What's In It For Me? Why Narcissists Help Others

Research Thesis

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by

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Abstract

Grandiose and vulnerable narcissists are both self-absorbed and highly entitled, yet they can also exhibit prosocial behavior, helping others under some circumstances. We predict that grandiose and vulnerable narcissists differ in their motivations to help, and these motivations may be influenced by their interpersonal goals and the perceived status of the target they wish to help. First, participants completed self-report measures assessing their levels of grandiose narcissism, vulnerable narcissism, and their interpersonal goals. Next, they completed a behavioral measure of helpfulness, where participants could help a fictitious partner complete a tangram task. We manipulated the status of their partner so participants perceived a low-status partner (high school student), an equal-status partner (same year in college), or a high-status partner (a graduate student). Results show that both narcissistic subtypes help when put in a situation where helping is normative but reported different helping motivations and experiences. For example, after helping, grandiose narcissists felt superior, special, respected, and like a hero –these effects were sometimes amplified when participants were also high in self-image goals or were helping a lowstatus individual. In comparison, vulnerable narcissists were less likely to help low-status individuals and reported motivations to help such as appearing likable, not being judged by the partner, and not being judged by the researcher. These results suggest grandiose and vulnerable narcissists may use helping as a way to boost their ego but in different ways (e.g. either for selfenhancement or social approval).

What's In It For Me? Why Narcissists Help Others

Individuals high in trait narcissism exhibit exploitativeness, entitlement, a lack of empathy, and a preoccupation with their self-worth (Dickinson & Pincus, 2003; Miller & Campbell, 2008; Morf & Rhodewalt, 2001; Raskin & Terry, 1988). Due to their self-focus, researchers often assume that prosocial behavior, or behavior intended to help others, is atypical for narcissists¹. However, previous research finds that narcissists can act prosocially (Moran, 2016; Kauten & Barry, 2014, 2016; Konrath, Ho, & Zarins, 2016). While these studies provide answers to *if* and *when* narcissists will show prosocial behavior, they do not directly address *why* narcissists help or their perceived consequences after helping. The current study provides theoretical contributions to the field by investigating narcissistic motivations for helping and exploring how helping can influence narcissists' feelings and perceptions. The results of this study offer practical implications as well. If people can better understand grandiose and vulnerable narcissists' interpersonal goals during social interactions, they may be able to improve narcissists' poor-quality relationships (Paulhus, 1998) or encourage greater prosocial behavior in workplace settings by marketing to the narcissists' specific goals.

Narcissistic Subtypes

Research on trait narcissism has supported the division of narcissism into two subtypes: grandiose and vulnerable (Dickinson & Pincus, 2003; Miller & Campbell, 2008; Russ, Shedler, Bradley, & Westen, 2008; Wink, 1991). The narcissistic subtypes share several key features including entitlement, aggression, and grandiose fantasy (Dickinson & Pincus, 2003; Krizan & Johar, 2012; Miller et al., 2011). In addition, both types share a cognitive-affective

¹ While we are studying trait narcissism, or individuals who are high or low on the continuum of grandiose and vulnerable narcissism, we refer to these individuals as "narcissists" for brevity.

preoccupation with the self, a tendency to give into one's own needs, and show disregard for others (Lobbestael, Baumeister, Fiebig, & Eckel, 2014). Although the subtypes possess traits that link them together, they are also distinguishable from one another.

Grandiose narcissism usually comes to mind when thinking about the stereotypical narcissist. Grandiose narcissists are arrogant, confident, believe they are inherently superior, and report high self-esteem (Freis, 2016; Rose, 2002). They are also interpersonally forceful, domineering, and act on their entitled feelings to gain what they want (Lannin, Guyll, Krizan, Madon, & Cornish, 2014). Grandiose narcissists are extraverted and seek attention and admiration from others (Lobbestael, et al., 2014). They prefer for others to see them the way they see themselves. They are approach motivated, and will brag, show-off, and dominate conversations to demonstrate their leadership (Buss & Chiodo, 1991; Foster & Trimm, 2008; Vangelisti, Knapp, & Daly, 1990). These behaviors work for grandiose narcissists, at least initially, as others generally do report admiring them, rating them as likeable, and rating their performances positively (Back, Schmukle, & Egloff, 2010; Czarna, Leifelf, Śmieja, Dufner, & Salovery, 2016; Deluga, 1997; Paulhus & John, 1998)

