change in state self-esteem. Furthermore, our results suggest that the effect of empathy on state narcissism does not depend on initial trait levels of narcissism. Study 2 seeks to extend these findings by examining a different instantiation of communal focus.

Studies 2a and 2b

In Studies 2a and 2b, we investigate whether changes in self-construal affect state narcissism. Self-construal is empirically related to narcissism and closely reflects our conceptualization of communal focus. Self-construal is the extent to which one's self-concept incorporates information about the social environment and can be modeled with two dimensions: independent self-construal and interdependent self-construal (Markus & Kitayama, 1991). Those with an *independent self-construal* view their stable individual traits as important to identity and place less emphasis on group memberships and social roles. Those with an *interdependent self-construal* value harmonious group relations and view group memberships and social roles as central to identity. All individuals can have both independent and interdependent self-construals, though one may predominate. By highlighting different elements of a person's self-concept, it is

possible to situationally alter self-construal (Cross, Hardin, & Gercek-Swing, 2011). In Studies 2a and 2b, we prime independent or interdependent self-construal and examine their impact on state narcissism. In Study 2b, we measure grandiosity and psychological entitlement in addition to the NPI; these two dimensions reflect core facets of narcissism (Tamborski, Brown, & Chowning, 2012). In addition, in Study 2b we test whether the effect of communal focus on narcissism is robust enough to observe on the standard, trait version of the NPI rather than the state version. We expect that priming an interdependent self-construal, relative to an independent self-construal, will reduce state narcissism, grandiosity and entitlement.

Method

Participants. Undergraduates (Study 2a: N = 83, 69 female, M_{age} = 18.18, SD = 3.06; Study 2b: N = 98, 70 female, M_{age} = 18.86, SD = 3.03) participated in exchange for partial course credit. Study 2a participants completed mass pre-testing at the beginning of the term; Study 2b participants did not, because most data were collected in a term without mass pre-testing.

Materials and Procedure. Participants completed the experimental tasks online and in the following order.

***Self-construal Manipulation*.** Participants were randomly assigned an interdependent or independent self-construal condition. We used the similarities and differences with friends and family (SDFF) manipulation (Tarfimow, Triandis, & Goto, 1991; see Appendix E). A recent meta-analysis identified this technique as the most effective manipulation of self-construal (Oyserman & Lee, 2008). Participants answered two open-ended questions about their friends and family; either, “What makes you similar to your friends and family?” and “What do they expect you to do in the future?” (interdependent), or “What makes you different from your friends and family?” and “What do you expect yourself to do in the future?” (independent).

***Narcissism*.** As in Study 1, participants in Study 2a completed the NPI during pre-testing ($\alpha = .87$) and again after the self-construal manipulation ($\alpha = .85$). The post-test measure used state instructions (see Appendix C). In Study 2b, participants completed the NPI only after the manipulation ($\alpha = .83$), with its standard (i.e., non-state) instructions.

Psychological entitlement. In Study 2b, participants completed the Psychological Entitlement Scale (PES; Campbell et al., 2004; see Appendix F). Participants indicated their agreement with nine items such as "I honestly feel I'm just more deserving than others" and "I demand the best because I'm worth it" ($\alpha = .84$) on a scale from 1 (*strong disagreement*) to 7 (*strong agreement*). We averaged items such that higher scores indicate greater entitlement.

Grandiosity. In Study 2b, participants also completed the State-Trait Grandiosity Scale (STGS; Rosenthal, Hooley, & Steshenko, 2003; see Appendix G). Participants indicated the extent to which they possess 16 personal qualities (e.g., superior, omnipotent, envied) from 1 (*not at all*) to 7 (*extremely*) ($\alpha = .95$). Items were averaged such that higher scores indicate more grandiosity.

Results

We expected individuals primed with interdependent self-construal to report lower state narcissism, grandiosity, and psychological entitlement than those primed with independent self-construal. To test these predictions, in Study 2a and 2b, we examined post-manipulation NPI scores as a function of condition. In Study 2a, we controlled pre-test NPI scores. As predicted, this analysis revealed a significant effect of self-construal condition. Participants in the interdependent condition (2a: $M = 14.45$, $SD = 8.05$; 2b: $M = 14.36$, $SD = 6.40$) endorsed significantly fewer narcissistic items than those in the independent condition (2a: $M = 16.26$, $SD = 6.26$; 2b: $M = 17.02$, $SD = 6.64$), $F(2, 80) = 4.31$, $p = .041$, $\eta_p^2 = .05$ for Study 2a; $F(1, 96) =$

4.08, $p = .046$, $\eta_p^2 = .04$ for Study 2b (see Table 1). Likewise, in Study 2b, participants primed with interdependence displayed less grandiosity ($M = 3.17$, $SD = 1.07$) than participants primed with independence ($M = 3.69$, $SD = .90$), $F(1, 96) = 6.84$, $p = .010$, $\eta_p^2 = .07$, and participants primed with interdependence also reported marginally less entitlement ($M = 2.73$, $SD = .98$) than participants primed with independence ($M = 3.09$, $SD = 1.00$), $F(1, 96) = 3.28$, $p = .073$, $\eta_p^2 = .03$.

In Study 2a, we tested whether the effect of self-construal on narcissism depended on initial narcissism. (Parallel analyses could not be conducted for Study 2b because we did not have pre-test measures of narcissism for that sample.) We regressed post-manipulation NPI scores on pre-test NPI scores (mean centered), condition (effect coded: 1 = independent, -1 = interdependent) and their interaction. This analysis revealed a significant effect of condition, $t(79) = 2.06$, $p = .043$, and pre-test NPI scores, $t(79) = 31.51$, $p < .001$. However, the interaction was not significant, $t(79) = .12$, $p = .905$. This pattern of results suggests that the effect of self-construal on narcissism did not depend on initial levels of narcissism.

Discussion

As predicted, when people were primed with interdependent self-construal they endorsed fewer narcissistic tendencies (Study 2a and 2b), less grandiosity, and marginally less psychological entitlement (Study 2b) than those primed with independent self-construal. Thus, increasing communal focus, by priming interdependent self-construal, situationally reduced narcissistic tendencies. As in Study 1, initial narcissism did not moderate this effect in Study 2a. In addition, Study 2b suggests that communal focus reduces some of the more negative, overt aspects of narcissism reflected in grandiosity and feelings of entitlement. Furthermore, the effect of communal focus on narcissism is robust enough to observe on the standard, trait version of the NPI.

Study 3

In Study 3, we attempt to replicate and extend our findings in two ways. First, we add a no-prime control condition to determine whether changes in interdependent or independent self-construal primarily affect state narcissism. We expected participants primed with interdependent self-construal to endorse fewer narcissistic self-descriptions relative to those in the control condition. We did not expect independent self-construal to have as large an effect, because our North American participants are likely to already be high in independent self-construal (Markus & Kitayama, 1991); thus increased interdependent self-construal may be a more significant change for them and more influential in affecting narcissism.

Secondly, our self-construal manipulation in Studies 2a and 2b may have been somewhat transparent to participants. Contemplating similarities or differences to others might have caused participants to change their responses on the NPI due to demand characteristics. Thus, in Study 3 we employ a more subtle manipulation of self-construal.

Method

Participants. Undergraduates (N = 84; 61 females, M_{age} = 19.37, SD = 3.59) participated in exchange for partial course credit. All participants completed pre-testing at the beginning of the term.

Materials and Procedure. Participants completed the experimental tasks online and in the following order.

***Self-construal Manipulation*.** Participants were randomly assigned to an independent self-construal, interdependent self-construal or a no-prime control condition. We manipulated self-construal with the I/We prime task, which affects interdependent and independent self-construal by activating the concept of "I" (independent) or "we" (interdependent; Brewer &

Gardner, 1996; see Appendix H). Participants counted the pronouns in a paragraph about a trip to the city, as part of a reading comprehension task. The pronouns were either singular (i.e., I, me, my) in the independent condition, plural (i.e., we, us, our) in the interdependent condition or impersonal (i.e., it, its) in the control condition.

***Narcissism*.** Participants completed the NPI both in pre- testing ($\alpha = .85$), and after the self-construal manipulation ($\alpha = .86$; see Appendix C). In this study, we used standard trait instructions for the NPI for both administrations.

***Self-esteem*.** Participants completed the RSES in pre-testing ($\alpha = .86$) and after the self-construal manipulation ($\alpha = .93$; see Appendix D). As with the NPI, we did not use state instructions; participants indicated their agreement with each item in general.

Results

We predicted that participants primed with interdependent self-construal would report fewer narcissistic tendencies than those primed with independent self-construal and those in the no-prime control condition. We thus conducted an ANCOVA testing the effects of condition on post-manipulation NPI scores while controlling pre-test NPI scores. As predicted, there was a main effect of condition, $F(2, 80) = 5.94$, $p = .004$, $\eta_p^2 = .13$. Participants in the interdependent condition ($M = 11.97$, $SD = 5.92$) scored lower on the NPI than those in the control condition ($M = 17.48$, $SD = 7.54$), $t(55) = 3.06$, $p = .003$, and those in the independent condition ($M = 17.55$, $SD = 7.03$), $t(61) = 3.42$, $p = .001$ (see Table 1). There was no difference between the independent and control conditions, $t(46) = 0.04$, $p = .970$. This pattern of results suggests that interdependent self-construal reduces state narcissism but, at least among North American participants, independent self-construal does not increase narcissism.

We again tested whether these self-construal effects depended on initial levels of narcissism. We regressed post-manipulation NPI scores on pre-test NPI scores (mean centered), condition (effect coded: 1, 0 = independent, 0, 1 = interdependent, -1, -1 = control) and their interaction. There was a main effect of pre-test NPI scores, $t(78) = 8.80$, $p < .001$, and the interdependent condition, $t(79) = -3.36$, $p = .001$, on post-manipulation narcissism. There was, however, no significant interaction, $R^2\text{-}change = .001$, $p = .905$.

There were no effects of condition on self-esteem, $F(2, 79) = .68$, $p = .511$, $\eta_p^2 = .02$, when controlling pre-test self-esteem. This suggests that changes in self-construal affect narcissism specifically rather than self-esteem.

Discussion

Study 3 conceptually replicated Studies 2a and 2b with a subtle manipulation of self-construal, suggesting that the effect of self-construal on narcissism is not due to demand characteristics. As hypothesized, participants primed with interdependent self-construal endorsed fewer narcissistic tendencies than those primed with independent self-construal and those in the control condition. This pattern of results suggests that interdependent self-construal reduces narcissism, rather than independent self-construal increasing it. One reason independent self-construal did not significantly affect narcissism relative to the control condition may be that the impersonal pronouns used in the control condition ("it," "its") may have been interpreted by participants to be relatively agentic in orientation. Our sample was also likely high in independent self-construal to begin with (Markus & Kitayama, 1991), possibly limiting the impact of the independence manipulation. It is possible that in other contexts or within different cultural samples, independent self-construal would also increase narcissism. This study thus provides additional evidence that communal focus reduces state narcissism. In Study 4, we

explore whether the situational changes in narcissism observed in Studies 1-3 have additional psychological consequences.

Study 4

Studies 1-3 suggest that a communal focus situationally reduces narcissism. In Study 4, we explore whether these changes predict changes in other constructs related to narcissism, namely fame-striving and prosocial behavior. Narcissists display a heightened desire to achieve fame and a celebrity lifestyle (Kasser & Ryan, 1996; Maltby, 2010). The extended agency model posits that a desire for fame and a celebrity lifestyle is part of narcissistic self-regulation (Campbell & Foster, 2007). The desire for fame may thus increase or decrease as narcissism changes. We expect that reducing state narcissism through communal focus will attenuate the desire to be famous.

Similarly, narcissists may be relatively unhelpful. Narcissism is related to hostility (Morf & Rhodewalt, 2001), aggression (Bushman & Baumeister, 1998), disagreeableness (Paulhus, 2001), and a lack of empathy (Watson & Morris, 1991). All of these qualities may reduce prosocial tendencies. We thus explore the relations between narcissism and decisions to help as well as perceptions of whether other people deserve help. We expect that a more communal focus will reduce state narcissism, which may increase intentions to help others and perceptions that others deserve help.

Thus, in Study 4 we attempt to replicate our finding that priming interdependent self-construal reduces narcissistic tendencies. We further expect changes in narcissism to mediate changes in the desire to be famous and prosocial behavior.

Method

Participants. Undergraduates (N = 164; 134 females, M_{age} = 20.01, SD = 4.47) participated in exchange for partial course credit.

Materials and Procedure. Participants completed this study online. They completed the experimental tasks in the following order.

***Self-construal Manipulation*.** Participants were randomly assigned to an independent or interdependent prime condition. Participants completed the I/We prime used in Study 3, although we did not include a no-prime condition.

***Narcissism*.** Participants then responded to the 40-item NPI (α = .87) with state instructions (see Appendix C). Participants did not complete a pre-test measure of narcissism because most data were collected in a term when pre-testing was unavailable.

***Fame*.** Participants also completed three 7-item subscales from Maltby's (2010) fame scale, assessing the degree to which people care about fame (see Appendix I). We included subscales assessing fame intensity, celebrity lifestyle, and perceived suitability for fame, as these subscales correlate with narcissism (Maltby, 2010). The fame intensity subscale reflects an intensity towards, and desperation for, being famous (e.g., "Very little matters to me apart from being famous") (α = .90). The celebrity lifestyle subscale reflects a desire for celebrity lifestyle that involves easy access to money and publicity (e.g., "I want to be famous because I want everyone to know my name) (α = .87). The perceived suitability subscale measures a belief in one's suitability for fame (e.g., "I've got what it takes to be famous") (α = .90). Participants responded on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were averaged within each subscale such that higher scores indicate a more intense desire to be famous, increased desire for celebrity lifestyle and increased perceptions of fame suitability.

***Helping and Deservingness*.** We also asked participants to rate how willing they would be to help others in need and their perceptions of whether those others deserve help (Conway & Peetz, 2012; see Appendix J). Participants read four scenarios describing a person in need of help; for example:

> Imagine you are one of Bill's neighbors. One day you see him working in his garden using a small hand-tool where a bigger one would be much easier to use. You happen to have the exact tool he needs, but you were planning to use it yourself later that day. Bill asks if you have any tools that would help make his gardening chores easier.

The other scenarios involve "Cindy" needing spare change, delivering a parcel for "Susan," and letting "Jim" move ahead in a lunch line. Participants were asked to indicate their willingness to help each person on a scale from 1 (*extremely unlikely*) to 9 (*extremely likely*). We averaged these items to create an index of willingness to help ($\alpha = .62$). Participants also indicated how much each person deserved help on a scale from 1 (*not at all*) to 9 (*very much*). We averaged these items to create an index of deservingness perceptions ($\alpha = .85$).

Results

We conducted independent samples *t*-tests to determine whether the self-construal primes affected state narcissism, willingness to help, perceptions of deservingness, and the fame interest subscales. As predicted, and consistent with our previous findings, there was a significant effect of condition on state narcissism whereby those in the interdependent condition ($M = 13.27$, $SD = 6.49$) endorsed fewer narcissistic tendencies than those in the independent condition ($M = 15.62$, $SD = 7.78$), $t(161) = -2.09$, $p = .038$, $\eta_p^2 = .03$ (see Table 1).

We also found that self-construal affected fame intensity; those in the independent condition ($M = 1.33$, $SD = .40$) reported greater fame intensity than those in the interdependent

condition (M = 1.17, SD = .28), $t(142) = -2.86$, $p = .006$. Likewise, participants in the independent condition (M = 1.84, SD = .78) wanted a celebrity lifestyle marginally more than those in the interdependent condition (M = 1.61, SD = .63), $t(143) = -1.94$, $p = .055$. However, there was no difference across conditions on the perceived suitability for fame subscale, $t(143) = -1.06$, $p = .289$.

For the helping measures, there was no effect of condition on willingness to help, $t(161) = .19$, $p = .848$. There was, however, a marginally significant effect of self-construal on perceptions of how deserving each person was of help; participants in the interdependent condition (M = 6.17, SD = 1.48) thought others were more deserving of help than those in the independent condition (M = 5.68, SD = 1.87), $t(159) = 1.86$, $p = .065$.

We expected narcissism to mediate the effects of self-construal on the subscales of fame interest and perceptions of deservingness, and conducted mediation analyses to test these predictions. We effect coded self-construal conditions (interdependent = 1, independent = -1) as our independent variable and used NPI scores as our mediator. We tested mediation in each case with the bootstrapping procedure advocated by Preacher and Hayes (2004, 2008) with 5000 re-sampling iterations.

For fame intensity (see Figure 1), consistent with the analyses reported above, the mediation analysis revealed significant effects of self-construal condition on state narcissism and fame intensity. When controlling condition, the effect of narcissism on fame intensity was significant, $b = .01$, $t(144) = 3.28$, $p = .001$. The indirect effect of self-construal on fame intensity, mediated by narcissism, was also significant, $b = -.02$ (SE = .01), with the 95% confidence interval excluding zero (lower bound = -.05, higher bound = -.01). These results suggest that the effect of self-construal on fame intensity was mediated by state narcissism. A

reverse mediation model, with desire for fame as the mediator and narcissism as the outcome did not fit the data well, as the confidence interval included zero.

A similar pattern was found for the celebrity lifestyle subscale (see Figure 2). When controlling condition, the effect of state narcissism on desire for celebrity lifestyle was significant, $b = .04$, $t(145) = 5.85$, $p < .001$. The indirect effect was also significant, $b = -.07$ ($SE = .03$), with the 95% confidence interval excluding zero (lower bound = -.14, higher bound = -.02). This analysis suggests that the effect of self-construal on the desire for celebrity lifestyle is mediated by state narcissism.[2] Again, a reverse mediation model did not fit the data well, as the confidence interval included zero.

Lastly, we tested whether changes in narcissism mediated perceptions of how deserving others were of help (see Figure 3). When controlling condition, the effect of state narcissism on perceptions of deservingness was significant, $b = -.04$, $t(161) = -2.39$, $p = .018$. The indirect effect was also significant, $b = .06$ ($SE = .56$) with the 95% confidence interval excluding zero (lower bound = .01, higher bound = .14). These analyses support a model in which the effects of self-construal on perceptions of others' deservingness of help are mediated by state narcissism. The reverse mediation model included zero in the confidence interval, and did not fit the data.

Discussion

Study 4 provides further evidence that communal focus reduces state narcissism. Priming interdependent self-construal caused participants to endorse fewer narcissistic self-descriptions than priming independent self-construal. These changes in state narcissism, moreover, mediated

[2] There is disagreement among researchers about whether a direct effect of an independent variable on a dependent variable is necessary for mediation to fit the data (e.g., Mackinnon, 2000; Shrout & Bolger, 2002). If we assume that it is not necessary, then there is also evidence that self-construal mediates changes in perceived fame suitability; there is a significant indirect effect mediated through state narcissism, $b = .19$, $SE = .08$, with the 95% confidence interval excluding zero (lower bound = .05, higher bound = .35).

changes in closely-allied constructs. Specifically, priming interdependent self-construal reduced fame intensity (i.e., the overriding desire to be famous) and desire for celebrity lifestyle. It also led participants to perceive others as being more deserving of help. We found evidence that all of these changes were mediated by changes in state narcissism. Study 4 thus provides evidence that the situational changes in narcissism observed in Studies 1-3 are psychologically meaningful. A more communal focus makes people less concerned with being famous and more apt to see others as deserving of help and these changes may be caused by situational reductions in state narcissism.

Notably, changes in state narcissism were not associated with changes in willingness to help. This may be because of the relatively low reliability of the willingness to help measure or because participants were responding to hypothetical scenarios for which it was easy to report willingness to help without incurring personal costs. However, the fact that people experiencing higher levels of narcissism were just as likely to report a willingness to help but viewed others' as less deserving of help may suggest that they were more motivated by egoistic concerns than those experiencing less narcissism. Being willing to help even those perceived to be undeserving of help may be a way to increase a sense of power and narcissistic esteem. This interpretation is speculative but warrants further investigation.

Supplementary Analyses

One concern with the current findings might be that our results could be driven by demand characteristics. Participants encouraged to adopt a more communal focus on others might intuit that it is inappropriate to endorse self-centered statements on the NPI. A demand characteristic explanation might suggest that the effects found on narcissism would be driven mainly by the interpersonally-oriented items on the NPI. To address this concern, we conducted

a series of supplementary analyses for each study, examining underlying factors of the NPI. We examined seven- (Raskin & Terry, 1988), four- (Emmons, 1987), and three-factor solutions (Ackerman et al., 2011) for the NPI within each study. The effect of communal focus on narcissism was not driven by any specific underlying factor of the NPI, as there were no consistent effects across studies on any of the subscales. In particular, factors with more interpersonal content (e.g., Entitlement/Exploitativeness) were not more affected than other factors. These analyses reinforce the impression that narcissism as a whole changes coherently in response to changes in communal focus; it is not simply one facet of narcissism that changes. Indeed, in Study 2b, interdependent self-construal reduced grandiosity (as well as psychological entitlement). Grandiosity is a central component of narcissism, but does not include overtly communal content.

We also had two independent raters code the NPI items into two categories: (1) those for which the non-narcissistic option is more communal than the narcissistic option (e.g., "I prefer to blend in with the crowd," vs. "I like to be the center of attention") and (2) those for which the options are equally communal (e.g., "I always know what I am doing," vs. "Sometimes I am not sure of what I am doing") (Cohen's kappa =.78). (The narcissistic option was never more communal). Disagreements were resolved through discussion. The coders also rated the communal content of each item, from 1 (*no communal content*) to 4 (*high degree of communal content*) (inter-rater reliability = .83). Items for which the forced-choice options are equally communal had significantly less communal content (M = 2.32, SD = 1.21) than those for which the non-narcissistic option was more communal (M = 4.04, SD = .66), $t(38) = 4.85$, $p < .001$. If demand characteristics are driving our effects, they should be stronger on items for which the non-narcissistic option is more communal. This, however, was not the case. Meta-analyses

across all studies (Rosenthal, 1979), found that communal focus affected items with similarly communal options ($z = 2.74$, $p = .006$) as well as those for which the non-narcissistic option is more communal ($z = 2.15$, $p = .032$). These analyses do not support a demand characteristic explanation.

General Discussion

Narcissism has been conceptualized as a coherent set of intra- and interpersonal processes that are mutually reinforcing (e.g., Campbell & Foster, 2007; Morf & Rhodewalt, 2001). Consistent with this view, we examined whether state narcissism is reduced when a core element of narcissism—greater concern with agency than communion—is reduced. Across five studies, we found that increased communal focus decreased narcissistic tendencies. In Study 1, participants induced to feel greater empathy for a person in distress expressed less state narcissism. In Studies 2-4, participants primed with interdependent self-construal demonstrated less state narcissism, including grandiosity and entitlement, than those primed with independent self-construal. The effect of self-construal, moreover, was driven by interdependent rather than independent self-construal. In Study 3, participants primed with interdependent self-construal reported fewer narcissistic tendencies than those in a no-prime control condition, whereas those primed with independent self-construal did not differ from control participants. Lastly, in Study 4, situational changes in narcissism mediated changes in the desire for fame and a celebrity lifestyle and perceptions that others deserve help.

These findings extend theorizing about the nature of narcissism and support models of narcissism that view it as a set of mutually-reinforcing elements (e.g., Campbell & Foster, 2007; Morf & Rhodewalt, 2001). We tested the prediction that narcissism has a state-like and context-dependent component that fluctuates across situations. We found that narcissism changes when

one element of narcissism, in this case communal focus, is altered. Past research found that when this aspect of narcissism is changed (e.g., increasing a sense of personal connection with another person, or communal activation) some of the negative interpersonal consequences of narcissism are curtailed (Finkel et al., 2009; Konrath et al., 2006). The present studies extend this research by demonstrating that state narcissism changes in accordance with changes in communal focus. That is, a broad range of core narcissistic tendencies are reduced by enhancing a communal focus on others. These changes in state narcissism, moreover, mediated changes in constructs related to narcissism, such as an overriding desire for fame and perceptions that others deserve help. Indeed, we expect that the effects observed by Finkel et al. (2009) and Konrath et al. (2006) reflect underlying changes in state narcissism. Enhancing a communal focus reduces state narcissism, which may in turn reduce many of narcissism's deleterious consequences.

Our findings are also notable for demonstrating situational changes in narcissism, as measured by the NPI. From a theoretical standpoint, our results suggest that narcissism can function as a state that fluctuates across contexts (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). Research in narcissism has moved beyond a strict categorical conceptualization of narcissism to a dimensional conceptualization (see Foster & Campbell, 2007). The current work challenges a strict trait view of narcissism and aligns research on narcissism more with context-dependent models of personality (Cervone & Shoda, 1999; Mischell & Shoda, 1995). Such models specify that aspects of personality emerge in particular contexts. Our findings suggest that narcissism may be less evident and influential in contexts that highlight communion rather than agency.

From a practical standpoint, it is important for researchers to recognize that situational factors influence scores on the NPI. This insight may have important implications for

interpreting narcissism research. Research conducted on university students in exchange for course credit may create an "invisible context" that highlights agency concerns, because participants behave primarily in the context of their academic aspirations, even if their attention is not specifically drawn to them (McConnell, 2011). Such studies may thus give a biased picture of the prevalence of narcissistic tendencies and how they operate. In other contexts, such as among family or friends, communal considerations may be more salient and narcissistic tendencies may be less prominent.

Limitations

As previously mentioned, one concern with the current research may be that our results could be driven by demand characteristics. Indeed, the manipulations of empathy and self-construal in Studies 1, 2a and 2b may have been fairly transparent to participants. However, a subtle manipulation of communal focus, the I/We prime, also produced changes in narcissistic tendencies. The effectiveness of these subtle manipulations argues against a demand characteristic explanation of our results. This explanation is also difficult to reconcile with the fact that we observed no effects of self-construal on helping intentions in Study 4. Finally, our supplementary analyses demonstrate that communal focus reduced endorsement of NPI items that had little communal content and for which the narcissistic alternatives were not less communal than the non-narcissistic alternatives. It is thus unlikely that our effects reflect the influence of demand characteristics.

Another limitation concerns the nature of our samples. We recruited only non-Asian participants, because Asian individuals are typically less narcissistic and have more interdependent self-construal than North American individuals (Foster et al., 2003; Fukunishi et al., 1996). We reasoned that the inclusion of Asian participants might make it more difficult to

test our hypotheses, by restricting our ability to effect changes in self-construal or narcissism. This restriction on our samples, however, may have contributed to the fact that we observed changes in state narcissism only in response to interdependent self-construal primes. Because our North American participants were likely already high in independent self-construal, priming independent self-construal may have affected them less than priming interdependent self-construal. With a more culturally-diverse sample, we might have observed changes in narcissistic tendencies in response to increased independent self-construal as well. We could also have tested whether cultural background influences the processes we observed.

Implications for Treating Narcissism

Notably, this research may inform ways to effectively treat narcissism. Although a number of treatments for Narcissistic Personality Disorder (NPD) exist, these treatments have understandably developed before firm empirical evidence could identify factors that cause and maintain narcissism (Thomaes & Bushman, 2011). Recent work has begun to fill this gap with narcissism research conducted in non-clinical samples. This work may provide important insights into factors that contribute to NPD (Miller & Campbell, 2010a; 2010b). Identifying such factors is critical for designing effective interventions to reduce narcissistic tendencies. Recent findings, as noted earlier, suggest that communal focus can reduce some of the deleterious consequences of narcissism (Finkel et al., 2009; Konrath et al., 2006). Our results extend this work by suggesting that state narcissism can be reduced by increasing communal focus. Our findings thus help to establish a causal connection between communal focus and narcissism that can inform interventions.

As with other basic research that identifies factors that contribute to narcissism, our work does not delineate clear-cut treatment strategies (Thomaes & Bushman, 2011). A number of

steps must be taken before our work can meaningfully inform interventions. First, strategies must be developed to ensure that initial changes in narcissism can be maintained over longer durations. The findings observed here are likely short-lived, but they can inform efforts to effect long-term changes in narcissism. Techniques have been developed to induce prolonged changes in communal focus (Gilbert, 2005; Hofmann, Grossman, & Hinton, 2011). Our findings suggest that these approaches may reduce narcissism. It will be particularly important, however, to test directly whether such interventions are effective for individuals with NPD. Although we did not observe any moderating effects of initial narcissism, our samples likely did not contain many individuals who would meet the clinical criteria for NPD.

Reducing narcissism by enhancing communal focus is a promising approach because it does not require "tearing down" narcissists' grandiosity, but rather increasing narcissists' communal concerns and sense of connection to others (see Campbell & Foster, 2007). This approach may thus defuse narcissists' defensive tendencies. Increasing a communal focus, in combination with established treatments for narcissism, may be a "safe" way to reduce narcissism without engendering defensive resistance to treatment. Indeed, it may be a particularly desirable approach to reducing narcissism because we found that it did not concomitantly reduce self-esteem. The adaptive consequences of narcissism are entirely mediated by self-esteem (Sedikides et al., 2004), so increasing communal focus may reduce the maladaptive aspects of narcissism without undermining its more adaptive elements.

Conclusions

This research helps to further delineate the nature of narcissism. Campbell and Foster (2007) suggested that narcissism can function as a state, fluctuating within individuals across situations as elements of narcissism are enhanced or diminished. The present studies are, to our

knowledge, the first to directly examine situational changes in narcissism. Past research has found that changing one element of narcissism (e.g., increasing a sense of connection to others) can curtail some of the detrimental consequences of narcissism (e.g., Finkel et al., 2009; Konrath et al., 2006). Across five studies, we extend this research by demonstrating that communal focus reduces a broad range of narcissistic tendencies, reflected in state narcissism. Thus narcissism may have a state-like component that waxes and wanes across situations, particularly as one feels more or less connected to others. Although there are stable individual differences in narcissism that may have a heritable component (Holtzman & Strube, 2011), our findings suggest that there are also meaningful within-person variations in narcissism. Our findings may imply that everyone has the propensity to be narcissistic in some situations but also that we can be less narcissistic by focusing more communally on other people.

Table 1

Means (Standard Deviations) of State Narcissism as a Function of Communal Focus Condition for Studies 1 – 4.

	Communal Focus		
	Low M (SD)	**Control M (SD)**	**High M (SD)**
Study 1: Empathy	15.56 (7.28)	--	14.50 (6.49)
Study 2a: Self-construal	16.26 (6.26)	--	14.45 (8.05)
Study 2b: Self-construal	17.02 (6.64)	--	14.36 (6.40)
Study 3: Self-construal	17.55 (7.03)	17.48 (7.54)	11.97 (5.92)
Study 4: Self-construal	15.62 (7.78)	--	13.27 (6.49)

Note. The means presented for Studies 1, 2a and 3 are adjusted because we control for pre-test NPI scores. In Study 1, high and low communal focus correspond to high and low empathy conditions; in Studies 2-4, high and low communal focus correspond to interdependent and independent self-construal primes with an additional no-prime control in Study 3.

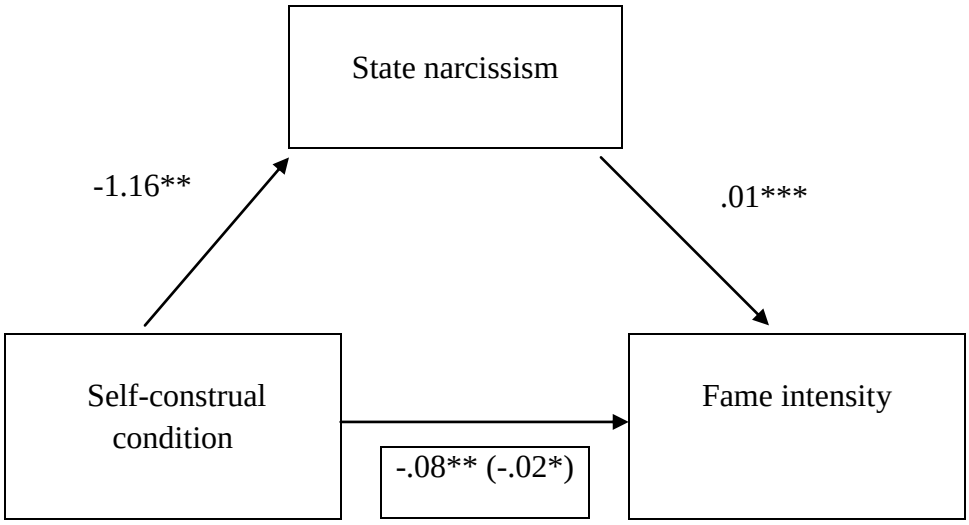

Figure 1. Effect of interdependent self-construal on fame intensity mediated by state narcissism.

Note. Path values represent unstandardized regression coefficients. Conditions were effect coded with interdependent self-construal = 1 and independent self-construal = -1. The value outside of the parentheses represents the total effect of self-construal on fame intensity prior to the inclusion of the mediating variable. Value in parentheses represents the indirect effect, from bootstrapping analyses, of self-construal on fame intensity after the mediator was included. *p < .05, **p < .01, *** p = .001.

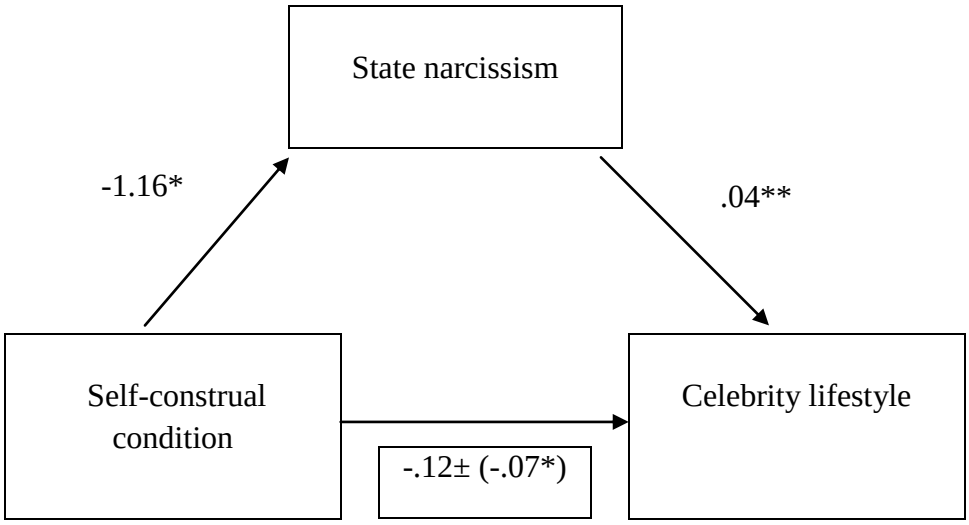

Figure 2. Effect of interdependent self-construal on celebrity lifestyle mediated by state narcissism.

Note. Path values represent unstandardized regression coefficients. Conditions were effect coded with interdependent self-construal = 1 and independent self-construal = -1. The value outside of the parentheses represents the total effect of self-construal on celebrity lifestyle prior to the inclusion of the mediating variable. Value in parentheses represents the indirect effect, from bootstrapping analyses, of self-construal on celebrity lifestyle after the mediator was included. ±p < .10, *p < .05, **p < .01.

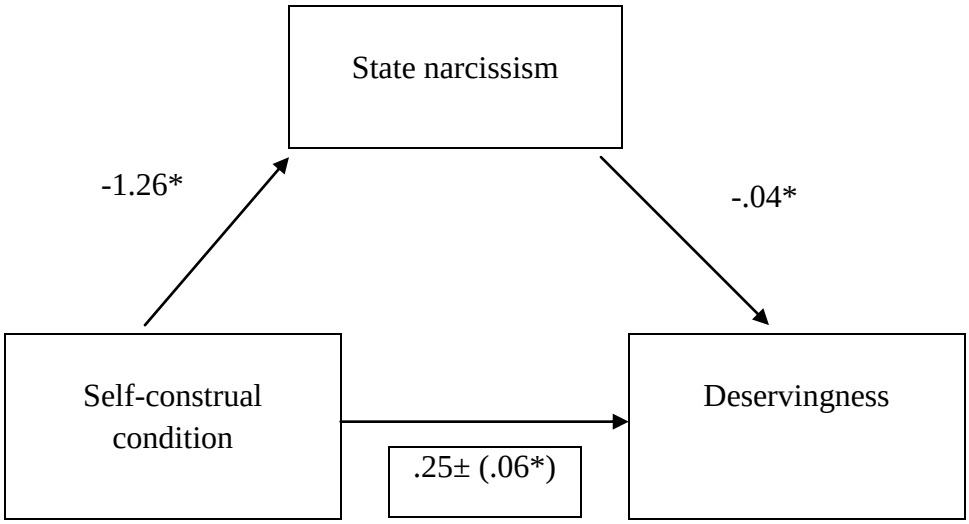

Figure 3. Effect of interdependent self-construal on judgements of how deserving others are of help mediated by state narcissism.

Note. Path values represent unstandardized regression coefficients. Conditions were effect coded with interdependent self-construal = 1 and independent self-construal = -1. The value outside of the parentheses represents the total effect of self-construal on deservingness prior to the inclusion of the mediating variable. Value in parentheses represents the indirect effect, from bootstrapping analyses, of self-construal on deservingness after the mediator was included. ±$p < .10$, * $p < .05$

CHAPTER 3 - MANUSCRIPT 2_b

THE WAX AND WANE OF NARCISSISM:

GRANDIOSE NARCISSISM AS A PROCESS OR STATE

[b] This manuscript is published in the *Journal of Personality*. Copyright agreement is provided within Appendix K.

Abstract

Though grandiose narcissism has predominantly been studied in structural terms—focused on individuals' general tendencies to be more or less narcissistic—we tested whether it also has a meaningful process or state component. Using a daily diary study methodology and multilevel modeling (N = 178, 146 female; M_{age} = 18.86, SD = 2.21), we examine whether there is significant variability in daily state narcissism and whether this variability relates systematically to other psychological states (i.e., self-esteem, stress) and daily events. We assessed state narcissism and daily experiences over a ten day period. We observed significant within-person variability in daily narcissism. Notably, this variability was not simply random error, as it related systematically to other psychological states and daily events. Specifically, state narcissism was higher when people experienced more positive agentic outcomes (e.g., having power over someone) or more positive communal outcomes (e.g., helping someone with a problem). State narcissism was lower on days people experienced greater felt stress. These relations held when state self-esteem, gender and trait narcissism were controlled. These findings suggest that grandiose narcissism has a meaningful process or state component.

INTRODUCTION

Narcissism, in popular books and web sites, is often cast in categorical terms, such that some people are said to be narcissists whereas others are not. This conceptualization is consistent with clinical accounts of Narcissistic Personality Disorder (e.g., Cooper & Ronningstam, 1992). Considerable research also supports a subclinical, dimensional view of grandiose narcissism, such that some people are more narcissistic than others (see Campbell & Miller, 2011). Both of these views are structural conceptualizations of narcissism, focusing on what people are like in general (Fleeson, 2001). In this article, we explore the possibility that grandiose narcissism has, in addition, a process or state component by examining the possibility of short-term, within-person variability in narcissism: Everyone may be more or less narcissistic at different times.

Exploring the possibility of narcissistic process is important because it can provide increased fidelity to narcissism research: Rather than view variability around individuals' mean-level of grandiose narcissism as unpredictable error, such variability might be systematically studied. In addition, studying situational changes in state grandiose narcissism may provide insights into factors that cause narcissism. Researchers have recently observed changes in narcissism after some social media use, experiences of empathy and primes of interdependent self-construal (Gentile, Twenge, Freeman, & Campbell, 2012; Giacomin & Jordan, 2014). Yet the extent to which narcissism fluctuates across time and situations, and the extent to which such fluctuations are meaningful, remains unknown. Using a diary study methodology and multilevel modeling, we test the magnitude of variability in daily narcissism and the extent to which it is systematically related to other psychological states (i.e., self-esteem, stress) and daily events.

Personality States

Some researchers have begun to systematically examine intra-individual variability in

personality constructs (e.g., Baird, Le, & Lucas, 2006; Bleidorn, 2009; Church et al., 2013; Fleeson, 2001; Fournier, Moskowitz, & Zuroff, 2008; Kernis & Waschull, 1995; La Guardia & Ryan, 2007; Leikas, Lonnqvist, & Verkasalo, 2012). Fleeson's (2001) density distribution approach to personality, for example, suggests that personality consists of both traits and states: Personality traits reflect general tendencies of behaving in particular ways, whereas personality states reflect within-person variability in behavior across contexts or situations. An individual might thus behave in a fairly extroverted manner in one situation but a fairly introverted manner in another. Indeed, the Big 5 personality traits display considerable within-person variability in daily measures, suggesting that they manifest differentially in behavior across situations (Church et al., 2013; Fleeson, 2001, 2004). This within-person variability, moreover, is psychologically meaningful (Fleeson, 2001; Fleeson, 2007; Fleeson & Leicht, 2006). It is related to situational goals and influences subjective well-being (Heller et al., 2007). Similarly, self-esteem also has both a stable trait component and a state component which fluctuates daily (Kernis, 2003; 2005). The extent to which self-esteem fluctuates in daily measures predicts meaningful psychological outcomes such as hostility and defensiveness (Jordan & Zeigler-Hill, 2013; Kernis, Grannemann, & Barclay, 1989; Kernis, Cornell, Sun, Berry, & Harlow, 1993). Thus, people are variable in their manifestations of personality traits depending on the context; that is, they display meaningful personality states.

State Narcissism

People might also display meaningful state narcissism. Pertinently, we focus on subclinical grandiose narcissism. Narcissism can assume grandiose or vulnerable forms (Dickinson & Pincus, 2003; Rathvon & Holmstrom, 1996; Wink, 1991). Grandiose narcissism is arrogant, extraverted, and exploitative whereas vulnerable narcissism is more fragile, introverted,

and neurotic, although both forms entail significant entitlement and disagreeableness. In the present study, we assess grandiose narcissism using the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). Although grandiose narcissism is relatively adaptive, it has significant aversive consequences. Grandiose narcissists are aggressive, greedy, domineering, and insincere (Campbell & Miller, 2011). In addition, NPI-16 scores (used here) correlate with the five-factor trait profile rated by experts as being prototypic of individuals with NPD, suggesting the NPI does assess significant pathological aspects of narcissism (Miller, Lynam, & Campbell, 2014).

Grandiose narcissism is characterized by arrogance, self-absorption, vanity, and entitlement. People may, however, vary across situations in the degree to which they display such tendencies in their beliefs and demeanor. This possibility is consistent with early psychodynamic theories of narcissism which approached it as a personality process or state rather than a fixed individual difference (see Levy, Ellison, & Reynoso, 2011). It is also consistent with models of narcissism that conceptualize it as a regulatory system (Campbell & Foster, 2007; Morf & Rhodewalt, 2001). These models view narcissism as a coherent set of characteristics, abilities, strategies, behaviors and emotions that are mutually reinforcing and orient individuals toward self-enhancement and positive self-feelings. These models also posit that narcissism fluctuates across situations.