Grandiose narcissists are often initially seen as charming (Rose, 2002) but they are also extremely opportunistic, and use social situations to advance themselves or maintain their inflated ego and heightened self-view (Brown, Freis, Carroll, & Arkin, 2016; Foster & Trimm, 2008). For example, they seek out relationships with others that enhance their status and popularity (Campbell & Foster, 2007; Veselka & Schermer, 2011), use ingratiation to gain an authority figure's favor (Kauten & Barry, 2016; Pincus et al., 2009), and take opportunities to self-enhance (Wallace & Baumeister, 2002).

Vulnerable narcissists are also self-absorbed, entitled, and aggressive (Cain, Pincus, & Ansell, 2008; Given-Wilson et al., 2011; Krizan & Johar, 2015; Miller & Campbell, 2008), but unlike grandiose narcissists, they present themselves as timid, insecure, and as lacking in self-confidence (Lobbestael et al., 2014). They are highly neurotic and report low self-esteem and high inferiority in comparison to others (Crowe, 2017; Hendin & Cheek, 1997; Freis, 2016; Miller & Campbell, 2008; Miller, Lynam, Vise, Crowe, 2017; Pincus et al., 2009).

Vulnerable narcissists' uncertainty about themselves causes them to seek approval from others; their self-worth is contingent upon receiving validation and admiration (Stoeber, Sherry, & Nealis, 2015; Zeigler-Hill, 2008). If this need is not met, they can become susceptible to feelings of envy and hostility (Krizan & Johar, 2012). Moreover, vulnerable narcissism significantly correlates to depression, anxiety, hostility, and paranoia (Miller, Dir, Gentile, Wilson, Pryor, & Campbell, 2010). These individuals can also experience social issues and health problems, such as social avoidance and negative affectivity (Lannin et al., 2014).

Although vulnerable narcissists lack confidence they still seek power and control, and prefer to avoid the possibility of losing (Houston, McIntire, Kinnie, & Terry, 2002). Vulnerable narcissists' low agency and avoidance motivation (Foster & Trimm, 2008; Brown et al., 2016) makes it difficult for them to achieve their goals or boost their own self-esteem (Brown et al., 2016). They are also less able to self-enhance (Freis, Brown, Carroll, Arkin, 2015) which may be why they rely on others to manage their self-worth.

Due to the manipulative and antisocial nature of grandiose and vulnerable narcissists' personality (Campbell, Bush, Brunell & Shelton, 2005; Miller, Gentile, Wilson, & Campbell, 2013), one would expect them both to demonstrate negative social behavior. The literature supports this, showing that they exploit others to gain personal resources (Brunell, Davis, Schley,

Eng, Dulmen, 2013; Freis, Italiano & Carroll, in prep), aggress against minor insults (Bushman & Baumesiter, 1998), and are more likely to express prejudice (Campbell et al., 2004; Hodson, Hogg & MacInnis, 2009). While research often emphasizes the negative attributes of narcissists, research finds they can also be prosocial in some circumstances. It is important for the field to investigate narcissists' prosocial and antisocial traits in order to potentially improve their relationships.

Narcissism and Helping

Prosocial behavior is that which is intended to benefit others (Carlo & Randall, 2002). Past research has found links between grandiose narcissism and prosocial behavior. For example, Konrath and colleagues (2016) looked at the relationship between grandiose narcissism and altruistic prosocial behavior when participating in the "ASL association's ice bucket challenge." This challenge was a fundraising campaign that went viral in 2014, asking people to promote awareness for amyotrophic lateral sclerosis research (ALS) by privately donating money after posting a video of themselves dumping a bucket of icy water on their heads. They found that grandiose narcissists prefer to post a video of themselves completing the challenge than actually donate money to the charity involved. That is, they prefer to be prosocial in public but not private situations. People high in grandiose narcissism are also more generous and willing to share with others when helping behavior indicates more agentic versus communal attributes (Czarna, Czerniak & Szmajke, 2014). This evidence suggests that grandiose narcissists may have more egoistic motives for helping. Rather than provide authentic social support, grandiose narcissists likely act prosocially for an opportunity to self-enhance, achieve respect, admiration, and feelings of superiority.