The extended agency model, for example, posits four core elements of narcissism (Campbell & Foster, 2007; Foster & Brennan, 2010): (1) entitled and inflated self-views, (2) desire for self-esteem, (3) approach orientation, and (4) greater concern with agency than communion. These elements are viewed as being connected by positive feedback loops, such that increases in one element are likely to cause increases in other elements. Situations that highlight an individual's competence, for example, may fuel the individual's approach orientation or

desire for self-esteem. Consistent with psychodynamic models of narcissism, system models suggest that narcissism is meaningfully variable across contexts and situations. Some situations or events may enhance narcissism, whereas others may diminish it.

Indeed, recent research suggests that grandiose narcissism may change in response to situational affordances (Gentile et al., 2012; Giacomin & Jordan, 2014). People report higher levels of narcissism after perusing their MySpace pages, relative to interacting with Google Maps (Gentile et al., Study 1; but see, Gentile et al., Study 2; Horton, Reid, Barber, Miracle & Green, 2014). People also report less narcissism after being induced to experience empathic concern or in response to interdependent self-construal primes (Giacomin & Jordan, 2014). Such findings suggest the possible utility of examining situational changes in narcissism for understanding factors that affect narcissism. The extent to which such changes are common and psychologically meaningful, however, remains unclear.

The Current Research

In the present study, we used a daily diary methodology to measure state grandiose narcissism across a 10-day period, in order to examine whether there is significant variability in grandiose narcissism and whether this variability relates systematically to other psychological variables. An important objective of the present study was to assess whether changes in state narcissism are meaningful. If narcissism is significantly variable across relatively short durations, it is important to demonstrate that such variability is not simply measurement error. We thus identified and measured several events and psychological states that might serve as antecedents or consequences of changes in narcissism. First, we assessed daily self-esteem, given that it is a well-established construct (see Jordan & Zeigler-Hill, 2013) and self-esteem is positively related to narcissism. Accordingly, it is important to control daily self-esteem in our

analyses of daily narcissism in order to assess its incremental validity beyond daily self-esteem.

For the remaining variables, we assumed that similar associations would hold for state and trait narcissism based on the principle of similarity between states and traits within the density distribution approach to personality (Heller at al., 2007; Fleeson, 2001). Consistent with the expectations of the extended agency model (Campbell & Foster, 2007), we assessed a number of positive events that reflect agentic concerns, including being assigned an important role in a group, and receiving recognition from others. Trait grandiose narcissism is associated with a focus on agentic concerns (Campbell & Foster, 2007). Accordingly, we predicted that positive agentic events would increase state narcissism on days that they occurred.

We also assessed events that reflect more communal concerns, such as doing something caring for someone else, having a pleasant interpersonal interaction, and giving someone a gift. We predicted that such events would reduce narcissism on days that they occurred. Our predictions here, however, were more tentative. Although narcissism is clearly associated with high levels of agency, it is largely associated with indifference toward communion rather than especially low levels (Jones & Paulhus, 2011). In addition, recent evidence suggests that narcissistic motives can, in some individuals, increase communal self-enhancement and grandiosity (Gebauer, Sedikides, Verplanken, & Maio, 2012). These tendencies have been described as communal narcissism, which is modestly positively correlated with (agentic) narcissism. We therefore assessed disproportionately more communal than agentic events in order to get a clearer sense of how state narcissism might relate to positive communal events.

Lastly, we included measures of daily felt stress. Narcissism is generally adaptive and associated with psychological well-being and positive affect (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Although narcissism is associated with increased physiological

stress reactions, such as increased cortisol (Reinhard, Konrath, Lopez, & Cameron, 2012), narcissists self-report feeling less stress and more competence in response to stressors (Buntrock & Reddy, 1992). We thus predicted that change in state narcissism would relate negatively to change in felt stress.

To summarize, we sought to document the existence of significant within-person variability in state narcissism. We then aimed to examine the extent to which such variability is systematically associated with other psychological constructs. In particular, we expected that events that highlight positive agentic outcomes would be associated with greater state narcissism. We expected that events that highlight positive communal outcomes would most likely be associated with lower state narcissism. Finally, we expected that state narcissism would relate negatively to felt stress, such that on days when people display higher narcissism, they will self-report less stress. We expected all of these relations to hold when controlling daily self-esteem, providing evidence for the discriminant validity of state narcissism.

Method

Participants

Undergraduates (N = 178; 146 female) completed the study online in exchange for course credit. Participant age ranged from 17 to 39 (M = 18.86, SD = 2.21). The ethnic backgrounds were 72.7% Caucasian, 12.6% Asian, 2.2% Hispanic, 1.6% Black, 1.6% First Nations, and 9.3% undisclosed. On average, participants completed 5.27 (SD = 3.03) daily reports (1294 in total).

Materials and Procedure

Participants completed an initial intake survey and were emailed daily surveys over the next 10 days. The first survey was sent 24 hours after the intake survey. Each subsequent survey was sent roughly 24 hours apart in late afternoon. Participants completed tasks in the following

order:

Narcissism. During the initial intake survey, participants completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988; see Appendix C), a widely used measure of grandiose narcissism. The NPI consists of 40 forced-choice items, with one option being more narcissistic (e.g., "If I ruled the world it would be a better place") than the other (e.g., "The thought of ruling the world frightens the hell out of me"). Participants select the option they identify with most. The number of narcissistic choices was summed to create a trait narcissism score ($\alpha = .83$).

In each of the daily surveys, participants completed a short validated version of the NPI. The NPI-16 (Ames et al., 2006; See Appendix L) contains 16 of the original items from the NPI. We adapted the instructions to reflect state instructions. Specifically, participants indicated the option they identified with most "right now," at the current moment. The number of narcissistic choices was summed to create a state narcissism score for each of the ten days ($\alpha = .76$).

Self-esteem. During the intake survey, participants completed the Rosenberg (1965) Self-Esteem Scale ($\alpha = .88$; see Appendix D). It consists of ten items (e.g., "I take a positive attitude towards myself") and participants indicate how much they agree with each item from 1 (*strongly disagree*) to 7 (*strongly agree*). Items were averaged, with higher scores indicating higher trait self-esteem.

In the daily surveys, participants responded to the statement "I have high self-esteem" from 1 (*not very true of me*) to 5 (*very true of me*). Past research demonstrates that this single item validly assesses self-esteem (Robins, Hendin, & Trzesniewski, 2001; See Appendix M). Scores from this item were used as a daily measure of self-esteem.

Daily events. In each daily survey, participants were asked to indicate whether a series of

events had occurred in the previous 24 hours (see Appendix N), and responses were dummy coded (1 = yes, 0 = no). The daily events reflected positive outcomes in agentic or communal domains. The three agentic events were: “were you assigned to an important role in a group?”; “did you feel that you had power over anyone?”; and “did you receive any recognition?” The nine communal events were: “did you have a pleasant interaction with someone?”; “did someone do something caring for you?”; “did you do something caring for someone else?”; “did you give someone a gift?”; “did you help someone with a problem?”; “did you share something meaningful about yourself with someone?”; “did you volunteer your time for an organization, cause, or event?”; “did you donate any money to an organization, cause, or event?”; and “did you feel concerned for anyone?” We summed the number of agentic events and communal events to create composites of agentic and communal daily events, respectively.

Felt stress. We measured participants’ subjective experiences of daily stress (see Appendix O). Participants indicated how “stressed out or anxious,” “overwhelmed by schoolwork or other responsibilities,” and “socially isolated” they felt over the previous 24 hours on a scale from 1 (*not at all*) to 7 (*extremely*). We averaged these three items to create a measure of daily stress ($\alpha = .77$).

Analytic Strategy

The daily measures in this study have a nested structure, such that daily reports are nested within individuals. Accordingly, we used multilevel modeling to analyze our data. We first conducted a series of multilevel random-coefficient models to determine the best-fitting unconditional model. A series of models were then fit including time-invarying Level 2 variables (i.e., trait narcissism, trait self-esteem and gender) and time-varying Level 1 variables (i.e., daily agentic and communal events, stress, and self-esteem). All covariates were entered into the

model as fixed effects. Non-significant variables were eliminated in a stepwise fashion until a final model with only significant covariates remained.

To facilitate interpretation, all time-invariant covariates were parameterized by grand mean centering the Level 2 variables and all time-variant covariates were parameterized by person-mean centering the Level 1 variables (see Hoffman, 2007; Nezlek, 2008; Raudenbush & Bryk, 2002). We used person-mean centering to account for average differences in stress, self-esteem, and the number of daily communal and agentic events between participants and to allow examination of the association between state narcissism and deviation from participants' average number of daily agentic events, communal events and stress (e.g., "Do participants report higher state narcissism on days that they experience more agentic events than is usual for them?"; see West, Ryu, Kwok, & Cham, 2011). Furthermore, Day, the Level 1 temporal predictor, was rescaled by subtracting 1 such that the intercept describes the value of the outcome at the first occasion of measurement. We determined the best-fitting model by evaluating relative improvement in Akaike's Information Criteria (AIC) and the Bayesian Information Criteria (BIC) under restricted maximum likelihood estimation procedures, with smaller values indicating better model fit (Singer, 1998).

The multilevel equation for the final model is:

$$Y_{ti} = \gamma_{00} + \gamma_{01}(\text{Day}_i) + \gamma_{02}(\text{Trait narcissism}_i) + \gamma_{03}(\text{Gender}_i) + \gamma_{10}(\text{Daily self-esteem}_{ti}) + \gamma_{20}(\text{Communal events}_{ti}) + \gamma_{30}(\text{Agentic events}_{ti}) + \gamma_{40}(\text{Stress}_{ti}) + \mu_{0i} + \mu_{1i} + r_{ti}$$

where Y_{ti} is the state narcissism score at time *t* for individual *i*, in which *t* represents the number of different measurement occasions and *i* represents each participant. γ_{00} is the grand mean of state narcissism across all participants, γ_{01} represents the change in state narcissism across each day, γ_{02} is association between an individuals' level of trait narcissism and state narcissism, and

γ_{03} is the association between gender (0 = female, 1 = male) and state narcissism. γ_{10} represents the association between an individual's deviation from average daily self-esteem and state narcissism, γ_{20} represents the association between deviation from one's average number of daily communal events and state narcissism, γ_{30} represents the association between deviation from one's average number of daily agentic events and state narcissism, and γ_{40} represents the association between deviation from one's average daily stress level and state narcissism. μ_{0j} is the between-individual random effect, μ_{1j} is the random effect of Day, and r_{ti} is the within-individual random error which captures the difference between observed score at time *t* and the predicted score for individual *i*.

Results

Table 1 reports the descriptive statistics and correlations for our primary variables, including trait levels of narcissism and self-esteem, and mean daily ratings averaged within participants across days of narcissism, self-esteem, agentic and communal events, and stress for each individual. For each daily measure, we also calculated a within-person standard deviation (*SD*) across all measures for each individual, to quantify the amount of variability displayed. Mean levels of these SD estimates reflect how much the average individual's state fluctuates across time (Fleeson, 2001).[1]

Trait narcissism correlated positively with trait self-esteem, mean daily narcissism, self-esteem, and agentic events, and the within-person SDs of daily narcissism, agentic events and felt stress. Mean daily narcissism correlated positively with mean daily self-esteem and agentic events (marginal), and SDs of daily narcissism and felt stress, and it was negatively correlated

[1] To calculate the within-person SDs, we could use only participants with a minimum of three daily diary reports. Eighteen people were thus excluded, leaving 160 participants.

with mean daily felt stress. Interestingly, trait narcissism and mean daily narcissism correlated positively with the average within-person SD of daily narcissism. This suggests that people higher in narcissism generally, or who experience greater narcissism daily, fluctuate more in their narcissism over time.

In order to test whether there is significant variability in daily narcissism, we tested the average within-person SD in narcissism against zero. We found, indeed, that this variability is significant (M = 1.17, SD = .99), $t(159) = 14.87$, $p < .001$. This is the first indication that there is substantial within-person variability in state narcissism. A parallel test revealed significant variability in daily self-esteem (M = .37, SD = .29), $t(159) = 16.19$, $p < .001$.

Past research demonstrates that males tend to be higher in narcissism than females (e.g., Foster, Campbell, & Twenge, 2003). Consistent with these findings, in the current study, men were significantly higher in daily narcissism, trait narcissism, and daily self-esteem than women (all ps < .01). Men also reported a marginally greater number of agentic events overall, significantly fewer communal events and significantly lower levels of daily stress than women. Due to the limited number of men in the sample these results should be interpreted cautiously; however, gender was included as a covariate in all analyses to control these differences.

Multilevel Models

To examine whether there was significant variability in daily grandiose narcissism and whether it is psychologically meaningfully, we first estimated an unconditional random intercept model to predict state narcissism (see Table 2, Model A). This model is used to calculate the intraclass correlation (ICC), which can express the magnitude of within-person variation. Accordingly, 24% of variability in our daily narcissism scores occurred within participants, which indicates a substantial amount of within-person variability in daily narcissism.

Next, 'Day' was included as both a fixed and random effect in the model (see Table 2, Model B). It is important to note that in this study a variable for Day would not necessarily need to be included in the model. Unlike growth curve models, where systematic change is expected over time, we do not expect state narcissism to grow or decline systematically over a 10-day period. However, Day was included as a factor to determine whether there were unexpected systematic changes in daily narcissism over time.

We found no significant fixed effect of Day. There was, however, a significant random effect of Day (See Table 2, Model B). Although there was no overall slope in daily narcissism (i.e., the specific measurement day did not systematically influence changes in state narcissism), there was significant variation in this trend (i.e., some people's state narcissism may have increased and others may have decreased). This finding also suggests significant within-person variability in daily narcissism because it suggests that people deviate from their mean level of state narcissism across different days. It also suggests that there is unexplained within-person residual variance as the effect of Day does not entirely account for the within-person variation in state narcissism. We include Day as both a fixed (non-significant) and random slope in our final model to help control any possible time-dependent bias prior to examining other predictors of within-person variation in narcissism.

When analyzing repeated measures data using a multilevel structure it is important to consider the correlations among measures for the same individual. The models described so far (Models A and B) have an unstructured covariance matrix, which serves as the most parsimonious best-fitting baseline. Due to the use of repeated measures data, however, a first-order autoregressive covariance structure may be more appropriate (AR1: Heterogeneous; ARH1; see Table 2, Model C), which allows variances to be heterogeneous and allows the

correlation among errors to decline exponentially over time. In comparing the random-intercept model (A) to the model using ARH1 covariance (C), there is significantly better model fit in Model C (i.e., lower AIC and BIC estimates). Model A and Model C can be statistically compared by subtracting the values of the -2 Deviance Log Likelihood (-2 DLL) fit estimates, and treating it like a chi-square statistic, χ^2, $df(12) = 131.36$, $p < .05$. This test suggests that the model with the ARH1 covariance structure has significantly better model fit than the model with unstructured covariance. Furthermore, the repeated measures variances all show substantial variability from one testing session to another, and ARH1 rho, a measure of strength of association between Level 1 residuals, is statistically significant. Moving forward, ARH1 covariance structure is thus utilized for the repeated effect in each model.

Next, time-invariant covariates (i.e., trait narcissism, trait self-esteem and gender) were simultaneously included in the model as fixed effects (see Table 2, Model D). Not surprisingly, trait narcissism significantly predicted daily narcissism such that individuals higher in trait narcissism experienced greater daily narcissism on average. As expected, gender was also a significant covariate such that males displayed higher daily narcissism. Although self-esteem and narcissism are often correlated, trait self-esteem was not a significant covariate in the final model, meaning it did not predict average daily levels of narcissism.

Lastly, a series of time-varying covariates (i.e., agentic and communal events, stress, and daily self-esteem) were simultaneously included in the model (see Table 2, Model E). As previously mentioned, the time-varying covariates were person-mean centered such that they represent the deviation from participants' average daily levels. These analyses allow us to test whether within-person variability in daily narcissism is psychologically meaningful. Daily self-esteem was a significant time-varying covariate; increases in daily self-esteem were associated

with increases in state narcissism.[2] Most pertinently, agentic events, communal events and daily stress were also significant predictors of state narcissism. As predicted, days on which participants experienced more agentic events than usual were associated with higher state narcissism. Somewhat unexpectedly, days on which participants experienced more communal events than usual were also associated with higher state narcissism. Lastly, as predicted, daily stress was negatively associated with state narcissism; on days that people reported more stress, they also reported less narcissism. Notably, these associations were observed with trait narcissism, daily self-esteem, and gender statistically controlled (see Table 3).[3]

Supplemental Analyses

As noted, the positive relation between daily narcissism and communal events was somewhat unexpected. Accordingly, we further examined the types of communal events people experienced in relation to state narcissism. Conceptually, we divided the communal events into three categories: (1) participant providing communion (i.e., caring for someone else, giving a gift to someone, helping someone, volunteering, donating, or being concerned for someone); (2) participant receiving communion (i.e., having someone care for them); (3) positive social experiences (i.e., sharing with someone, having a positive interaction). We conducted parallel multilevel models using each communal event composite (including gender, trait narcissism, daily self-esteem, daily agentic events and felt stress). Participants' daily narcissism was

[2] High self-esteem is arguably a component of grandiose narcissism. Accordingly, we also conducted our analyses without state self-esteem controlled. When state self-esteem is not included as a covariate, the model is equivalent to that reported here: trait narcissism and gender are positively related to state narcissism. Notably, daily agentic and communal events are positively and significantly related to state narcissism, whereas daily felt stress is negatively and significantly related to state narcissism.

[3] Trait narcissism did not moderate any of our results. In addition, if agentic and communal events are analyzed separately, each remains positively related to state narcissism.

unrelated to times when they provided communion to others (*b* = .03, *SE* = .05), *t* = .65, *p* = .518, 95% CI [-.06, .13]. In contrast, participants experienced significantly greater state narcissism on days when they received communion from someone else (*b* = .24, *SE* = .12), *t* = 2.10, *p* = .036, 95% CI [.02, .47] or when they had positive social experiences (*b* = .17, *SE* = .08), *t*= 2.26, *p* = .024, 95% CI [.02, .32]. Thus, the relation between daily narcissism and communal events was clearest for times when participants were cared for by others or had positive social experiences.

We also examined the possibility that gender moderates our findings, because we observed gender differences in a number of our study variables, and prior literature demonstrates that men are generally higher in agency and lower in communion than women (e.g., Hegelson, 1994). We did so tentatively in light of the small number of male participants in our sample and the generally small sample size for such moderation analyses. Nevertheless, we conducted a series of analyses that included cross-level interactions between gender and each of our time-varying covariates (daily agentic and communal events, self-esteem and stress) in predicting state narcissism. We observed a significant interaction between gender and daily agentic events (*b* = -.73, SE = .28), *t* = -2.59, *p* = .010, 95% CI [-1.28, -.18] and a significant interaction between gender and communal events (*b* = .27, *SE* = .10), *t* = 2.65, *p* = .008, 95% CI [.02, .32].

These interactions revealed that females experienced higher levels of state narcissism on days when they experienced more agentic events than usual (*b* = .49, *SE* = .12), *t* = 4.09, *p* < .001, 95% CI [.25, .72], whereas males did not (*b* = -.23, *SE* = .26), *t* = -.94, *p* = .349, 95% CI [-.74, .26]. In contrast, females' state narcissism was unrelated to daily communal events (*b* = .04, *SE* = .04), *t*= 1.08, *p* = .279, 95% CI [-.03, .11], whereas males experienced higher state narcissism on days when they experienced more communal events than usual (*b* = .30, *SE* = .09), *t* = 3.21, *p* < .001, 95% CI [.12, .49]. These results should be interpreted cautiously, however,

given the small number of male participants (n = 32) and the potential for them to exert considerable leverage in these analyses. The interaction between gender and agentic events, for example, is rendered non-significant (p = .114) by the exclusion of one male participant who displayed a pronounced negative relation between agentic events and state narcissism.

Discussion

Narcissism has been studied predominantly in structural terms, focused on general tendencies of individuals to be more or less narcissistic (Campbell & Miller, 2011). We explored the possibility that grandiose narcissism also has a process or state component, such that individuals are more or less narcissistic at different times or across different contexts. Using a daily diary methodology and multilevel modeling, we observed significant variability within-individuals in daily reports of grandiose narcissism across ten days. The average within-person standard deviation of state narcissism was significantly greater than zero and 24% of the variability in daily narcissism occurred within-persons. A significant random effect of day also suggests that state narcissism fluctuates across relatively short durations. Importantly, we found that this variability is not simply random error: It is systematically related to other psychological states and events within people's lives.

As predicted, participants reported higher state narcissism on days that they experienced more positive agentic outcomes, such as having power over someone or being assigned an important role in a group. This pattern is consistent with the extended agency model of narcissism, which posits that change in one aspect of narcissism (e.g., increased agentic focus or self-enhancement) feeds back through other aspects of narcissism, enhancing narcissism as a whole (Campbell & Foster, 2007). We also found, as predicted, that felt stress was negatively associated with state narcissism. Just as trait narcissism is related to lower reports of felt stress

(Buntrock & Reddy, 1992), state narcissism is negatively related to daily experiences of stress.

A somewhat surprising finding was that positive communal events were also related to greater state narcissism overall. Closer inspection revealed, however, that this was primarily true for events in which one felt cared for by another person or had a positive social interaction, but not events in which participants behaved communally toward others. Though narcissists are generally unconcerned with being communal, they frequently seek validation of their positive qualities from others and their self-esteem is contingent on the positivity of their interpersonal interactions (Rhodewalt, Madrian, & Cheney, 1998; see Morf & Rhodewalt, 2001; Morf, Torchetti, & Schurch, 2011). Being the object of others' affection or having positive social interactions may have been seen by some participants as reflecting others' validation or admiration of them. Such events might also have been seen as indicative of social skills or competence, which reflects a more agentic focus. These interpretations may be why such events enhanced state narcissism. Overall, our findings support the conclusion that fluctuations in state narcissism are psychologically meaningful.