Little information exists about vulnerable narcissists' motivations for helping. Kauten and Barry (2016) found that vulnerable narcissists exhibit little prosocial behavior, and Pincus and colleagues (2009) suggest they prefer to avoid social interactions for fear of negative appraisals. However, vulnerable narcissists base their self-worth on others' approval (Zeigler-Hill et al., 2008); thus, helping may present an opportunity to please others. Gaining approval would allow a vulnerable narcissist to feel more secure and accepted by others, which may be enough motivation to incur the costs of helping.

Although previous studies have identified situations in which narcissists might help, grandiose and vulnerable narcissists' motivations for helping are less clearly understood. To address the question of why narcissists help, we will test three factors: the status of the individual they are helping, their interpersonal goals or motivations, and their unique perceptions and feelings during and after helping.

Status of the Target

We predict grandiose narcissists may be likely to help a high-status person in order to increase their own social standing and feel good about themselves. Grandiose narcissists are entitled individuals, interested in gaining and maintaining their superiority. They seek out relationships with authority figures that can enhance their own status and popularity and often employ self-enhancing and ingratiation strategies (Campbell & Foster, 2007; Veselka & Schermer, 2011; Wallace & Baumeister, 2002). Grandiose narcissists are more likely to report prosocial behavior towards their parents than peers (Kauten & Barry, 2016), suggesting they seek opportunities to gain social praise and attention. Furthermore, grandiose narcissists' high social intelligence makes them more aware of their role in social interactions (Delič, Novak, Kovačič, & Avsec, 2011). Therefore, when put in a position where they have to help low-status

or high-status partners, their awareness may lead them to view the high-status individual as someone that can help them advance themselves.

Vulnerable narcissism, in contrast, is unrelated to any indicator of prosocial behavior (Kauten & Barry, 2016). Based on this past literature, one might predict that vulnerable narcissists would not be motivated to help anyone. However, a competing hypothesis exists. Past research also finds that vulnerable narcissists base their self-worth off of others' approval (Zeigler-Hill et al., 2008). Since helping is one-way people gain approval, vulnerable narcissists could help others as a way to get the social approval they need to manage their self-esteem. With two competing hypotheses, the role of vulnerable narcissists' motivations to help high-status and low-status others will be explored in this study.

Compassionate and Self-Image Goals

Interpersonal goals reflect specific relationships between the self and others (Crocker, Olivier & Nuer, 2011). Self-image and compassionate goals are two particular goals that may influence helping behavior. Individuals with self-image goals are motivated by impression management concerns, whereas individuals with compassionate goals are motivated by their concern for others' wellbeing (Crocker & Canavello, 2008).

The importance of a narcissist's self-image dates back to the original conceptualization of narcissism based on the Greek mythology character Narcissus who fell in love with his own image (Freud, 1914, Pincus et al., 2009). We predict that both grandiose and vulnerable narcissists hold egoistic motives for helping others. In fact, literature finds that due to grandiose narcissists' high entitlement, they exhibit high self-image goals (Moeller, Crocker, & Bushman, 2009). Although not previously tested, vulnerable narcissists' shared traits with grandiose narcissism, including self-absorption and high entitlement, suggest vulnerable narcissists may

also hold high self-image goals. Specifically, narcissists' higher self-image goals may motivate them to help others. but for their own self-benefit. Grandiose narcissists may help to self-enhance or increase their social standing, whereas vulnerable narcissists may help to gain social approval they need to maintain their self-esteem. Therefore, in both cases narcissists may act in ways that benefit others, but those actions are not executed with the well-being of others in mind.