Limitations

A significant limitation of the current study is that our sample contained a disproportionate number of female participants and a small sample size for testing the moderating role of gender. We did observe that gender significantly moderated the effects of agentic and communal events on daily narcissism, though these findings should be interpreted with caution. We observed that women displayed higher state narcissism when they experienced agentic events, whereas men did not. In contrast, men displayed higher state narcissism when they experienced communal events, whereas women did not. It may be the case that people's state narcissism fluctuates more substantially in response to experiences that are relatively

atypical for them or that occur in domains that they do not typically focus on (Hegelson, 1994). This interpretation, however, is speculative and our analyses are equivocal. Further research is needed to more clearly delineate the role of gender in experiences of state narcissism and to determine the generality of our findings.

In addition, some aspects of our methodology may have limited our ability to observe fluctuations in daily narcissism. In order to reduce demands on participants and increase compliance with our procedures, we included only 10 daily reports in our design. Participants, moreover, completed an average of only 5 daily surveys. Other studies of personality states have included more reports (Fleeson, 2001; but see, Heller et al., 2007). The fact that we have relatively few reports in our study is mitigated by our use of multilevel modeling as these analyses are robust to missing data and allowed us to include all available data that participants provided (Bickel, 2012). Nevertheless, we may have underestimated the degree of variability in state narcissism because we observed relatively few time points.

Similarly, use of the NPI-16 to measure daily grandiose narcissism may have restricted the within-person variability we observed. Other studies of personality states have used brief, adjective-based ratings, asking participants to indicate how enthusiastic or quiet they have recently been, for example (Fleeson, 2001; Heller et al., 2007). No well-validated adjective measure of narcissism exists, however, so we opted to use the brief version of the NPI. Importantly, adjective-based ratings of personality focus on short-term perceptions of behavior, whereas the NPI-16 focuses on general beliefs about the self (e.g., “I always know what I am doing” vs. “Sometimes I am not sure of what I am doing”). Although participants responded by selecting the statement with which they identified most “right now,” the nature of the items may have considerably limited observed variability. It is likely that participants’ general beliefs

change less dramatically day-to-day than do perceptions of their own recent behavior. Consequently, use of the NPI-16 likely reduced the variability in state narcissism we observed. Nevertheless, use of a well-validated narcissism scale increases confidence that we measured state grandiose narcissism. Future researchers, however, might work to develop an adjective-based measure of state narcissism, similar to the State-Trait Grandiosity Scale, which measures one facet of narcissism (Rosenthal, Hooley, & Steshenko, 2003), in order to obtain a better estimate of the degree of variability in state narcissism.

Perhaps due to these limitations, the within-person variability in state narcissism observed in this study was modest (at 24%). Past research has found that the within-person variability in personality states, such as extroversion and agreeableness, is quite large and ranges from 50-70% (Church et al., 2013; Fleeson, 2001, 2007; Fleeson et al., 2002). However, only 36% of variability in daily self-esteem occurs within-person, by one estimate (Alessandri et al., 2013). This is more comparable to the within-person variability observed here for state narcissism. Thus, despite some methodological limitations, we observed a significant amount of within-person variability in state narcissism and this variability was systematically associated with agentic events, communal events, and daily experiences of stress.

Although we found that state narcissism is systematically related to other psychological states and daily events, our correlational data preclude firm conclusions about causality. We anticipated that daily events would affect state narcissism, but it is possible that state narcissism led people to enact events with more positive agentic and communal outcomes (as implied by Interactionism; Buss, 1987; Funder, 2010). In addition, state narcissism might have led people to perceive greater occurrence of positive outcomes for the self (e.g., John & Robins, 1994). This might help to further explain why state narcissism was positively related to reports of positive

communal outcomes; state narcissism may encourage perception of positive outcomes, whether agentic or communal. Similarly, we anticipated that state narcissism reduces felt stress, but it is possible that reductions in stress encouraged greater state narcissism. Thus, our results are clear that within-person variation in state narcissism is systematic, not simply error, but more research is needed to understand the possible causal relations between the variables studied.

Implications

Our findings have a number of implications for theory and research. There are clearly stable individual differences in grandiose narcissism, but our findings suggest there is also meaningful situational variability in grandiose narcissism. Thus narcissism might be better understood, in part, through context-dependent models of personality (e.g., Cervone & Shoda, 1999; Mischel & Shoda, 1995). However, a model that acknowledges both the structural and process elements of narcissism may be most useful. Narcissism might thus be conceptualized in terms of density distributions (Fleeson, 2001), by which people have a characteristic mean level around which they characteristically vary. This conceptualization of narcissism may allow narcissism research to advance in new directions.

One implication of the density distribution view is that people may vary in terms of the stability of their state narcissism. One parameter of an individual's density distribution for narcissism may be one's stable dispersion (standard deviation [SD]) around his or her mean level of state narcissism (Fleeson, 2001). Two people with the same mean level of narcissism may vary in the dispersion or stability of their state narcissism. Self-esteem researchers have, for some time, recognized the importance of considering self-esteem stability (operationalized as the SD of daily self-esteem) in addition to self-esteem level (Jordan & Zeigler-Hill, 2013; Kernis et al., 1989, 1993). It is possible that narcissism stability also predicts important outcomes beyond

narcissism level, such as hostility or subjective well-being. The stability of state narcissism might also help distinguish vulnerable and grandiose forms of narcissism (Dickinson & Pincus, 2003; Pincus & Roche, 2011). With an average of only five daily reports for our participants, however, we could not assess whether the SD of state narcissism is a stable characteristic of individuals. This is a possibility that could be explored in further research.

Recognition of a state component of narcissism may also facilitate research into the causes and consequences of narcissism. As noted earlier, recent research has observed that some social media use increases, whereas empathy and interdependent self-construal decrease state narcissism (Gentile et al., 2012; Giacomin & Jordan, 2014). Other potential causes of narcissism might be similarly studied. In addition, researchers have begun examining the consequences of extraversion by manipulating state extraversion (e.g., McNeil, Lowman, & Fleeson, 2010; Zelenski, Santoro, & Whelan, 2012). Thus, inducing people to behave in a more extraverted manner (i.e., increasing state extraversion) leads people to experience more positive affect (McNeil et al., 2010). The consequences of narcissism might be similarly studied by inducing people to behave more or less narcissistically (i.e., in a more arrogant, grandiose, and entitled manner). Such studies could suggest whether changes in state narcissism cause changes in other psychological constructs, such as well-being, stress, and positive or negative affect.

Conclusions

Narcissism is associated with positive psychological outcomes (Sedikides et al., 2004) but is also associated with numerous maladaptive qualities; high narcissists are more dishonest, greedy, insincere, and antisocial than less narcissistic individuals (Miller & Maples, 2010). Narcissism, moreover, may be more prevalent among recent young generations (e.g., Twenge, Konrath, Foster, Campbell, & Bushman, 2008). It is thus important to better understand the inter-

and intrapersonal dynamics of narcissism. The present study observed significant within-person variability in state narcissism over short durations. This variability, moreover, was psychologically meaningful, as it systematically related to experiences of positive agentic outcomes, communal outcomes and felt stress. Our results support the possibility that narcissism has a process or state component. Though some people are, in general, more narcissistic than others, it may also be the case that everyone can be more or less narcissistic across different times or situations. Understanding the factors that contribute to such variability may help us to better understand narcissism.

Table 1

Zero-order correlations, means (M) and standard deviations (SD) for the main dependent variables and predictors.

Note. † $p < .07$; * $p < .05$; ** $p < .01$

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Narcissism (Trait)	--												
2. Self-esteem (Trait)	.22**	--											
3. Gender	.23*	.10	--										
4. Narcissism (Daily *M*)	.79**	.14†	.35*	--									
5. Self-esteem (Daily *M*)	.33**	.68**	.29**	.29**	--								
6. Agentic Events (Daily *M*)	.23**	.05	.06	.15†	.05	--							
7. Communal Events (Daily *M*)	.02	-.02	-.22*	-.05	-.06	.40**	--						
8. Felt Stress (Daily *M*)	-.11	-.33**	-.21*	-.14†	-.37**	.10	.27**	--					
9. Narcissism (Daily *SD*)	.32**	.01	.15†	.35**	.19*	.18*	-.07	.01	--				
10. Self-esteem (Daily *SD*)	-.06	-.16*	-.03	.01	-.12	-.02	-.04	.25**	.24**	--			
11. Agentic Events (Daily *SD*)	.21**	.10	.07	.19*	.13	.90**	.41**	.09	.15†	.02	--		
12. Communal Events (Daily *SD*)	.03	-.11	-.13	-.09	-.08	.18*	.42**	.16*	.16*	-.02	.23**	--	
13. Felt Stress (Daily *SD*)	.16*	.03	-.04	.19*	.01	.12	.15†	.02	-.03	-.08	.11	-.08	--
M	13.39	6.17	.17	3.81	3.06	.19	1.58	4.21	1.17	.37	.29	1.23	1.16
SD	6.50	1.45	.38	2.75	.97	.28	1.06	1.10	.99	.29	.30	.63	3.68

Table 2

Within-person multilevel analyses between state narcissism and daily experiences.

	Model A	Model B	Model C	Model D	Model E
Fixed Effects					
Intercept (γ_{00})	3.78 (.21)***	3.84 (.21)***	3.75 (.21)***	3.71 (.13)***	3.63 (.13)***
Day (γ_{01})	--	-.02 (.02)	--	-.02 (.02)	.00 (.02)
Trait narcissism (γ_{02})	--	--	--	.32 (.02)***	.32 (.02)***
Gender (γ_{03})	--	--	--	1.47 (.33)***	1.48 (.33)***
Daily self-esteem (γ_{10})	--	--	--	--	.33 (.09)***
Communal events (γ_{20})	--	--	--	--	.07 (.03)*
Agentic events (γ_{30})	--	--	--	--	.36 (.11)**
Stress (γ_{40})	--	--	--	--	-.09 (.04)*
Random Effects					
Intercept (μ_{0j})	7.14 (.82)***	6.60 (.79)***	6.90 (.83)***	1.18 (.31)**	1.24 (.32)***
Residual (r_{ti})	2.28 (.10)***	1.90 (.09)***	--	--	--
Day(μ_{1j})	--	.05 (.01)***	--	.03 (.01)**	.04 (.01)***
ARH1 rho (ρ)	--	--	.36 (.04)***	.27 (.05)**	.25 (.06)***
Model Fit					
Deviance (-2LL)	5261.19	5183.02	5129.83	4825.31	4550.66
AIC	5265.19	5191.02	5153.83	4853.31	4578.66
BIC	5275.52	5211.68	5215.81	4925.26	4649.83

Note. N = 178; Unstandardized estimates are presented with standard errors in parentheses

(* $p < .05$; ** $p < .01$; *** $p < .001$)

Model A: Random-intercept unconditional model with unstructured covariance.

Model B: Simple linear growth model (unstructured covariance)

Model C: Random-intercept unconditional model with AR1: Heterogeneous covariance structure

Model D: Including time-invariant covariates

Model E: Including time-varying covariates

Table 3
Fixed effects for the final model (E) predicting state narcissism.

	Unstandardized Estimate (*SE*)	Standardized Estimate	*t-test*	*p-value*	95% CI	Effect Size
Intercept	3.63 (.13)		26.99	< .001	[3.37, 3.90]	
Day	.00 (.02)	.00	.12	.904	[-.05, .05]	--
Trait Narcissism	.32 (.02)	.66	17.11	< .001	[.28, .36]	.81
Gender	1.48 (.33)	.18	4.42	< .001	[.82, 2.14]	.11
Daily self-esteem	.33 (.09)	.05	3.73	< .001	[.16, .51]	.15
Communal events	.07 (.03)	.03	2.13	.033	[.01, .14]	.08
Agentic events	.36 (.11)	.04	3.27	.001	[.14, .57]	.12
Stress	-.09 (.04)	-.03	-2.04	.042	[-.18, -.01]	.15

Note. SE: Standard error; CI: Confidence interval (lower bound, higher bound).

CHAPTER 4 - MANUSCRIPT 3_c

SELF-FOCUSED AND FEELING FINE:

ASSESSING STATE NARCISSISM AND ITS RELATION TO WELL-BEING

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Abstract

The current research replicates and extends past findings for within-person variability in narcissism by examining how fluctuations in daily narcissism across three different measures relate to subjective well-being. We assessed state narcissism, daily life satisfaction, positive and negative affect over 14 days (*N*=147) and observed substantial within-person variability in three measures of state narcissism. Within-person variability in "normal" grandiose narcissism (the Narcissistic Personality Inventory) was associated with greater life satisfaction, greater positive affect and greater hostility. Within-person variability on self-reports of narcissism reflecting more pathological expressions of narcissism (Single-Item Narcissism Scale, and an adjective-rating measure) were also associated with daily shame and guilt. People may thus display variable levels of normal and pathological narcissism that relate to well-being.

Introduction

People high in narcissism have unrealistic and inflated positive self-views, a sense of entitlement and frequently strive to validate and enhance their self-esteem (e.g., Campbell & Foster, 2007; Morf, Torchetti, & Schürch, 2011). Narcissism has mainly been studied as a structural variable, in terms of between-person variability, or the extent to which different people are characteristically more or less narcissistic. Recent research, however, suggests that narcissism may also function as a personality process or state such that everyone can be more or less narcissistic at different times (e.g., Giacomin & Jordan, 2016). The current research replicates and extends past findings by assessing the degree of within-person variability in daily narcissism across a variety of state narcissism measures. Furthermore the current research examines how fluctuations in daily narcissism relate to subjective well-being.

Narcissism as a Process or State

Descriptions of narcissism, both within and across different assessment techniques and theoretical orientations, are heterogeneous (Cain, Pincus, & Ansell, 2008; Pincus & Lukowitsky, 2010). This diversity in descriptions has led to the proposed existence of numerous forms of narcissism. One useful framework for considering phenotypic variation in narcissism is the hierarchical organization proposed by Pincus and colleagues (Cain et al., 2008; Pincus & Lukowitsky, 2010; Pincus & Roche, 2011). This framework firstly distinguishes normal and pathological narcissism, largely on the basis of whether the manifestation of narcissism is associated with adaptive (normal) or maladaptive (pathological) outcomes, such as psychological adjustment, mood disorder symptoms, and self-esteem. These forms of narcissism, in turn, manifest with narcissistic grandiosity or vulnerability. Grandiose narcissism is arrogant, extraverted, and exploitative, whereas vulnerable narcissism is more fragile, introverted, and

neurotic. In the current research, we focus on normal, grandiose narcissism, assessed by the Narcissistic Personality Inventory (NPI), although we admit to some reservation about labeling this form of narcissism "normal." NPI scores are associated with maladaptive interpersonal outcomes, and with being aggressive, greedy, domineering, and insincere (Campbell & Miller, 2011). NPI scores also correlate with the five-factor trait profile rated by experts as being prototypic of individuals with Narcissistic Personality Disorder, suggesting the NPI does assess some pathological aspects of narcissism (Miller, Lynam, & Campbell, 2014).

In addition to the structural, trait component of normal, grandiose narcissism, recent models theoretically posit that this form of narcissism may include a process or state component. These models conceptualize narcissism as a self-regulatory system, in which narcissism is a set of mutually reinforcing characteristics, abilities and strategies (e.g., approach orientation, desire for self-esteem) that orient individuals toward positive self-views and greater self-enhancement (e.g., Campbell & Foster, 2007; Foster & Brennan, 2010; Morf & Rhodewalt, 2001). These characteristics are connected by positive feedback loops, such that when one element in the system changes, others are posited to also change, resulting in overall increases or decreases in narcissism. Contexts that highlight an individual's competence, for example, may fuel his or her desire for self-esteem, which in turn may increase other narcissistic tendencies. These models thus suggest that narcissism fluctuates as a function of situational affordances.

Recent research has begun to systematically examine within-person variability in normal, grandiose narcissism (Giacomin & Jordan, 2014, 2016). By investigating narcissism as a personality process or state, this research helps to align narcissism research with context-dependent models of personality (e.g., Mischel & Shoda, 1995) and the density distribution approach to personality (Fleeson, 2001). The density distribution approach, for example,

suggests that personality consists of a structural component—mean levels of a personality trait—and a process component—the within-person variability or dispersion around mean levels of a personality trait. People display personality traits which reflect general tendencies of behaving; however, they also display personality states to differing degrees across contexts or situations.

Giacomin and Jordan (2016) measured state narcissism across 10-days using the NPI-16 (Ames et al., 2006), a widely used measure of normal grandiose narcissism. They examined whether there is significant within-person variability in grandiose narcissism and whether this variability relates systematically to other psychological states and daily events. They found that 24% of the variability in daily narcissism on the NPI-16 occurs within-person. Moreover, they found that participants reported higher state narcissism on days when they experienced more positive outcomes, such as having power over someone or when someone behaved positively toward them. In addition, felt stress was negatively associated with state narcissism such that on days when people reported more narcissism, they reported experiencing less stress.

Other research suggests that narcissism changes in response to situational affordances. For example, people reported less narcissism after being induced to experience empathy in response to another's suffering or when they were primed with interdependent self-construal (Giacomin & Jordan, 2014; for a review, see Jordan, Giacomin, & Kopp, 2014). People have reported higher state narcissism after increased social media use (Gentile, Twenge, Freeman, & Campbell, 2012, Study 1) and after thinking about a time when they had impressed others or after being primed with positive traits (e.g., beautiful, smart; Sakellaropoulo & Baldwin, 2007). Although some people are, in general, more narcissistic than others, this research suggests that people can also be more or less narcissistic across different times or situations, and these fluctuations in narcissism are psychologically meaningful.

To date, research examining state narcissism has only examined the degree of within-person variability in narcissism using the NPI-16. In the current research, however, we replicate and extend our past findings by examining the degree of within-person variability in state narcissism across three different assessments of daily narcissism. We then examine the extent to which state narcissism relates to daily subjective well-being. Subjective well-being can be considered to be composed of two components: a person's satisfaction with life and his or her mood (Diener, Suh, Lucas, & Smith, 1999). We examine whether people's daily positive and negative affective states and daily life satisfaction are associated with their daily narcissism.

Narcissism and Well-being

Individuals high in normal grandiose narcissism tend to report good psychological health. This form of narcissism is positively related to subjective well-being (Rose, 2002), and negatively related to anxiety (Watson & Biderman, 1993) and depression (Wink, 1992). Sedikides and colleagues (2004) found that normal grandiose narcissism is related to decreased depression, loneliness, anxiety, neuroticism and increased subjective well-being, including life satisfaction and affective balance (i.e., the balance between positive and negative affect).

Some research has also examined how this form of narcissism relates to daily affect and variability in daily affect. Emmons (1987) found that narcissism (particularly its exploitativeness and entitlement facets) was associated with greater variability in positive and negative affect across 42 days. Rhodewalt, Madrian and Cheney (1998) observed that trait narcissism predicted greater positive affect and more positive affect variability across five consecutive days, but was unrelated to negative affect. Narcissists, however, did experience greater fluctuations in positive and negative affect on days when they experienced more interpersonal hassles. These findings

are consistent with theoretical accounts suggesting that narcissists are emotionally volatile (Kernberg, 1975; Kohut, 1976).

There is thus evidence that trait narcissism is associated with greater subjective well-being and variability in daily affect. Based on the principle of similarity between states and traits within the density distribution approach to personality (Heller, Komar, & Lee, 2007; Fleeson, 2001), we predicted that similar associations would hold for state grandiose narcissism measured using the NPI-16. Thus we expected that daily grandiose narcissism would be positively related to daily subjective well-being, including greater life satisfaction, more positive affect and less negative affect. Because the association of trait narcissism with negative affect is least consistent, our prediction for this outcome was relatively tentative.

In addition to examining the relations between state narcissism and these measures of subjective well-being, we also examine the extent to which such relations are due to fluctuations in daily self-esteem. We previously observed that daily narcissism is associated with daily self-esteem (Giacomin & Jordan, 2016). In addition, the relation between trait grandiose narcissism and many indicators of psychological health, including subjective well-being, are fully mediated by self-esteem (Sedikides et al., 2004). Thus, it is possible, as with trait narcissism, that any relation between state narcissism and subjective well-being is due entirely to state self-esteem. We test this possibility in the present studies by measuring daily self-esteem and controlling it in our analyses. Evidence that the association between state narcissism and subjective well-being is reduced or eliminated when state self-esteem is controlled would provide evidence that self-esteem mediates this relation, as is the case for trait narcissism. If controlling state self-esteem does not reduce this relation, however, it suggests a unique effect of state narcissism on well-being that differentiates it from state self-esteem.

Assessing State Narcissism

A limitation of our previous examination of daily narcissism was that we focused solely on fluctuations in state narcissism based on the NPI-16. Although using a well-validated narcissism scale increased confidence that we assessed normal grandiose narcissism, it also may have restricted the amount of within-person variability observed in daily narcissism. Personality states have typically been studied with rating scales and brief adjective-based assessments of personality dimensions (e.g., extroversion; Fleeson, 2001). Brief adjective ratings may allow people to more sensitively report changes in their behavior compared to the NPI-16 which requires participants to make forced-choices between pairs of broad self-statements (e.g., "I am going to be a great person," vs. "I hope I am going to be successful"). Thus rating scales and adjective-based measures of narcissism may allow us to more sensitively assess within-person variability in daily narcissism and potentially observe greater within-person variability. In the current study we thus administer two additional measures of state narcissism in conjunction with the NPI-16.

Recent research suggests that narcissists are self-aware and can relatively accurately report their own narcissism (Carlson, Vazire, & Oltmanns, 2011; Carlson, 2013). For example, narcissists rate themselves higher across a variety of narcissistic attributes (e.g., arrogant) and those who score higher on well-validated measures of narcissism are more likely to rate themselves as being more narcissistic (Carlson et al., 2011). The Single Item Narcissism Scale (SINS; Konrath, Meier, & Bushman, 2014) is a recently developed one-item measure of narcissism that asks participants to indicate their agreement with the statement, "I am a narcissist." In the current study we administered the SINS in addition to the NPI-16. Konrath et al. (2014) suggest that the SINS may be useful in longer studies or in studies where participants

respond to repeated measurements. Including the SINS in the current study allows us to examine the utility of the SINS in daily diary studies as well as compare the SINS as a state measure of narcissism with the NPI-16 in terms of the degree of within-person variability displayed and how it relates to subjective well-being.

We also included an adjective-rating measure of state narcissism. Although no well-validated adjective measure of narcissism exists, we developed a brief adjective-rating measure of narcissistic qualities (e.g., self-focused, manipulative, arrogant). To do so, we selected a variety of adjectives typically used to describe narcissists. We included an assortment of 11 adjectives intended to reflect core narcissistic features. We intended this to be a short, transparent measure in which participants reported the extent to which their behavior, over the past 24 hours, reflected core narcissistic features that are generally not socially desirable. We included the term narcissistic, as well as the three main descriptors of narcissism used in the SINS (i.e., egotistical, self-focused, vain). We also included adjectives that have been used in previous research (e.g., Carlson et al., 2011; Gough & Heilbrun, 1983) and adjectives that reflect the maladaptive factors identified in the NPI (i.e., superiority, vanity, exhibitionism, entitlement, and exploitativeness; Raskin & Terry, 1988). This adjective-rating measure of state narcissism will allow us to further investigate people's willingness to endorse self-descriptive negative qualities associated with narcissism. As with the SINS, we can compare scores on this adjective-rating measure with the NPI in terms of the degree of within-person variability observed and how it relates to subjective well-being.

Both the SINS and the adjective-rating measure of narcissism are likely to correspond more with pathological aspects of narcissism than does the NPI. The NPI strictly captures normal grandiose aspects of narcissism and tends to be associated with more adaptive or desirable

expressions of narcissism (e.g., leadership, high self-esteem). Although the NPI is positively correlated with the SINS, the SINS also relates to pathological forms of narcissism and to both grandiose and vulnerable expressions. In particular, the SINS is more clearly related to vulnerable, or hypersensitive aspects of pathological narcissism, which are characterized by an anxious preoccupation with one's self, low self-esteem, and feelings of helplessness and shame. The SINS correlates positively with a commonly used measure of pathological narcissism (i.e., the Pathological Narcissism Inventory; Pincus et al., 2009) which assesses both narcissistic grandiosity and vulnerability, and correlates positively with the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997). These relations are likely due to the overtly negative content of the SINS and so we expect to observe similar relations for our adjective-rating measure of narcissism. We also expect that these measures may also demonstrate different relations to psychological well-being than does the NPI-16.

A defining difference between normal grandiose narcissism and pathological narcissism is that normal narcissists report greater psychological well-being than pathological narcissists. Pathological narcissism, for example, is related to greater negative affect after experiencing negative events (Besser & Zeigler-Hill, 2010), and more depressive temperament (Pincus et al., 2009; Tritt, Ryder, Ring, & Pincus, 2010). As noted, the SINS reflects both normal and pathological expressions of narcissism; it also displays mixed relations with well-being. The SINS is positively correlated with positive affect (particularly feeling inspired, determined and proud) and also positively correlated with negative affect (particularly feeling irritable, hostile, afraid, scared, ashamed, and guilty; Konrath et al., 2014). The SINS is also largely unrelated to self-esteem suggesting that people scoring high on the SINS do not view themselves particularly positively.

Given that the SINS and the adjective-rating measure of narcissism involve directly reporting on negative attributes, we expect both measures to exhibit similar relations with well-being. Because past research on the SINS suggests a positive relation with positive affect, we expect a positive association between life satisfaction and positive affect and state measures of the SINS and adjective-ratings of narcissism. To the extent that the SINS and the newly created adjective-rating measure of narcissism capture more pathological and maladaptive expressions of narcissism, we expect them to also correlate positively with daily negative affect.

The Current Research

In the present study, we used a daily diary methodology to measure state narcissism in multiple ways across a 14-day period. As in our previous research, we measured daily narcissism using the NPI-16. Because the NPI-16 is a well-validated scale, we are confident that it captures normal, grandiose narcissism. In addition, we also assessed daily narcissism by using the SINS and an adjective-rating measure of narcissism. These scales are likely to capture normal, grandiose narcissism, but also pathological and vulnerable features of narcissism. Lastly we assessed people's daily life satisfaction, positive and negative affect, which are components of subjective well-being (Diener et al., 1999). In order to replicate and extend research by Giacomin and Jordan (2016), we assessed the degree of within-person variability in state narcissism using a new sample of participants, across each of the three measures of state narcissism. We also sought to further examine the extent to which state narcissism systematically relates to other psychological states (i.e., life satisfaction, positive and negative affect). The NPI-16 is a well-validated measure of normal, grandiose narcissism, capturing the more adaptive aspects of narcissism. We therefore expected it to have a fairly straightforward relation to well-being; we expected it to be positively related to life satisfaction, positive affect, and possibly negatively

related to negative affect. The SINS and, particularly, our adjectives-based measure of narcissism are less well-validated and are likely to capture pathological (maladaptive) aspects of narcissism in addition to adaptive aspects. We therefore expected these measures to have somewhat more complicated relations to well-being; we expected them to relate positively to life satisfaction, positive affect, but also negative affect.

Method

Participants. One hundred and forty-seven undergraduate students (117 female; M_{age} = 18.61, *SD* = 1.82, ranging from 17 to 36 years old) completed the study in exchange for partial course credit.[1] The ethnic backgrounds were 61.9% Caucasian, 22.4% Asian, 2.7% Black and 12.9% undisclosed. On average, participants completed 10.44 out of a possible 14 follow-up surveys (*SD* = 4.12; 1,597 in total).

Materials and Procedure. Participants completed an initial intake survey online and were emailed follow-up assessment surveys for 14 days, 24 hours apart in the late afternoon. Participants completed tasks in the following order.

Trait self-esteem. During the intake survey, participants completed the Rosenberg (1965) Self-esteem Scale (RSES; α = .89; see Appendix D). Participants indicated how much they agree with 10-items from 1 (*strongly disagree*) to 7 (*strongly agree*) (e.g., "I take a positive attitude towards myself"). Items were averaged, with higher scores indicating higher trait self-esteem.

Trait narcissism. During the initial intake survey, participants completed three measures of trait narcissism. First, they completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988; see Appendix C), a widely used measure of normal grandiose narcissism. The NPI

[1] This sample size was determined by the total number of participants we could recruit across two academic semesters.

consists of 40 forced-choice items, with one option being more narcissistic (e.g., "If I ruled the world it would be a better place") than the other (e.g., "The thought of ruling the world frightens the hell out of me"). Participants select the option they identify with most. The number of narcissistic choices was summed to create a trait narcissism score ($\alpha = .84$).

Participants also completed the Pathological Narcissism Inventory (PNI; Pincus et al., 2009; see Appendix Q). This 52-item measure assesses seven dimensions of pathological narcissism that can be divided into narcissistic grandiosity (exploitativeness, grandiose fantasy, self-sacrificing self-enhancement) and narcissistic vulnerability (entitlement rage, contingent self-esteem, hiding the self, and devaluing) on a scale from 1 (*not at all like me*) to 6 (*very much like me*). We averaged items from each of the two facets to create a measure of narcissistic grandiosity ($\alpha = .88$) and narcissistic vulnerability ($\alpha = .95$).

Lastly, participants completed the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997; $\alpha = .75$; see Appendix R), which assesses more vulnerable facets of pathological narcissism. On a scale from 1 (*very uncharacteristic or untrue; strongly disagree*) to 5 (*very characteristic or true; strongly agree*), participants responded to 10-items such as, "My feelings are easily hurt by ridicule or by the slighting remarks of others," and "I feel that I have enough on my hands without worrying about other people's troubles."

State narcissism. In each of the daily surveys, we measured state narcissism in three ways. First, participants completed the NPI-16, a short validated 16-item version of the NPI (Ames et al., 2006; see Appendix L). We adapted the instructions to reflect state instructions. Specifically, participants indicated the option they identified with most "right now," at the current moment. The number of narcissistic choices were summed to create a state narcissism

score for each of the fourteen days (α_{mean} = .76; range = .73 - .80).[2] Next participants indicated the extent to which 11 adjectives described their behavior over the last 24 hours (see Appendix S). Participants read the stem, "During the past 24 hours, I have felt" and responded to the following adjectives on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*): egotistical, self-focused, vain, manipulative, attention seeking, arrogant, narcissistic, self-centered, conceited, self-indulgent, selfish (α_{mean} = .92; range = .89 - .94).[3] Lastly, participants completed the Single Item Narcissism Scale (SINS; Konrath, Meier, & Bushman, 2014; see Appendix T). This item asks participants to indicate on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*), "To what extent do you agree with this statement: I am a narcissist. (Note: The word 'narcissist' means egotistical, self-focused, and vain)."

State self-esteem. In the daily surveys, participants responded to the statement, "Right now, I have high self-esteem," from 1 (*not very true of me*) to 5 (*very true of me*). Past research demonstrates that this single item validly assesses self-esteem (Robins, Hendin, & Trzesniewski, 2001; see Appendix M). Scores from this item were used as a state measure of self-esteem.

Life satisfaction. In addition, we included three items assessing daily life satisfaction from the Life Satisfaction Scale (Diener, Emmons, Larsen, & Griffin, 1985; see Appendix U).

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[2] For our repeated measures, alphas were calculated separately for each daily report. The average alpha (across 14 daily surveys) is reported.

[3] In a separate convenience sample (N = 257; 163 female, 1 unknown; M_{age} = 19.31, SD = 1.99), we assessed the reliability of the adjective-based measure of narcissism and examined its relation to established measures of narcissism. The 11-items of the adjective-based measure were reliable (α = .92) and loaded strongly onto a single factor after computing a principle components factor analysis. In addition, the adjective-based measure correlated positively with the NPI (r = .32, $p < .001$), the SINS (r = .44, $p < .001$), the vulnerable subscale (r = .42, $p < .001$) and the grandiosity subscale (r = .32, $p < .001$) of the PNI, the Hypersensitive Narcissism Scale (r = .41, $p < .001$), and was negatively related to the Rosenberg Self-esteem Scale (r = -.39, $p < .001$). The adjective-based measure was also positively related to negative affect (r = .27, $p < .001$), but was not significantly related to positive affect (r = -.05, p = .475) on the PANAS. These relations are largely consistent with the average correlations for the daily narcissism adjective measure in the current study, as in Table 1.

On a scale from 1 (*not at all*) to 7 (*extremely*), participants responded to the following items reflecting on the past 24 hours: "I felt my life was close to ideal," "I have been satisfied with my life," and "I would change almost nothing." Responses to these items were averaged such that higher scores indicate higher daily life satisfaction (α_{mean} = .91; range = .85 - .95).

Daily affect. In each daily survey, we included the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988; see Appendix V) which consists of two 10-item subscales assessing positive and negative affect. Participants were asked to indicate the extent to which they felt a series of affective states (e.g., hostile, excited) in the last 24 hours on a scale from 1 (*very slightly or not at all*) to 5 (*extremely*). The positive affect subscale (α_{mean} = .90; range = .87 - .93) and the negative affect subscale (α_{mean} = .90; range = .88 - .93) were averaged such that higher scores indicate greater positive and negative affect, respectively.

Results

Table 1 reports the descriptive statistics and zero-order correlations for our primary variables. Trait grandiose narcissism as assessed by the NPI correlated positively with trait and state self-esteem, the grandiosity subscale of the PNI, and average levels of each of the daily measures of state narcissism. Trait grandiose narcissism was also positively related to average daily life satisfaction and to average daily positive affect but was unrelated to daily negative affect (consistent with past findings, e.g., Rhodewalt et al., 1998).

Importantly, each of the state narcissism measures positively correlated with one another. Participants' average level of state narcissism, measured using the NPI-16, was positively correlated with the grandiosity subscale of the PNI, trait and state self-esteem, positive and negative daily affect but was unrelated to daily life satisfaction. Average state narcissism measured using the SINS correlated positively with the HSNS, an indicator of vulnerable

narcissism, although it was uncorrelated with the grandiose and vulnerable narcissism subscales of the PNI, and was unrelated to trait and state self-esteem. Average state SINS was also positively correlated with positive and negative daily affect but was unrelated to life satisfaction. Lastly, average state narcissism measured using the daily adjective-ratings was marginally positively correlated with the grandiose narcissism subscale of the PNI and was significantly positively associated with the vulnerable narcissism subscale of the PNI and the HSNS, both indicators of vulnerable narcissism. The adjective-rating measure of state narcissism was unrelated to trait and state self-esteem and daily life satisfaction but was positively correlated with both positive and negative daily affect. These correlations suggest the validity of our daily measures of narcissism, and in particular suggest that the SINS and adjective-rating measure capture both normal (adaptive) and pathological (maladaptive) expressions of narcissism.

Multilevel modeling. We used multilevel modeling (using SPSS Mixed Procedure) to quantify the degree of within-person variability in daily narcissism and to determine the factors associated with fluctuations in daily narcissism (for more specific details of our analytic approach, see Giacomin & Jordan, 2016).[4] We conducted separate analyses for each measure of

[4] The multilevel equation for the final model is:

$$Y_{ti} = \gamma_{00} + \gamma_{01}(Day_i) + \gamma_{02}(\text{Trait narcissism}_i) + \gamma_{03}(\text{Trait self-esteem}_i) + \gamma_{04}(Gender_i) + \gamma_{10}(\text{Daily self-esteem}_{ti}) + \gamma_{20}(\text{Daily life satisfaction}_{ti}) + \gamma_{30}(\text{Daily positive affect}_{ti}) + \gamma_{40}(\text{Daily negative affect}_{ti}) + \mu_{0i} + \mu_{1i} + r_{ti.}$$

where Y_{ti} is the state narcissism score at time *t* for individual *i*, in which *t* represents the number of different measurement occasions and *i* represents each participant. γ_{00} is the grand mean of state narcissism across all participants, γ_{01} represents the change in state narcissism across each day. γ_{02}, γ_{03}, and γ_{04} represent the association between an individuals' level of trait narcissism, trait self-esteem and gender (0 = female, 1 = male) and state narcissism, respectively. γ_{10} represents the association between an individual's deviation from average daily self-esteem and state narcissism, γ_{20}, γ_{30}, and γ_{40} represents the association between deviation from one's average daily life satisfaction, daily positive affect, and daily negative affect and state narcissism, respectively. μ_{0j} is the between-individual random effect, μ_{1j} is the random effect of Day, and r_{ti} is the within-individual random error which captures the difference between observed score at time *t* and the predicted score for individual *i*.

state narcissism as a dependent variable: NPI-16, SINS, and narcissistic adjective-ratings.

For each analysis, we first estimated an unconditional random intercept model to examine whether there was a substantial amount of within-person variability in our daily narcissism measures. The intraclass correlation (ICC) was calculated to determine the magnitude of within-person variation across each of our measures (i.e., 1-ICC). Consistent with the findings of Giacomin and Jordan (2016), 26% of variability in daily grandiose narcissism measured by the NPI-16 occurred within participants. The SINS and adjective-rating measure also displayed substantial within-person variability (33% and 28%, respectively), at levels comparable to the NPI-16. These results demonstrate a sizeable amount of within-person variability in all three measures of daily narcissism. We were also interested in whether this variability is psychologically meaningful, by examining whether it relates systematically to within-person variability in subjective well-being.

In each of our models, 'Day' (which was rescaled by subtracting one) was included as both a fixed and random effect to help control any possible time-dependent trends prior to examining other predictors of within-person variation in narcissism. Due to the use of repeated measures data, we also used a first-order autoregressive covariance structure for our repeated effects (AR1: Heterogeneous; ARH1). This allows variances to be heterogeneous and allows the correlation among errors to decline exponentially over time and provided significantly better model fit. All of our time-invariant covariates (i.e., trait narcissism, trait self-esteem and gender) were grand mean centered and our time-varying covariates (i.e., daily self-esteem, life satisfaction, positive and negative affect) were person-mean centered such that they represent the deviation from participants' average daily levels. All of our covariates were simultaneously included in the model as fixed effects (see Table 2).

NPI-16. As expected, trait grandiose narcissism (NPI) significantly predicted daily grandiose narcissism as measured by the NPI-16 such that individuals higher in trait narcissism experienced greater daily narcissism on the NPI-16 on average. Trait self-esteem was also a significant covariate in the final model such that individuals higher in trait self-esteem experienced lower daily narcissism. That is, when trait narcissism was included (and thus controlled) in the model, trait self-esteem was in fact associated with lower daily narcissism. Gender was also a significant covariate such that male participants displayed higher daily narcissism than female participants. As expected, increases in daily self-esteem were associated with increases in state narcissism. Days when participants reported greater narcissism were also days when they reported experiencing higher self-esteem. As predicted, days on which participants experienced higher life satisfaction than usual were also associated with higher state narcissism. Similarly, days on which participants reported higher positive affect than usual were associated with higher state narcissism. Somewhat surprisingly, days when participants experienced higher negative affect than usual were also associated with higher state narcissism on the NPI-16. Notably, these associations were observed with trait narcissism, trait self-esteem, daily self-esteem, and gender statistically controlled.

SINS. Trait grandiose narcissism (NPI) was positively associated with daily narcissism as measured by the SINS. However, gender, trait and state self-esteem were unrelated to daily SINS ratings. Interestingly, days on which participants experienced higher life satisfaction than usual were associated with higher SINS scores. That is, on days when participants reported that their lives were closer to ideal, they also endorsed the statement, "I am a narcissist" to a greater extent. However, daily positive affect was not related to state narcissism. As predicted, on days when participants experienced higher negative affect than usual they also reported higher state

narcissism on the SINS. Thus, daily SINS ratings were associated with both more and less subjective well-being across different measures (i.e., life satisfaction and negative affect), consistent with the idea that it captures both normal and pathological features of narcissism.

Adjective-rating measure of narcissism. Unlike the other state narcissism measures, there was a significant effect of day on state adjective-ratings of narcissism; participants tended to demonstrate systematic decreases in their narcissistic adjective ratings across the period of the study. This observation may reflect a form of sensitization to the adjective-rating measure such that ratings become more socially desirable with repeated assessments. Notably, we control this effect in all subsequent analyses. Trait grandiose narcissism (NPI) and trait self-esteem were both positively related to adjective-ratings of narcissism. Male participants displayed higher narcissism than female participants. Daily narcissism adjective-ratings were unrelated to daily life satisfaction. However, days on which participants experienced higher positive affect than usual and days on which participants experienced higher negative affect than usual were associated with higher narcissism adjective ratings, consistent with the possibility that this measure also captures both normal and pathological features of narcissism.

Supplemental analyses. Given that each measure of state narcissism was positively associated with negative affect—unexpectedly so for the NPI-16—we further investigated the relation between daily affect and state narcissism. Both the broad positive and negative affect subscales of the PANAS can be divided into specific facets of affect (although this is typically done using a 60-item version of the PANAS; Watson & Clark, 1999). The higher-order positive affect subscale was divided into self-assuredness (i.e., strong, proud; α_{mean} = .73, range = .61 - .82), joviality (i.e., excited, enthusiastic; α_{mean} = .79, range = .69 - .88), and attentiveness (i.e., alert, attentive, determined; α_{mean} = .79, range = .72 - .85). The higher-order negative affect

subscale was divided into hostility (i.e., hostile, irritable; α_{mean} = .68, range = .59 - .78), fear (i.e., afraid, scared, jittery, nervous; α_{mean} = .84, range = .80 - .87), guilt (i.e., guilty, ashamed; α_{mean} = .81, range = .71 - .87), and upset (i.e., distressed, upset; α_{mean} = .69, range = .52 - .78). After calculating the specific facets of positive and negative affect, we entered them into our final model in lieu of the broader positive and negative affect subscales using each measure of state narcissism as a dependent variable (see Table 3).

We found that state narcissism measured using the NPI-16 was positively associated with greater self-assuredness (positive affect) than usual and greater hostility (negative affect) than usual. Thus, self-assuredness primarily accounts for the relation between daily grandiose narcissism and positive affect whereas hostility primarily accounts for the relation between daily grandiose narcissism and negative affect. The relation between daily SINS ratings and negative affect was primarily due to hostility and guilt such that days when people felt more hostile or guiltier than usual were associated with higher state narcissism on the SINS, which is consistent with previous research on trait levels of the SINS (Konrath et al., 2014). The narcissism adjective-rating measure was positively related to attentiveness (positive affect) and guilt (negative affect) but also negatively related to fear (negative affect). That is, days on which participants felt more attentive or guiltier than usual were associated with higher state narcissism on the adjective-rating measure whereas days when participants felt more fearful than usual were associated with lower state narcissism.

Discussion

Research on narcissism has begun to move beyond investigating the structural or trait components of narcissism toward exploring narcissism as a personality process or state (e.g., Giacomin & Jordan, 2016). The current research sought to replicate and extend past findings by

quantifying the degree of within-person variability in state narcissism using a new sample of participants, and by examining the variability of a variety of state narcissism measures. We also examined the extent to which daily fluctuations in narcissism systematically relate to variability in subjective well-being.