Narcissists' Helping Motivations

In order to learn about narcissists motivations to help, people's reported experiences during helping and their perceptions and feeling after helping are important to uncover. Due to grandiose narcissists' motivations to maintain their inflated ego and their desire to outshine others, we predict that when put in a helping situation, they will want to demonstrate their superiority (Campbell & Foster, 2007, Morf & Rhodewalt, 2001; Sedikides & Gregg, 2001 Zeigler-Hill et al.,2008) and gain admiration or attention from others. Therefore, when put in a helping situation, they may help to feel good about themselves and to seem like a good person. Since helping could offer them an opportunity to self-enhance, after helping they may feel superior, repected, special, like a hero, and like they could show off about their experience to others.

Vulnerable narcissists' self-serving behavior is motivated by a need for social approval (Carlo & Randall, 2002). Therefore, vulnerable narcissists may provide help because they want to be likable and not judged by anyone. If they achieve their goal of gaining social approval from helping, after helping they could feel accepted and special. But they may also feel used and inferior after helping as they consistently see themselves as unfairly disadvantaged or like a victim in any given scenario (Freis, 2016; Zeigler-Hill, 2008).

The distinction between grandiose narcissists' belief that they are inherently superior and vulnerable narcissists' belief that they are inferior and disadvantaged, may offer critical insight into the narcissists' helping experiences. Since how people interact with others is often based on their self-beliefs (Leary, 1995), the narcissists' different perceptions of superiority and inferiority may differentially motivate who they are willing to help or how they interpret the interaction later on. We predict that after helping, narcissists will continue to manifest these distinct feelings. Grandiose narcissists may feel superior because they have gained or demonstrated their social standing and vulnerable narcissists may feel inferior because they feel used, submissive, or obligated to help.

The Present Study

Although past literature provides evidence regarding grandiose and vulnerable narcissists' helping behavior, this study will expand upon the literature by investigating their motivations for helping. One way we can better understand narcissists' behavior is through the level of status they perceive in the target as well as their level of self-image goals or related motivations. In the present study, participants completed a survey, a behavioral helping task, and follow-up questions to assess the extent to which narcissism is associated with helping and why narcissists chose to help. We examined the roles of self-image goals and motivations for helping partners of varying statuses: low-status (high school), equal-status (same year in college), or high-status (a graduate student).

We hypothesize that grandiose and vulnerable narcissists will not differ in their choice to help others (hypothesis 1). That is, when grandiose and vulnerable narcissists are put in a situation where helping is normative they both should provide help. However, the amount of help provided or the experience of helping may differ based on the status of the target. We predict that

grandiose narcissists will be motivated to help a high-status individual (hypothesis 2), and who vulnerable narcissists are motivated to help will be exploratory (hypothesis 3). In addition, we predict self-image goals will moderate narcissists' helping experience (hypothesis 4).

Specifically, grandiose narcissists will help because they want to feel good about themselves and look like a good person. They will feel superior, respected, special, and like they could show off about their experience after helping (hypothesis 5). Vulnerable narcissists, in comparison, may help because they desire social approval, want to be likable, and don't want to be judged by either the participant or the researcher. After helping, we predict vulnerable narcissists will feel accepted and special, but they may also feel used and inferior (hypothesis 6).

Method

Participants

Participants included 140 undergraduate students (91 female, 101 college freshmen, 94 Caucasian, ages 18-22) from The Ohio State University who completed the study in exchange for course credit.

Procedure

In this study, participants first completed a consent form and then were prompted to complete self-report questionnaires. These questionnaires measured their levels of grandiose and vulnerable narcissism, and their self-image and compassionate goals. Additionally, we measured participants' social desirability and need for cognition due to the nature of our helping task.

We modeled our manipulation after Ashton-James (2013) methods to assign participants to a low-status, equal-status, or high-status fictitious "partner" in which they had the opportunity help. Status was manipulated by having the opportunity to help a graduate student (high in status), an undergraduate student of the same year in school (equal-status), or a high school

student (low-status) participant in the adjacent room to the real participant. We also made sure the participants' gender matched the description of the fictitious participant in terms of the pronouns used to describe the "partner".

After revealing the partner's status, we told participants their partner "needed some help completing their problem-solving task since their session was up and they didn't want to have to stay later." Participants could then decide if they would like to help the partner or complete their own problem-solving task for 10 minutes.