Using a daily diary methodology and multilevel modeling, we observed a substantial amount of within-person variability in daily reports of normal grandiose narcissism over 14 days. Consistent with our past findings, in which we observed that 24% of the variance in daily NPI-16 scores occurred within persons (Giacomin & Jordan, 2016), in the present sample 26% of the variability in daily NPI-16 scores occurred within persons. These results are thus highly consistent across studies. This is notable because we included more time points in our assessment of daily narcissism in the current study (14 days versus 10 in our previous study) allowing for a more precise assessment of the degree of within-person variability in narcissism. Although this is a relatively modest amount of the variability in daily narcissism (cf. Church et al., 2013; Fleeson, 2001, 2007; Fleeson, Malanos, & Achille, 2002 for other personality states), our findings also demonstrate that this variability is meaningful and not simply random error.

Specifically, the observed within-person variability in NPI-16 scores was systematically related to daily subjective well-being. The NPI-16 measures "normal" grandiose narcissism and reflects relatively adaptive expressions of narcissism. As predicted, participants reported higher state narcissism on the NPI-16 on days when they experienced higher life satisfaction and on days when they experienced more positive affect, particularly greater feelings of self-assuredness. Somewhat surprisingly, however, participants also reported higher state grandiose narcissism on days when they experienced greater negative affect than is typical. Further analyses indicated that this effect was driven by feelings of hostility; state narcissism was

associated with experiencing greater hostility than usual. Anger and hostility tend to be approach-related emotions (Carver & Harmon-Jones, 2009) and narcissism is also associated with approach motivation (Foster & Brennan, 2011). In addition, trait narcissism is positively associated with hostility. Although past research has generally found no relation between trait narcissism and negative affect (Bogart et al., 2004; Rhodewalt et al., 1998) or variability in negative affect at baseline (Rhodewalt et al., 1998), narcissists are known to react aggressively and become more hostile when their positive self-views are threatened (e.g., Bushman & Baumeister, 1998; Rhodewalt & Morf, 1998). In addition, Li et al. (2015) found that after making people feel more narcisisstic they were more aggressive and hostile after being provoked compared to people who were not made to feel more narcissistic.

Our findings are thus quite parallel for state and trait grandiose narcissism. As with trait grandiose narcissism, state grandiose narcissism is positively related to life satisfaction and positive affect (particularly self-asurance), but generally unrelated to negative affect with the exception that it is positively related to hostility. These findings extend our past research in which we observed that state narcissism is negatively associated with daily felt stress, another aspect of subjective well-being (Giacomin & Jordan, 2016). Overall, we thus have strong evidence that people experience greater subjective well-being on days that they display more state narcissism on the NPI-16.

Importantly, all of these results remained significant when both trait and state self-esteem were controlled. Sedikides et al. (2004) found that the relation between trait grandiose narcissism and psychological well-being is entirely mediated by trait self-esteem. This was not the case for state narcissism in the present study. Our results thus demonstrate largely parallel relations between narcissism and well-being at both the state and trait levels, but also distinguish state

from trait narcissism. The association between normal grandiose trait narcissism and well-being reflects its relation with high self-esteem, but the relation between state narcissism and well-being is independent of self-esteem.

Different assessments of state narcissism

Another purpose of the present study was to compare results with the NPI-16 to those for the SINS and an adjective-based measure of daily narcissism we developed for the present study. We expected that the use of a continuous rating scale and focus on how well adjectives described behavior over a 24-hour period might allow us to observe greater within-person variability in narcissism. Although we observed somewhat more within-person variability with these measures (28% for the adjective-rating measure and 33% for the SINS), it was comparable to that observed for the NPI-16 (26%). The NPI-16 thus appears to do a reasonable job of quantifying within-person variability in state narcissism, despite its forced-choice format and focus on broad self-statements. It also has the advantage of being a well-validated measure that clearly assesses normal, grandiose narcissism.

Notably, however, the adjective-rating measure and SINS demonstrated different associations with measures of well-being, consistent with the possibility that they assess both normal and pathological expressions of narcissism. Indeed, average daily levels of the SINS correlated positively with trait levels of normal grandiose narcissism (NPI) and hypersensitive narcissism (HSNS), an indicator of vulnerable narcissism. The adjective-ratings measure also correlated postively with trait grandiose narcissism (NPI and PNI grandiosity) and vulnerable narcissism (PNI vulnerability and HSNS). Aside from our primary purpose, these results are noteworthy because they demonstrate that narcissists are willing and able to endorse as self-descriptive socially undesirable, narcissistic characteristics. Past research demonstrates some

degree of self-awareness for narcissists (Carlson et al., 2011; Carlson, 2013; Konrath et al., 2014) but no study has examined self-reports across the range of transparent narcissistic attributes included in the present study. Our adjective-rating measure included adjectives reflecting vanity, self-focus, arrogance, exploitativeness and selfishness and displayed a high degree of internal consistency and meaningful associations with established measures of narcissism.

With respect to well-being, daily ratings of the SINS were positively associated with daily life satisfaction such that on days when people indicated that their lives were closer to ideal they were also more likely to describe themselves as being more of a narcissist. In the current study, daily SINS responses were not significantly associated with daily positive affect or self-esteem but were positively associated with daily negative affect. In particular, people rated themselves as being more of a narcissist on days when they experienced more hostility and guilt. This is consistent with research by Konrath et al. (2014) who found that trait ratings of the SINS correlate positively with irritability and hostility as well as feeling ashamed and guilty; we extend these findings to within-person variability in the SINS.

The adjective-rating measure was not related to daily life satisfaction, but was positively related to both daily positive affect and daily negative affect. The positive association between state adjective ratings of narcissism and positive affect was driven by greater feelings of attentiveness (i.e., alertness, attentiveness, and determination). The positive association between state narcissism and negative affect was largely driven by feelings of guilt, similar to the SINS. Narcissistic adjective-ratings, however, were also significantly negatively related to fear. Thus on days when participants felt greater guilt or less fear than usual, they described themselves using more narcissistic adjectives, such as arrogant, vain, self-indulgent, and manipulative.

These findings are theoretically important because they suggest that state narcissism may have grandiose and vulnerable expressions, as is the case for trait narcissism. With respect to daily ratings of negative affect, daily ratings of the NPI-16 were positively related to only hostility, which is typical of normal grandiose narcissism. The SINS and adjective-ratings, however, were also positively related to feelings of guilt and shame (Konrath et al., 2014), a defining characteristic of vulnerable narcissists (Pincus et al., 2009).

Our results also suggest the importance of carefully choosing a measure of state narcissism. The SINS is easily administered and may be useful for studies that require multiple assessments of narcissism, particularly when it is important to keep the overall length of daily surveys short. It also captures both normal and pathological expressions of narcissism, which may be advantageous for some purposes, but potentially problematic for discriminant validity. We observed that both the SINS and adjective-ratings were associated with adaptive and maladaptive indicators of well-being. This is likely due to differential associations between well-being and normal and pathological narcissism. It may be desirable in future research to develop cleaner measures of state pathological narcissism, such as a state version of the PNI. Doing so could reveal whether there is meaningful within-person variability in pathological narcissism and allow examination of the distinct psychological correlates of normal and pathological state narcissism.

Limitations

One limitation of the current research is that state narcissism was assessed only once a day. Previous studies of personality states have typically included multiple personality assessments per day (e.g., Fleeson, 2001, 2007). This might limit the degree of within-person variability we were able to observe in daily narcissism. Given that a primary goal of the current

study was to examine multiple measures of state narcissism, we believed that administering multiple assessments per day would have been overly burdensome to participants and might have caused greater attrition.

The fact that we only measured narcissism at one time point per day, may contribute to the modest amounts of within-person variability we observed for narcissism (ranging from 26-33%; see also, Giacomin & Jordan, 2016). Past research has observed within-person variability in personality states, such as extroversion and agreeableness, that is much larger and ranges from 50-70% (Church et al., 2013; Fleeson, 2001, 2007; Fleeson et al., 2002). The degree of within-person variability in self-esteem has been observed to be between 36 – 44% (Alessandri, Vecchione, Donnellan, & Tisak 2013; Alessandri, Zuffianò, Vecchione, Donnellan, & Tisak, 2016), which is more comparable to the within-person variability observed here for state narcissism. The available data thus suggest that variability in narcissism is predominately between-person variability, but there is also substantial and meaningful within-person variability. Importantly, the current research suggests that the modest amount of within-person variability is not due to the measurement scale employed because we used forced-choice options and scale ratings as well as adjective-based items similar to previous research on personality states, and each produced comparable estimates of within-person variability in narcissism.

Another limitation is that we cannot specify the causal relation between state narcissism and well-being. We do not know whether daily narcissism enhances subjective well-being or whether higher daily well-being increases narcissistic tendencies. It is also possible that our findings reflect the effect of positive events; we observed previously that state narcissism is higher on the NPI-16 when people experience positive outcomes, such as receiving an award, having power over someone, or having someone do something positive for them (Giacomin &

Jordan, 2016). Such positive events may enhance state narcissism, which then enhances subjective well-being. However, it remains possible that positive events enhance well-being which situationally enhances narcissism. It is interesting in this context, however, that daily narcissism (on the NPI-16) was associated with greater daily hostility. If positive events enhance state narcissism, they appear to enhance at least some negative aspects of narcissism.

Focusing on state narcissism in future research may allow the causal connections to well-being to be more clearly defined. Researchers have begun to examine the effects of other personality states by manipulating them (e.g., McNeil, Lowman, & Fleeson, 2010). Inducing people to behave in a more extraverted manner (i.e., increasing state extraversion), thus leads people to experience more positive affect (McNeil et al., 2012). Future research could induce people to behave in a more narcissistic manner (e.g., with more grandiosity, entitlement and self-focus) to examine the effects of state narcissism on well-being or other outcomes of interest.

Conclusions

Although some people are more characteristically narcissistic than others, we may all have the capacity to be more or less narcissistic at different times. The current study replicates and extends past research examining the degree of within-person variability in state narcissism. We observed a modest but meaningful degree of within-person variability across three different measures of state narcissism. Importantly these measures assessed varying degrees of "normal" and more pathological narcissism. Across each of these measures however, on days when people displayed greater state narcissism, they also tended to experience greater subjective well-being, specifically higher life satisfaction and more positive affect. They also experienced greater negative affect which was primarily driven by feelings of hostility when "normal" grandiose narcissism was assessed or feelings of guilt when more pathological state narcissism was

assessed. These results provide further evidence that state narcissism is psychologically meaningful and associated with other psychological states. We hope that these findings encourage further research that conceptualizes narcissism in terms of density distributions (Fleeson, 2001), in which people have a characteristic level and dispersion of narcissism. Acknowledging the process or state component of narcissism can advance narcissism research in new directions and provide novel insights into the antecedents and consequences of narcissism.

Table 1

Zero-order correlations, means (M) and standard deviations (SD) across each of the trait and state narcissism and self-esteem measures.

Note. N = 146; † $p < .07$; * $p < .05$; ** $p < .01$

	1	2	3	4	5	6	7	8	9	10	11	12
1. Trait Grandiose Narcissism (NPI-40)	--											
2. Pathological Narcissism (PNI) - Grandiose	.44**	--										
3. Pathological Narcissism (PNI) - Vulnerable	.12	.64**	--									
4. Hypersensitive Narcissism (HSNS)	.04	.41**	.75**	--								
5. Trait Self-esteem (RSES)	.37**	-.09	-.45**	-.38**	--							
6. State NPI-16 (Daily *M*)	.79**	.39**	.13	.09	.18*	--						
7. State SINS (Daily *M*)	.30**	.09	.11	.18*	.03	.35**	--					
8. State Narcissism Adjectives (Daily *M*)	.26**	.15†	.17*	.29**	-.10	.40**	.65**	--				
9. State Self-esteem (Daily *M*)	.32**	-.001	-.36**	-.36**	.60**	.26**	.14	.11	--			
10. Life satisfaction (Daily *M*)	.24**	-.07	-.32**	-.30**	.57**	.14	.15	.05	.78**	--		
11. Positive affect (Daily *M*)	.29**	.06	-.26**	-.19*	.37**	.35**	.24**	.36**	.61**	.54**	--	
12. Negative affect (Daily *M*)	.07	.22**	.35**	.40**	-.36**	.19*	.36**	.60**	-.30**	-.29**	.19*	--
M	15.60	3.79	3.48	3.09	6.18	4.98	2.65	2.82	3.22	4.12	2.83	2.35
SD	6.88	.74	.85	.59	1.44	3.00	1.31	.98	.80	1.07	.69	.66

Table 2

Fixed effects (standardized estimates (SE) and 95% confidence intervals) for the final model across three measures of state narcissism.

	Dependent Variable: State Narcissism		
	NPI-16	SINS	Narcissism Adjectives
Fixed Effects			
Intercept	-.02 (.04)	.003 (.07)	-.02 (.07)
	[-.10, .07]	[-.13, .14]	[-.15, .12]
Day	.03 (.02)	-.01 (.02)	-.06 (.02)**
	[-.01, .07]	[-.06, .03]	[-.11, -.02]
Trait grandiose narcissism	.70 (.05)***	.28 (.07)***	.25 (.07)**
	[.61, .79]	[.14, .42]	[.11, .40]
Trait self-esteem	-.10 (.04)*	-.08 (.07)	-.21 (.07)**
	[-.19, -.01]	[-.22, .06]	[-.35, -.07]
Gender	.12 (.04)**	.06 (.07)	.17 (.07)*
	[.04, .21]	[-.07, .20]	[.03, .30]
Daily self-esteem	.04 (.02)*	.03 (.02)	.03 (.01)
	[.01, .07]	[-.004, .07]	[-.001, .05]
Daily life satisfaction	.04 (.02)**	.07 (.02)***	.00 (.02)
	[.01, .07]	[.04, .11]	[-.03, .03]
Daily positive affect	.04 (.02)**	-.01 (.02)	.11 (.01)***
	[.01, .07]	[-.04, .03]	[.08, .13]
Daily negative affect	.03 (.01)*	.07 (.02)***	.06 (.01)***
	[.001, .05]	[.04, .10]	[.03, .09]
Random Effects			
Intercept	.23 (.03)***	.61 (.08)***	.65 (.08)***
	[.17, .30]	[.47, .79]	[.50, .83]
Day	.03 (.01)***	.01 (.01)	.04 (.01)***
	[.02, .05]	[.00, .10]	[.02, .06]
ARH1 rho (ρ)	.20 (.03)***	.29 (.04)***	.24 (.04)***
	[.13, .26]	[.22, .36]	[.17, .31]
Model Fit			
Deviance (-2LL)	2441.27	2892.50	2456.34
AIC	2477.27	2928.50	2492.34
BIC	2572.99	3024.15	2588.08
N (Number of participants)	146	146	146
k (Number of observations)	1588	1577	1584

Note. Standard errors (SE) in parentheses (* $p < .05$; ** $p < .01$; *** $p < .001$). 95% CI: Confidence interval [lower bound, higher bound]. In all cases $N = 146$ (Level 1).

Table 3

Fixed effects (standardized estimates (SE) and 95% confidence intervals) for the final model across three measures of state narcissism using different affect subscales.

	Dependent Variable: State Narcissism		
	NPI-16	SINS	Narcissism adjectives
Fixed Effects			
Intercept	-.02 (.04)	.003 (.07)	-.02 (.07)
	[-.10, .07]	[-.13, .14]	[-.15, .12]
Day	.03 (.02)	-.01 (.02)	-.06 (.02)**
	[-.02, .07]	[-.06, .03]	[-.11, -.02]
Trait grandiose narcissism	.70 (.05)***	.28 (.07)***	.26 (.07)**
	[.61, .79]	[.14, .43]	[.11, .40]
Trait self-esteem	-.10 (.04)*	-.08 (.07)	-.21 (.07)**
	[-.19, -.01]	[-.22, .06]	[-.35, -.07]
Gender	.12 (.04)**	.06 (.07)	.17 (.07)*
	[.04, .21]	[-.07, .20]	[.03, .30]
Daily self-esteem	.04 (.02)**	.03 (.02)	.04 (.01)**
	[.01, .07]	[-.004, .06]	[.01, .07]
Daily life satisfaction	.05 (.02)**	.07 (.02)***	.01 (.02)
	[.01, .08]	[.03, .10]	[-.02, .04]
Hostile (PANAS)	.03 (.01)*	.04 (.02)*	.02 (.01)
	[.001, .06]	[.003, .07]	[-.004, .05]
Fear (PANAS)	-.001 (.02)	-.02 (.02)	-.03 (.02)*
	[-.03, .03]	[-.06, .01]	[-.06, -.0003]
Guilt (PANAS)	.02 (.02)	.08 (.02)***	.08 (.01)***
	[-.01, .05]	[.05, .12]	[.05, .11]
Upset (PANAS)	.002 (.02)	.01 (02)	.02 (.01)
	[-.03, .03]	[-.02, .05]	[-.01, .05]
Jovial (PANAS)	.002 (.02)	-.01 (.02)	.01 (.01)
	[-.03, .03]	[-.04, .03]	[-.01, .04]
Self-assured (PANAS)	.04 (.02)*	.01 (.02)	.02 (.01)
	[.01, .07]	[-.02, .05]	[-.01, .05]
Attentive (PANAS)	-.004 (.01)	-.01 (.02)	.07 (.01)***
	[-.03, .02]	[-.05, .02]	[.04, .10]
Random Effects			
Intercept	.23 (.03)***	.61 (.08)***	.64 (.08)***
	[.17, .30]	[.47, .79]	[.50, .83]
Day	.03 (.01)***	.01 (.01)	.04 (.01)***
	[.02, .05]	[.00, .07]	[.03, .06]
ARH1 rho (ρ)	.19 (.04)***	.28 (.04)***	.23 (.04)***
	[.12, .26]	[.20, .35]	[.16, .30]
N (Number of participants)	146	146	146
k (Number of observations)	1588	1577	1584

Note. SE: Standard error; 95% Confidence interval [lower bound, higher bound]. (* $p < .05$; ** $p < .01$; *** $p < .001$).

CHAPTER 5 – GENERAL DISCUSSION

EXTENDING THE EXTENDED AGENCY MODEL OF NARCISSISM

Previous research has typically treated subclinical grandiose narcissism as a personality trait, such that some people are dispositionally higher in narcissism than others. In this dissertation, however, I empirically examined grandiose narcissism as a personality state. Together these manuscripts provide initial evidence that grandiose narcissism is more context-dependent than previously assumed. That is, people's narcissistic tendencies vary meaningfully within individuals as a function of different situational affordances (e.g., when feeling powerful or more connected to other people). People can be more or less narcissistic across time or different contexts.

In Manuscript 1, I found that reducing one element of narcissism (i.e., greater concern for agency than communion) situationally reduced narcissism in a state-like manner. Making people feel more connected to others (by increasing empathic concern or priming interdependent self-construal) reduced their endorsement of narcissistic tendencies and, in turn, negated some of the negative tendencies associated with narcissism (e.g., fame seeking). This suggests that narcissism may behave like a self-regulatory system, consistent with the extended agency model of narcissism.

In Manuscript 2 and 3, I observed a meaningful amount of within-person variability in daily narcissism across 10 and 14 days, respectively. Notably, in both studies, this variability was not simply random error, but was related systematically to other psychological states and daily events. In Manuscript 2, state narcissism was higher when people experienced more positive agentic outcomes (e.g., having power over someone) or more positive communal outcomes (e.g., having a positive social interaction) and was lower on days people experienced greater felt stress. In Manuscript 3, state narcissism (measured using multiple assessments) was related to higher overall daily life satisfaction, positive and negative affect.

Taken together, this dissertation empirically examines narcissism as a personality state and directly tests self-regulatory models of narcissism. By adopting both experimental and daily diary methodological approaches, this research extends theorizing about the state-like nature of narcissism and supports models of narcissism that view it as a set of mutually-reinforcing elements which form a dynamic, context-dependent self-regulatory system (e.g., Campbell & Foster, 2007; Morf & Rhodewalt, 2001).

Extending the Extended Agency Model of Narcissism

Campbell and Foster (2007) suggested that narcissism was a truly dynamic system that is initiated when certain thresholds are surpassed and discontinued when those thresholds are not met. This process, however, may be more complicated than previously assumed. Based on the data in this dissertation in the following sections I discuss multiple factors that help refine, or extend, the Extended Agency Model of narcissism. First, I consider when, and under what circumstances, communal orientations and behaviors will lead to decreases or increases in state narcissism. Second, I examine when, and how, the narcissistic system can be up-regulated or the situations in which people might experience increased state narcissism. Next, I discuss when trait narcissism might moderate the effects of context on state narcissism. Lastly, I will briefly discuss how other forms of narcissism (i.e., pathological narcissism) may fluctuate across time.

Communal focus and state narcissism. A comparison across Manuscript 1 and Manuscript 2 perhaps suggests some contradictory observations. In Manuscript 1, we observed that experimentally increasing communal focus (by increasing empathic concern or interdependent self-construal) decreases state narcissism, and that these changes in state narcissism, in turn, may increase prosocial tendencies. In Manuscript 2, however, we observed that state narcissism was higher on days when people engaged in more communal activities (e.g.,

being cared for). Taken alone, these findings seem inconsistent. As such, it raises the question: under what circumstances will feelings of communality or engaging in communal behavior lead to increases or decreases in state narcissism?

The Extended Agency Model of narcissism suggests that a shift in focus from agency to communion will cause the narcissistic system to be down-regulated which may, in turn, decrease people's narcissistic tendencies. Indeed Campbell and Foster (2007) suggested that, "it may be possible to alter narcissism, not by attacking features of narcissism, but instead by feeding the components of the narcissistic self that are lacking (e.g., communal concerns)" (p. 133). We found evidence for this pattern of results in Manuscript 1. When we made people feel more communal and more connected to others, their narcissistic tendencies subsequently decreased. This research was also consistent with previous findings that increasing a sense of connection to others can curtail some of the detrimental consequences of narcissism (e.g., Finkel et al., 2009; Konrath et al., 2006). Taken together, these results suggest that when a fundamental self-aspect that narcissists lack is enhanced (e.g., communal focus), in a non-threatening manner, the narcissistic system may be down-regulated as a whole.

Although the findings from Manuscript 1 may suggest that when people engage in communal acts they will report less narcissism, this is not necessarily the case. The supplementary analyses in Manuscript 2 show that behaving more communally toward others is unrelated to state narcissism but that positive social interactions and receiving communion (i.e., being cared for) are positively related to state narcissism. The inconsistencies between these two manuscripts may, however, be informative. The discrepant findings can allow us to further refine self-regulatory models of narcissism. One possibility is that the nature of a behavior itself, whether it is generally agentic or communal, might not be what specifically influences

narcissism. It might actually be the motivation behind a behavior (e.g., egoistic vs. altruistic) that primarily influences people's narcissistic tendencies. In Manuscript 1, we made people feel closer and more connected to others, which caused reduced state narcissism. But simply engaging in communal, or prosocial, behavior does not require *feeling* more communal toward other people. Indeed, supplemental analyses in Manuscript 2 indicated that being communal towards another person (e.g., volunteering, donating to a cause) is unrelated to state narcissism. This suggests that simply engaging in a communal act may not directly influence state narcissism, and that the motive behind the act may be more important.

It is possible, then, that engaging in prosocial behavior may increase state narcissism, particularly if it is motivated by egoistic reasons. The supplemental analyses in Manuscript 2 support this possibility. These analyses revealed that increases in state narcissism were driven by events in which one felt cared for by another person or days with positive social interactions. It may be that being cared for by other people or gaining the social affection of others through positive social interactions is a source of validation for individuals, which may increase state narcissism. It should be noted that the methodology used in Manuscript 2, however, did not allow us to assess the motivation behind engaging in communal events each day nor did it allow us to examine how connected individuals felt toward others when engaging in communal acts. Despite this limitation, previous research also supports this suggestion.

Given that narcissists use a variety of interpersonal strategies to self-enhance (e.g., self-promotion, downward social comparisons), more narcissistic people may be particularly likely to engage in prosocial behavior as a way to gain attention or admiration, in order to boost their positive self-views. Doing so, moreover, may increase their state narcissism. Narcissists might thus be more likely to engage in prosocial behavior in the presence of other people or when

others are paying attention. This possibility is consistent with recent research that indicates that narcissists volunteer for egoistic reasons that are career oriented or to avoid their own problems (Brunell et al., 2014) and that narcissists engage in public or opportunistic prosocial behavior (Konrath, Ho, & Zarins, 2016). Konrath et al. (2016) found, for example, that narcissistic individuals were much more likely to publicly post videos from the ALS "ice bucket challenge," whereas non-narcissistic individuals were much more likely to privately donate to the cause itself. Although these findings may be specific to individuals who are dispositionally high in trait narcissism, a similar pattern of results might hold for individuals who fall anywhere on the continuum of trait narcissism. Engaging in prosocial acts in conspicuous ways, or to achieve self-interested goals, might enhance rather than reduce state narcissism.

This prediction is also largely consistent with Crocker's (2008) two motivational perspectives: egosystem and ecosystem motives. Egosystem motives reflect the desire to maintain, protect, and enhance positive self-views, whereas ecosystem motives reflect the desire to put others' well-being before one's own (see also Crocker, Nuer, et al., 2006). Whereas those with an egosystem motivation view others as a means to attain positive self-views, those with an ecosystem motivation prioritize the needs of others and feel more connected to other people. Although people may have chronic tendencies to be motivated primarily by ego- or ecosystem goals, people are believed to be able to flexibly shift between motivational systems (Crocker, 2008). Indeed, self-threatening or competitive situations should activate an egosystem motivational perspective whereas an ecosystem motivational perspective should be activated when people begin to appreciate their connectedness to others.

In sum, there are several possibilities for when and why a more communal focus or prosocial engagement can diminish or enhance people's narcissistic tendencies. First, when

fundamental narcissistic qualities, such as a greater concern for agency than communion, are diminished, state narcissism will also diminish. That is, when people actually *feel* more connected to other people, and their ego is not threatened, they will also endorse fewer narcissistic tendencies. A second possibility is that when people are the recipients of others' communal behavior, their narcissism will increase. Taking advantage of others' social graces or having a positive social interaction may boost one's own esteem which may lead people to experience increased state narcissism, particularly if they are focused on self-image concerns. Finally, engaging in public prosocial behavior may increase state narcissism to the extent that the behavior is linked to self-image goals. These latter possibilities may function as interpersonal strategies to serve narcissist's need for attention, validation, and social admiration. Alternatively, prosocial actions may decrease state narcissism when they are motivated by compassionate goals or altruism. Notably, these possibilities are all consistent with predictions derived from the Extended Agency Model.

Finally it should also be noted that my reasoning may only apply to communal orientations or behaviors that are communal in nature. That is, the motivation to engage in specific behaviors may only matter for more communal behavior (e.g., helping others, donating to a cause) where the motivation can be either egoistic or altruistic in nature. Although agency and communion are considered orthogonal dimensions, it is difficult to imagine an agentic behavior being motivated by communal values. This issue does, however, lead to another interesting question: what contexts or psychological states will increase people's narcissistic tendencies?

Up-regulating the narcissistic system. The results of Manuscript 1 primarily demonstrated that the narcissistic system can be down-regulated by making people feel more

communal. Although beyond the scope of the current dissertation, future research should seek to identify the contexts in which people's narcissism is up-regulated or increased. Based on all of the data in this dissertation, one could argue that anything that makes people feel good about themselves or boosts their self-esteem is likely to increase their state narcissism. Indeed, in Manuscript 3, we observed that state narcissism was higher on days when people reported higher daily life satisfaction and more positive affect. This could indicate that feeling good is equivalent to feeling more narcissistic. It is likely, however, that the processes involved are inherently more complex than that description suggests. There may be multiple factors that determine how, and when, people's narcissistic tendencies increase. Some factors include agentic experiences and ego-threats.

Does making people feel more agentic really increase their narcissism? It is not immediately clear that providing people with positive feedback or increasing their agency necessarily increases their state narcissism. In Manuscript 1, we observed that priming independent self-construal did not increase state narcissism compared to a baseline condition. This pattern of results may reflect the fact that our sample was from a highly independent culture, and so the independent self-construal prime might not have shifted their self-construal much. We did observe in Manuscript 2, however, that state narcissism was higher on days when people reported experiencing more agentic daily events. The agentic daily events included: feeling powerful, receiving recognition or award, and being assigned to an important role in a group. Interestingly all of these events are likely to maintain positive self-views and, in particular may involve comparisons with other people. It may actually be the case that gaining a source of public recognition enhances people's narcissism overall, in the same vein that being cared for by others was associated with increased narcissism. Thus when people experience a series of events

that directly enhance their positive self-image, their state narcissism may increase. This might occur regardless of whether events are agentic or communal. Of course the results presented in Manuscript 2 are not causal and should be interpreted cautiously.

The possibility that social acknowledgment enhances state narcissism is consistent with research that suggests that when people engage in more self-directed behavior their narcissism subsequently increases. For example, people report higher state narcissism after thinking about a time when they had impressed others or after being primed with positive traits (e.g., beautiful, smart; Sakellaropoulo & Baldwin, 2007). People also report higher levels of narcissism after perusing their MySpace pages, relative to interacting with Google Maps (Gentile et al., Study 1; but see, Gentile et al., Study 2; Horton, Reid, Barber, Miracle & Green, 2014). In addition, research has observed that narcissists take selfies (self-portraits, typically uploaded to social media) more frequently than non-narcissists, and do so in order to maintain their positive self-views (Halpern, Valenzuela, & Katz, 2016). More pertinently, taking repeated selfies is linked to increased narcissism levels over time. Halpern et al. (2016) suggest that this pattern of results reflects a self-reinforcement effect, consistent with self-regulatory models of narcissism, whereby posting selfies makes people feel rewarded, which in turn increases their narcissism, at least for individuals who already exhibit some degree of narcissism.

Although people's narcissistic tendencies may increase after people engage in events or activities that directly boost their self-image, people also are likely to become more narcissistic when they have been threatened. Previous research examining narcissism as a personality trait has consistently found that narcissists respond aggressively and defensively after an ego threat (e.g., failure feedback; Bushman & Baumeister, 1998). In addition Zeigler-Hill, Myers, and Clark (2010) found that narcissists experienced a greater drop in their daily self-esteem on days

when they experienced more negative achievement events (e.g., doing poorly on a schoolwork task) compared to non-narcissists. My dissertation never directly tests the hypothesis that threatening people's positive self-image increases their state narcissism; however, Manuscript 3, does provide some initial support for this possibility.

We observed in Manuscript 3 that state narcissism was higher on days when people felt more negative affect, particularly hostility. Narcissists may feel particularly hostile after their positive self-views had been threatened in one way or another and that these feelings of daily hostility, in turn, predicted higher daily narcissism. This pattern of results suggests that narcissism may be a defensive reaction to ego-threat and that people's narcissism fluctuates in accordance with these threats and the hostility that may accompany them. This theorizing is consistent with recent research by Li et al. (2015) who found that making people feel temporarily higher in state narcissism led to increased anger after an unexpected provocation which, in turn, heightened aggression. Nevertheless more research is needed to test the influence of threatened self-views on state narcissism. It is highly plausible that damaging people's overly positive self-views would enhance their narcissistic self-regulatory strategies (e.g., discrediting failure feedback, derogating others), which would increase people's state narcissism more generally.

In sum, we posit that upregulating the narcissistic system may be less straightforward than previously assumed. Feeling good may not automatically increase state narcissism. It is important to consider the situations in which people are likely to endorse more narcissistic tendencies than usual. Indeed, people may be higher in narcissism on days when they are experiencing greater psychological well-being or on days when they have experienced more positive events, particularly where they receive some sort of recognition in comparison to others. State narcissism may also be likely to increase when people experience greater hostility,

particularly after experiencing ego-threat. Thus there are multiple contexts that may increase state narcissism.

Perhaps what is most important, however, is that people's narcissism be provoked in some way in order for it to be upregulated. Fleeson (2007) suggested that there are situation-based contingencies underlying states such that characteristics of certain situations may evoke different behavioral responses. Notably, different states may be adaptive in different situations. Thus it may be that something about the context signals to individuals to behave more narcissistically. After being threatened, people's subsequent drop in self-esteem may signal to an individual to find a way to increase their positive self-views, and in response they may engage in more narcissistic behavior. It may be the case that people's narcissism is activated in contexts where their self-views are already being enhanced (e.g., after receiving a prestigious award). It may also be that people behave more narcissistically when the context invokes the belief that narcissism is an effective strategy to meet one's current goals. These notions would be consistent with self-regulatory models of narcissism. It could be that in Manuscript 1, the lack of increase in state narcissism after priming an independent self-construal, compared to the control condition, occurred because there was nothing that actually engaged the narcissistic system. Nothing signaled to the individual to behave in a more narcissistic manner or endorse more narcissistic tendencies because feeling relatively different from their friends and family is something that people typically feel, at least in a Canadian individualistic culture. Conversely, it may be the fact that the narcissistic system was not activated that allowed our communal focus manipulations to reduce narcissism. It is highly doubtful that if we had tried to increase people's communal focus in a threatening manner (e.g., by telling them they are ungrateful or unhelpful)

that it would have made them respond less narcissistically. Instead, it likely would have increased people's state narcissism.

When does trait narcissism matter? An important question to address is the issue of when trait narcissism matters for fluctuations in state narcissism. Although Campbell and Foster (2007) did not explicitly state that the system only functions within highly narcissistic individuals, the majority of previous research compares individuals high versus low in trait narcissism. This focus could suggest that narcissistic processes only function for individuals who are dispositionally narcissistic. Perhaps the most novel aspect of this dissertation lies in the subtle observation that trait narcissism did not moderate any of the findings. That is, individuals high in trait narcissism did not react differently to the contextual cues examined in my dissertation research (either increased communal focus or day-to-day experiences) than those individuals who are low in narcissism. In other words, narcissists' state narcissism did not fluctuate more or less in response to situational cues than non-narcissists. This observation is novel in that it suggests that everyone has the propensity to behave more or less narcissistically. It is also novel in that we can suggest that narcissism functions as a dynamic regulatory system for everyone, not just for those high in trait narcissism.

It is nevertheless possible that there are some contexts in which narcissists react more vigorously or more intensely, and demonstrate greater fluctuations in their state narcissism, compared to non-narcissists. In all of the studies in this dissertation, the daily events or communal primes were relatively non-threatening. As previously mentioned, plenty of previous research suggests that narcissists react defensively to self-related threats. Thus it may be the case that narcissists will react more strongly in response to ego-threat. That is, we posit that trait narcissism will moderate the effects of ego-threat on state narcissism. This is would also be a

prime example of situations that provoke more narcissistic reactions. In addition, it may be useful for future researchers to investigate what additional personality traits or qualities influence state narcissism and in what contexts.

Does pathological narcissism function in a self-regulatory manner? Although I cannot conclusively answer this question, the data from Manuscript 3 suggests that the meaningful within-person variability exists in more pathological and vulnerable manifestations of narcissism. Much like subclinical grandiose narcissism, pathological conceptualizations of narcissism seem to fluctuate in accordance with people's daily well-being. This is consistent with theoretical models of pathological narcissism. These models suggest that pathological narcissists fluctuate between grandiose and vulnerable states (Pincus et al., 2009). Indeed in many cases, it is only when people are in vulnerable states that they seek clinical help and not when they are in a grandiose frame of mind. This characterization of pathological narcissism, however, is based largely on clinical observations. There is no direct empirical data tracking daily fluctuations in pathological narcissism. There is, however, previous research that indicates that pathological narcissists are influenced by daily interpersonal events (Besser & Zeigler-Hill, 2010; Roche, Pincus, Conroy, Hyde, & Ram, 2013). Roche et al. (2013) found that individuals high in grandiose pathological narcissism were more reactive to status threats whereas individuals high in vulnerable pathological narcissism were more rejection sensitive. In addition, Besser and Zeigler-Hill (2010) found that vulnerable pathological narcissism was related to higher negative affect and humiliation concerns after experiencing private negative offenses whereas grandiose pathological narcissism was associated with greater negative affect and a lack of forgiveness following public negative events. Given previous research, it would be useful for researchers to consider examining fluctuations in state pathological narcissism which could shed light on what

contexts or situations affect grandiose and vulnerable aspects of people's personality. Such understanding could have important implications in clinical settings.

Additional Considerations and Future Directions

There are many social, cognitive, affective and contextual factors that may influence fluctuations in state narcissism, which could inspire future research examining narcissism as a personality process. An important future direction may include examining the context or the developmental lifespan in which narcissism will fluctuate most readily. All of the data collected within this dissertation used a convenience sample of undergraduate students. This is notable for multiple reasons. There does seem to be a large age effect on narcissism such that younger individuals tend to be more narcissistic than older individuals. In addition, there is generational data which suggests that today's generation is more self-centered, conceited, and narcissistic than previous generations (e.g., Twenge, Konrath, Foster, Campbell, & Bushman, 2008). Because we only used younger samples in our research, it is unclear whether narcissism functions as a dynamic regulatory system among older adults. This does not mean to suggest that older adults do not behave more or less narcissistically under different circumstances. It is more likely, however, that greater variability exists in people's narcissistic tendencies among younger adults.

In addition, the majority of the participants in our studies were in a distinct life stage that Arnett (2000) labeled as emerging adulthood. Emerging adulthood (ages 18-25) is a time where adolescents become more independent, self-focused but also struggle with figuring out who they are and what they are going to do with their lives (Arnett, 2000). Many concerns throughout emerging adulthood are consistent with narcissism, particularly as adolescents figure out the ways in which they are going to be financially independent and successful. It is during this life stage where narcissism may actually be most beneficial and used in a strategic manner (e.g., to

secure future jobs). This theorizing is also consistent with Social Investment Theory (Roberts, Wood, & Lodi-Smith, 2005) which suggests that people's personality matures across the lifespan in accordance with their social roles. As adolescents gain more responsibility in adulthood their personality tendencies (e.g., conscientiousness) mature in accordance with changing expectations (e.g., due to increasing responsibility and independence; Roberts & Wood, 2006). It is possible that in order to face the social roles that accompany emerging adulthood, people use their narcissism in accordance with those roles and to achieve their goals. Thus fluctuations in state narcissism may be more prominent throughout this age group.

Finally, my dissertation research might also suggest that narcissism is not necessarily a maladaptive personality state. Greater psychological well-being, less daily stress, and celebrating one's daily achievements are all related to higher state narcissism. In future, it would be interesting to examine the idea that narcissism may be employed strategically. Are there contexts in which people strategically enhance their narcissism? If people can strategically use their narcissism to 'get ahead' and then rein in their narcissism to 'get along' with others, narcissism may appear to be advantageous. It is possible that some contexts activate people's narcissistic tendencies and that narcissism can be employed in order to succeed. During a job interview it is beneficial to appear extraverted, charming, and place greater emphasis on one's positive qualities. But, after receiving the job, it may be better for people to behave more communally toward others. Given that variability is itself a stable individual difference variable, future research may want to look at the degree to which people fluctuate in their narcissism across time. Are there more adaptive types of narcissism than others (e.g., stable vs. unstable narcissism)? Those who demonstrate a high degree of variability in their narcissistic tendencies may be able

to reap the benefits of narcissism while avoiding more of the detrimental interpersonal costs associated with narcissism compared to those who have very stable narcissism.

Conclusion

In sum, we are all narcissists to different degrees, across different contexts. Just as people can switch from being rude to polite, or dominant to submissive from moment-to-moment, people can also fluctuate from a non-narcissistic to a narcissistic state. Narcissism may be a dynamic self-regulatory system that functions within all individuals which can be down-regulated when fundamental aspects of narcissism are diminished and can be up-regulated when people receive a boost to their self-esteem or, perhaps, when they experience a threat to their self-esteem. Increases and decreases in state narcissism may lead people to engage in a variety of self-regulatory behaviors that work to maintain a positive self-image. Although this dissertation provides novel insights into the antecedents and consequences of narcissism, numerous questions concerning state narcissism remain to be explored.

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APPENDIX A
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APPENDIX B
Empathic Concern Manipulation (adapted from Batson et al., 1997)
(Used in Manuscript 1: Study 1)

Low Empathy: Try to be as objective as possible about what has happened to the person in the upcoming news story and how it has affected her life. To remain objective, do not let yourself get caught up in imagining what this person has been through and how she feels as a result. Just try to remain detached as you read the news article.

High Empathy: Next you are going to read a news story and answer a few questions. Try to imagine how the person in the upcoming news story feels about what has happened and how it has affected her life. Try not to concern yourself with attending to all the information presented. Just concentrate on trying to imagine how the person in the news story feels.

News Article:

Drinking and Driving: Karen's Story

February 16, 2010 is a day Karen Simmons will never forget. That evening, she and her sister Laura drove to work the nightshift at a local diner. Karen was driving with her sister beside her in the passenger seat. Karen was 21, Laura was 17. They had driven this route dozens of times without incident. But that night, Ed Bauer decided he was okay to drive, even though he had had a few drinks. He was speeding when he drove into the back of Karen's car. Afterwards, he said he didn't even see them until it was too late, though they had been stopped at a red light for minutes. The force of the impact drove their car into the intersection, where it was hit again on the passenger side by another car.

Karen's car was demolished and she was knocked unconscious. She woke later to find she had several broken bones and a fractured skull. She had no feeling on the left side of her face and permanent damage to her left eye. Her legs had also been so badly broken that she was confined to a wheelchair. Worst of all, Karen woke up to learn that her sister Laura had been killed instantly.

This happened a year ago. Aside from the physical trauma Karen suffered, her emotional trauma is extensive. She struggles every day. A team of physiotherapists and psychologists are working hard to rehabilitate her, but many days Karen still blames herself for her sister's death.

Truth is, her sister Laura died because one man decided he was okay to drive even though he'd been drinking.

APPENDIX C
State Version of the Narcissistic Personality Inventory (Raskin & Terry, 1988)
(Used in Manuscript 1: Studies 1-4)
(Trait instructions were used in Manuscript 2 and 3)

This inventory consists of a number of pairs of statements with which you may or may not identify.

Consider this example:
A. I like having authority over people
B. I don't mind following orders

Which of these two statements is closer to your own feelings about yourself RIGHT NOW? If you identify more with "liking to have authority over people" than with "not minding following orders", then you would choose option A.

You may identify with both A and B. In this case you should choose the statement which seems closer to yourself. Or, if you do not identify with either statement, select the one which is least objectionable or remote. In other words, read each pair of statements and then choose the one that is closer to your own feelings at the current moment. Indicate your answer selecting the letter (A or B) in the space provided. Please do not skip any items.

CHOOSE EITHER "A" OR "B"

1. A. I have a natural talent for influencing people.
   B. I am not good at influencing people. 1. _____

2. A. Modesty doesn't become me.
   B. I am essentially a modest person. 2. _____

3. A. I would do almost anything on a dare.
   B. I tend to be a fairly cautious person. 3. _____

4. A. When people compliment me I sometimes get embarrassed.
   B. I know that I am good because everybody keeps telling me so. 4. _____

5. A. The thought of ruling the world frightens the hell out of me.
   B. If I ruled the world it would be a better place. 5. _____

6. A. I can usually talk my way out of anything.
   B. I try to accept the consequences of my behaviour. 6. _____

7. A. I prefer to blend in with the crowd.

B. I like to be the center of attention. 7. _____

8. A. I will be a success.
B. I am not too concerned about success. 8. _____

9. A. I am no better or worse than most people.
B. I think I am a special person. 9. _____

10. A. I am not sure if I would make a good leader.
B. I see myself as a good leader. 10. _____

11. A. I am assertive.
B. I wish I were more assertive. 11. _____

12. A. I like to have authority over other people.
B. I don't mind following orders. 12. _____

13. A. I find it easy to manipulate people.
B. I don't like it when I find myself manipulating people. 13. _____

14. A. I insist upon getting the respect that is due me.
B. I usually get the respect that I deserve. 14. _____

15. A. I don't particularly like to show off my body.
B. I like to show off my body. 15. _____

16. A. I can read people like a book.
B. People are sometimes hard to understand. 16. _____

17. A. If I feel competent I am willing to take responsibility for making decisions.
B. I like to take responsibility for making decisions. 17. _____

18. A. I just want to be reasonably happy.
B. I want to amount to something in the eyes of the world. 18. _____

19. A. My body is nothing special.
B. I like to look at my body. 19. _____

20. A. I try not to be a show off.
B. I will usually show off if I get the chance. 20. _____

21. A. I always know what I am doing.
B. Sometimes I am not sure of what I am doing. 21. _____

22. A. I sometimes depend on people to get things done.
B. I rarely depend on anyone else to get things done. 22. _____

23. A. Sometimes I tell good stories.
B. Everybody likes to hear my stories. 23. _____

24. A. I expect a great deal from other people.
B. I like to do things for other people. 24. _____

25. A. I will never be satisfied until I get all that I deserve.
B. I take my satisfactions as they come. 25. _____

26. A. Compliments embarrass me.
B. I like to be complimented. 26. _____

27. A. I have a strong will to power.
B. Power for its own sake doesn't interest me. 27. _____

28. A. I don't care about new fads and fashions.
B. I like to start new fads and fashions. 28. _____

29. A. I like to look at myself in the mirror.
B. I am not particularly interested in looking at myself in the mirror. 29. _____

30. A. I really like to be the center of attention.
B. It makes me uncomfortable to be the center of attention. 30. _____

31. A. I can live my life in any way I want to.
B. People can't always live their lives in terms of what they want. 31. _____

32. A. Being an authority doesn't mean that much to me.
B. People always seem to recognize my authority. 32. _____

33. A. I would prefer to be a leader.
B. It makes little difference to me whether I am a leader or not. 33. _____

34. A. I am going to be a great person.
B. I hope I am going to be successful. 34. _____

35. A. People sometimes believe what I tell them.
B. I can make anybody believe anything I want them to. 35. _____

36. A. I am a born leader.
B. Leadership is a quality that takes a long time to develop. 36. _____

37. A. I wish somebody would someday write my biography.
B. I don't like people to pry into my life for any reason. 37. _____

38. A. I get upset when people don't notice how I look when I go out in public.
B. I don't mind blending into the crowd when I go out in public. 38. _____

39. A. I am more capable than other people.
B. There is a lot that I can learn from other people. 39. _____

40. A. I am much like everybody else.
B. I am an extraordinary person. 40. _____

APPENDIX D
State Rosenberg Self-esteem Scale (Rosenberg, 1965)
(Used in Manuscript 1: Studies 1 and 3)
(Trait instructions used in Manuscript 2 and 3)

Listed below are a number of statements about how people feel about themselves. Please read each statement and decide whether you agree or disagree that the statement describes you, and to what extent. Please use the scale below and circle the number that best represents how you feel RIGHT NOW.

Not at all						Extremely
1	2	3	4	5	6	7

1. I feel that I am a person of worth, at least on an equal basis with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

APPENDIX E
Similarities and Differences with Friends and Family (SDFF) Manipulation
(Tarfimow, Triandis, & Goto, 1991)
(Used in Manuscript 1: Studies 2a and 2b)

Independent Self-construal Condition:

Please think of what makes you <u>different</u> from your friends and family. This can include traits, likes, dislikes, aspirations or dreams etc. List them below.

_____
_____
_____

What do you expect yourself to do in the future?

_____
_____
_____

Interdependent Self-construal Condition:

Please think of what you have <u>in common</u> with your friends and family. This can include traits, likes, dislikes, aspirations or dreams etc. List them below.

_____
_____
_____

What do they expect you to do in the future?

_____
_____
_____

APPENDIX F
Psychological Entitlement Scale (Campbell et al., 2004)
(Used in Manuscript 1: Study 2b)

Please select the most appropriate response for each of the following items.

Strong disagreement						Strong agreement
1	2	3	4	5	6	7

1. I honestly feel I'm just more deserving than others.

2. Great things should come to me.

3. If I were on the Titanic, I would deserve to be on the first lifeboat!

4. I demand the best because I'm worth it.

5. I do not necessarily deserve special treatment.

6. I deserve more things in my life.

7. People like me deserve an extra break now and then.

8. Things should go my way.

9. I feel entitled to more of everything.

APPENDIX G
Grandiosity Scale (Rosenthal et al., 2003)
(Used in Manuscript 1: Study 2b)

INSTRUCTIONS: This scale consists of a number of words and phrases that describe different personal qualities. Read each item and then circle the appropriate answer. Indicate to what extent you feel this way *in general*, that is, *on the average.* Use the following scale to record your answers:

Not at all						Extremely
1	2	3	4	5	6	7

1.Perfect

2. Like an extraordinary person

3. Superior

4. Heroic

5. Omnipotent

6. Unrivalled

7. Authoritative

8. Glorious

9. Prestigious

10. Acclaimed

11. Prominent

12. High-status

13. Brilliant

14. Dominant

15. Envied

16. Powerful

APPENDIX H
I/We prime task (Brewer & Gardner, 1996)
(Used in Manuscript 1: Studies 3 and 4)

Independent Self-construal Condition:

Please read the paragraph on the next page carefully and tally all the PRONOUNS found within the paragraph. The pronouns may be singular (e.g. he, she, me, I, you, mine, yours, etc.) or plural (e.g., we, they, our, their, etc). Please take your time.

I go to the city often. My anticipation fills me as I see the skyscrapers come into view. I allow myself to explore every corner, never letting an attraction escape me. My voice fills the air and street. I see all the sights, I window shop, and everywhere I go I see my reflection looking back at me in the glass of a hundred windows. At nightfall I linger, my time in the city almost over. When finally I must leave, I do so knowing that I will soon return. The city belongs to me.

How many pronouns did you find within the paragraph? _____

Interdependent Self-construal Condition:

Please read the paragraph on the next page carefully and make a tally of all the PRONOUNS found within the paragraph. The pronouns may be singular (e.g. he, she, me, I, you, mine, yours, etc.) or plural (e.g., we, they, our, their, etc). Please take your time.

We go to the city often. Our anticipation fills us as we see the skyscrapers come into view. We allow ourselves to explore every corner, never letting an attraction escape us. Our voices fill the air and street. We see all the sights, we window shop, and everywhere we go we see our reflections looking back at us in the glass of a hundred windows. At nightfall we linger, our time in the city almost over. When finally we must leave, we do so knowing that we will soon return. The city belongs to us.

How many pronouns did you find within the paragraph? _____

Control Condition:

Please read the paragraph on the next page carefully and circle all the instances of the word 'IT' or 'ITS' found within the paragraph. Please take your time.

It goes to the city often. Its anticipation fills it as it sees the skyscrapers come into view. It allows itself to explore every corner, never letting an attraction escape it. Its voice fills the air and street. It sees all the sights, it window shops, and everywhere it goes, it sees its reflection looking back at it in the glass of a hundred windows. At nightfall it lingers, its time in the city almost over. When finally it must leave, it does so knowing that it will soon return. The city belongs to it.

How many instances of the work 'IT' or 'ITS' did you find within the paragraph? _____

APPENDIX I
Fame Scale (Maltby, 2010)
(Used in Study 4)

Please select the most appropriate response for each of the following items.

1	2	3	4	5
Strongly Disagree				Strongly Agree

1. Very little matters to me apart from being famous _____
2. I would do anything to be famous _____
3. Nothing else is of real value to me apart from being famous _____
4. I would be willing to do what others may not be willing to do to become famous _____
5. I have always wanted to be famous _____
6. I am desperate to be famous _____
7. Being famous is what is important in life _____
8. I want to be famous because I want everyone to know my name _____
9. I want to be famous so I can be rich _____
10. I want to see my picture in magazines _____
11. I want to be famous so I am able to access all areas of an elite social world _____
12. I feel I would fit in well with other celebrities _____
13. I want to be famous because I love to be in the spot-light _____
14. I want to be famous so I am recognized everywhere I go _____
15. I have got what it takes to be famous _____
16. I have the confidence to be famous _____
17. I have got the type of personality that is required to be famous _____
18. I should be famous because of my unique character _____
19. I am always in a good mood and that will help me become famous _____
20. I want to be famous because I enjoy my life _____
21. I am always happy and that will help me become famous _____

Subscales:
Fame intensity questions are from 1-7.
Celebrity Lifestyle questions are from 8-14.
Suitability questions are from 15-21.

APPENDIX J
Willingness to Help Measure
(Used in Manuscript 1: Study 4)

Please read the situation presented below and answer the following questions.

Cindy

Imagine you are a customer in the restaurant that Cindy visits for lunch. You notice that when the bill comes she is embarrassed to find that she does not have quite enough local currency to pay for her meal (they accept cash only). She apologizes to the waiter and asks for directions to the nearest bank machine, which turns out to be quite far away. You could save her the trouble and embarrassment by giving her the small amount she needs (approximately 50 cents).

How likely would you be to give Cindy a small amount of money to save her the hassle of walking many blocks to a bank machine and back?

1 (*Extremely unlikely*) to 5 (*Neither likely nor unlikely*) to 9 (*Extremely likely*)

How much does Cindy deserve your help? 1 (*Not at all*) to 9 (*Very much*)

Susan

Imagine that you are another of Susan's co-workers. At some point, you are chatting and she asks a favour of you. She needs to deliver a large heavy parcel to the local post office. She does not have a car, but you do, so she asks if you would mind taking it for her on your way home. The post office is in the opposite direction as your home, so helping Susan will add at least 10-15 minutes to your evening commute.

How likely would you be to agree to deliver Susan's parcel?

1 (*Extremely unlikely*) to 5 (*Neither likely nor unlikely*) to 9 (*Extremely likely*)

How much does Susan deserve your help? 1 (*Not at all*) to 9 (*Very much*)

Bill

Imagine you are one of Bill's other neighbours. One day you see him working in his garden using a small hand-tool where a bigger one would be much easier to use. You happen to have the exact tool he needs, but you were planning to use it yourself later that day. Bill asks if you have any tools that would help making his gardening chores easier.

How likely are you to offer your superior garden tool to Bill even though it would prevent you from using it the same day?

1 (*Extremely unlikely*) to 5 (*Neither likely nor unlikely*) to 9 (*Extremely likely*)

How much does Bill deserve your help? 1 (*Not at all*) to 9 (*Very much*)

Jim

Imagine you work in the same building as Jim and sometimes see him in line to buy food at the building food court. One day, the line is particularly slow and you realize that you may not have long to eat your lunch before you must go back to work. Then Jim asks if he could move ahead of you in line because he has only a few minutes before his next meeting and might not get to buy lunch otherwise.

How likely are you to let Jim move ahead of you in line even though it will make your short lunch hour even shorter?

1 (*Extremely unlikely*) to 5 (*Neither likely nor unlikely*) to 9 (*Extremely likely*)

How much does Jim deserve your help? 1 (*Not at all*) to 9 (*Very much*)

APPENDIX K
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Published in *Journal of Personality*

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APPENDIX L
State 16-Item Narcissistic Personality Inventory (Ames et al., 2006)
(Used in Manuscript 2 and 3)

This inventory consists of a number of pairs of statements with which you may or may not identify.

Consider this example:
A. I like having authority over people
B. I don't mind following orders

Which of these two statements is closer to your own feelings about yourself? If you identify more with "liking to have authority over people" than with "not minding following orders", then you would choose option A.

You may identify with both A and B. In this case you should choose the statement which seems closer to yourself **RIGHT NOW**. Or, if you do not identify with either statement at this moment, select the one which is least objectionable or remote. In other words, read each pair of statements and then choose the one that is closer to your own feelings. Indicate your answer by selecting the appropriate letter (A or B). Please do not skip any items.

1. A. When people compliment me I sometimes get embarrassed.
   B. I know that I am good because everybody keeps telling me so. 1. _____

2. A. I prefer to blend in with the crowd.
   B. I like to be the center of attention. 2. _____

3. A. I am no better or worse than most people.
   B. I think I am a special person. 3. _____

4. A. I like to have authority over other people.
   B. I don't mind following orders. 4. _____

5. A. I find it easy to manipulate people.
   B. I don't like it when I find myself manipulating people. 5. _____

6. A. I insist upon getting the respect that is due me.
   B. I usually get the respect that I deserve. 6. _____

7. A. I try not to be a show off.
   B. I will usually show off if I get the chance. 7. _____

8. A. I always know what I am doing.
   B. Sometimes I am not sure of what I am doing. 8. _____

9. A. Sometimes I tell good stories.
   B. Everybody likes to hear my stories. 9. _____

10. A. I expect a great deal from other people.
    B. I like to do things for other people. 10. _____

11. A. I really like to be the center of attention.
    B. It makes me uncomfortable to be the center of attention. 11. _____

12. A. Being an authority doesn't mean that much to me.
    B. People always seem to recognize my authority. 12. _____

13. A. I am going to be a great person.
    B. I hope I am going to be successful. 13. _____

14. A. People sometimes believe what I tell them.
    B. I can make anybody believe anything I want them to. 14. _____

15. A. I am more capable than other people.
    B. There is a lot that I can learn from other people. 15. _____

16. A. I am much like everybody else.
    B. I am an extraordinary person. 16. _____

APPENDIX M
Single-item Self-esteem Scale (Robins, Hendin, & Trzesniewski, 2001)
(Used in Manuscript 2 and 3)

I have high self-esteem.

1	2	3	4	5
Not very true of me				Very true of me

APPENDIX N
Daily Events Checklist
(Used in Manuscript 2)

When responding to the following questions, think back to how you felt in the last 24 hours.

Participants responded *yes* or *no* to the following questions:

Agentic Daily Events:

During the past 24 hours, were you assigned to an important role in a group (e.g.., a leadership position)?
During the past 24 hours, did you feel that you had power over anyone?
During the past 24 hours, did you receive any recognition (e.g., for a job well done, receive an award)?

Communal Daily Events:

During the past 24 hours, did you have a pleasant interaction with someone (e.g., boy/girlfriend, roommate, friend, family member, employer)?
During the past 24 hours, did you do something caring for someone else?
During the past 24 hours, did someone do something caring for you?
During the past 24 hours, did you give someone a gift?
During the past 24 hours, did you help someone with a problem?
During the past 24 hours, did you share something meaningful about yourself with someone?
During the past 24 hours, did you volunteer your time for an organization, cause, or event?
During the past 24 hours, did you donate any money to an organization, cause, or event?
During the past 24 hours, did you feel concerned for anyone?

APPENDIX O
Measure of Daily Stress
(Used in Manuscript 2)

During the past 24 hours, how overwhelmed by schoolwork or other responsibilities did you feel?

Not at all overwhelmed						Extremely overwhelmed
1	2	3	4	5	6	7

During the past 24 hours, how socially isolated did you feel?

Not at all isolated						Extremely isolated
1	2	3	4	5	6	7

During the past 24 hours how stressed out or anxious did you feel?

Not at all anxious						Extremely anxious
1	2	3	4	5	6	7

APPENDIX P
Copyright Agreement – Manuscript 3

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APPENDIX Q
Pathological Narcissism Scale (Pincus et al., 2009)
(Used in Manuscript 3)

1	2	3	4	5	6
Not at all like me					Very much like me

1. I often fantasize about being admired and respected.
2. My self-esteem fluctuates a lot.
3. I sometimes feel ashamed about my expectations of others when they disappoint me.
4. I can usually talk my way out of anything.
5. It's hard to feel good about myself when I'm alone.
6. I can make myself feel good by caring for others.
7. I hate asking for help.
8. When people don't notice me, I start to feel bad about myself.
9. I often hide my needs for fear that others will see me as needy and dependent.
10. I can make anyone believe anything I want them to.
11. I get mad when people don't notice all that I do for them.
12. I get annoyed by people who are not interested in what I say or do.
13. I wouldn't disclose all my intimate thoughts and feelings to someone I didn't admire.
14. I often fantasize about having a huge impact on the world around me.
15. I find it easy to manipulate people.
16. When others don't notice me, I start to feel worthless.
17. Sometimes I avoid people because I'm concerned that they'll disappoint me.
18. I typically get very angry when I'm unable to get what I want from others.
19. I sometimes need important others in my life to reassure me of my self-worth.
20. When I do this for other people, I expect them to do things for me.
21. When others don't meet my expectations, I often feel ashamed about what I wanted.
22. I feel important when others rely on me.
23. I can read people like a book.
24. When others disappoint me, I often get angry at myself.
25. Sacrificing for others makes me the better person.
26. I often fantasize about accomplishing things that are probably beyond my means.
27. Sometimes I avoid people because I'm afraid they won't do what I want them to.
29. I get angry when criticized.
28. It's hard to show others the weaknesses I feel inside.
30. It's hard to feel good about myself unless I know other people admire me.
31. I often fantasize about being rewarded for my efforts.
32. I am preoccupied with thoughts and concerns that most people are not interested in me.

33. I like to have friends who rely on me because it makes me feel important.
34. Sometimes I avoid people because I'm concerned they won't acknowledge what I do for them.
35. Everybody likes to hear my stories.
36. It's hard for me to feel good about myself unless I know other people like me.
37. It irritates me when people don't notice how good a person I am.
38. I will never be satisfied until I get all that I deserve.
39. I try to show what a good person I am though my sacrifices.
40. I am disappointed when people don't notice me.
41. I often find myself envying others' accomplishments.
42. I often fantasize about performing heroic deeds.
43. I help others in order to prove I'm a good person.
44. It's important to show people I can do it on my own, even if I have some doubts inside.
45. I often fantasize about being recognized for my accomplishments.
46. I can't stand relying on other people because it makes me feel weak.
47. When others don't respond to me the way that I would like them to, it is hard for me to still feel ok with myself.
48. I need others to acknowledge me.
49. I want to amount to something in the eyes of the world.
50. When others get a glimpse of my needs, I feel anxious and ashamed.
51. Sometimes it's easier to be alone than to face not getting everything I want from other people.
52. I can get pretty angry when others disagree with me.

APPENDIX R
Hypersensitive Narcissism Scale (Hendin & Cheek, 1997)
(Used in Manuscript 3)

1	2	3	4	5
Very uncharacteristic or untrue; strongly disagree				Very characteristic or true; strongly agree

1. I can become entirely absorbed in thinking about my personal affairs, my health, my cares or my relations to others.
2. My feelings are easily hurt by ridicule or by the slighting remarks of others.
3. When I enter a room I often become self-conscious and feel that the eyes of others are upon me.
4. I dislike sharing the credit of an achievement with others.
5. I dislike being with a group unless I know that I am appreciated by at least one of those present.
6. I feel that I am temperamentally different from most people.
7. I often interpret the remarks of others in a personal way.
8. I easily become wrapped up in my own interests and forget the existence of others.
9. I feel that I have enough on my hands without worrying about other people's troubles.
10. I am secretly ''put out'' when other people come to me with their troubles, asking me for my time and sympathy.

APPENDIX S
Adjective-based Narcissism Scale (Giacomin & Jordan, 2016)
(Used in Manuscript 3)

Using the following scale, please indicate how much each of the adjectives below describes your behaviour over the last 24 hours.

1	2	3	4	5	6	7
Disagree strongly	Disagree moderately	Disagree a little	Neither agree nor disagree	Agree a little	Agree moderately	Agree strongly

During the past 24 hours, I have felt:

1. Egotistical
2. Self-focused
3. Vain
4. Modest
5. Manipulative
6. Attention-seeking
7. Self-sacrificing
8. Arrogant
9. Humble
10. Narcissistic
11. Self-centered
12. Unsure of myself
13. Conceited
14. Self-indulgent
15. Selfish
16. Self-sufficient
17. Proud
18. Reserved

APPENDIX T
Single Item Narcissism Scale (Konrath, Meier, & Bushman, 2014)
(Used in Manuscript 3)

To what extent do you agree with this statement: I am a narcissist.
(Note: The word 'narcissist' means egotistical, self-focused, and vain)

1	2	3	4	5	6	7
Disagree strongly	Disagree moderately	Disagree a little	Neither agree nor disagree	Agree a little	Agree moderately	Agree strongly

APPENDIX U
Daily Life Satisfaction (adapted from Diener et al., 1985)
(Used in Manuscript 3)

When responding to the following questions, think back to how you felt in the last 24 hours.

During the past 24 hours, I felt my life was close to ideal.

Not at all						Extremely
1	2	3	4	5	6	7

During the past 24 hours, I have been satisfied with my life.

Not at all						Extremely
1	2	3	4	5	6	7

During the past 24 hours, I would change almost nothing.

Not at all						Extremely
1	2	3	4	5	6	7

APPENDIX V
Positive & Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988)
(Used in Manuscript 3)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the ***last 24 hours***. Use the following scale to record your answers.

1	2	3	4	5
Very slightly or not at all				Extremely

_____	interested	_____	irritable
_____	distressed	_____	alert
_____	excited	_____	ashamed
_____	upset	_____	inspired
_____	strong	_____	nervous
_____	guilty	_____	determined
_____	scared	_____	attentive
_____	hostile	_____	jittery
_____	enthusiastic	_____	active
_____	proud	_____	afraid