If participants chose to help, they completed the tangram task (Saleem et al., 2015). However, if participants decided not to help, they were given another popular problem-solving task (Burnham & Davis, 1969) as part of the cover story. We chose the alternative task based on a pilot study which revealed that the task was not significantly different from the tangram task in how interesting, difficult, and fun it was to the participant. If participants decided to help, they were asked to complete as many tangram shapes as they could by tracing the shapes onto a piece of paper (see Appendix). Whether or not a participant decided to help, how long they helped for, and how many tangrams they completed was recorded by our research assistants. When participants finished helping, they answered follow-up questions about their experiences and motivations to help. Finally, all participants answered demographic questions and were debriefed.

Measures

Grandiose Narcissism We used the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) to assess individual differences in trait grandiose narcissism. This 40-item forced-choice measure asks participants to choose one of two statements that is most self-descriptive.

One of the statements in each pair reflects narcissistic sentiments (e.g., "I am more capable than

other people.") while the other is considered less narcissistic (e.g. "There is a lot that I can learn from other people."). Answers to all 40 items were summed to create a total grandiose narcissism score ($\alpha = .85$).

Vulnerable Narcissism We used the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997) to measure individuals' differences in trait vulnerable narcissism. This 10-item scale is rated on a 7-point Likert scale from "Strongly Disagree" to "Strongly Agree." Example items include "I often interpret the remarks of others in a personal way" and "I dislike sharing the credit of an achievement with others." Answers to all 10 items were summed to create a total vulnerable narcissism score ($\alpha = .83$)

Compassionate and Self-Image Goals The Compassionate and Self-image Goals Scale (SIG/CG; Crocker & Canevello, 2008) was used to assess participants' interpersonal goals. This 18-item measure asks participants to think about their friendship with their best friend, and their goals with this person. It is rated on a 5-point Likert scale from "Not At All" to "Extremely." Example items of the self-image goals include (e.g. "I want to get my best friend to respect or admire me,") and compassionate goals (e.g. "I want to have compassion for others' mistakes and weaknesses"). The mean the subscales were summed to create a total compassionate goals score (α =.79) and a total self-image goals score (α =.83).

Social Desirability We used the Balanced Inventory of Desired Responding (BIDR; Paulhus, 1988) to measure and control for participants' social desirability responding in the study. This is a 41-item measure that is rated on a 7-point Likert scale from "Not at All Like Me" to "Just Like Me." Two subscales are used in this scale, measuring self-deceptive positivity (e.g. "I am a completely rational person,") and impression management (e.g. "I sometimes drive faster

than the speed limit.") Answers to all 41 items were summed to create a self-deceptive positivity ($\alpha = .83$) and an impression management subscale ($\alpha = .72$).

Need for Cognition We used the need for cognition scale (NFC; Cacioppo, Petty, & Kao, 1984) to control for participants' need for cognition in the problem-solving task. This scale asks participants to rate the importance of cognitive challenges to measure critical thinking. We used a shortened version of the NFC, asking participants to respond to the four items that had the highest factor loadings in the original NFC scale (Cacioppo et al., 1984). The items were rated on an 8-point scale from "Very strong disagreement" to "Very strong agreement." Example items include "I would prefer complex to simple problems" and "I don't like to have the responsibility of handling a situation that requires a lot of attention." Answers to the four items were summed to create a total NFC score ($\alpha = .79$)

Tangram Task We used a modified version of the tangram task developed by Saleem, et al., 2015). In this task, participants decided if they wanted to help a fictitious partner on a task, this decision was recorded by a research assistant. If a participant chose to help, the helpfulness of their behavior was measured by a) how long they helped, with a maximum time of 10 minutes, and b) how many tangrams they correctly completed in that time. Tangrams are based on seven differently shaped plastic pieces (e.g., small square, large triangle) used to form a specified outlined shape (see Appendix). Participants first viewed the shape outline and then used the tangram pieces to create the target shape. Participants traced the finished tangrams on paper using plastic tangram pieces so we could record the number of target shapes they got correct.

Motivations For Helping Participants answered follow up questions about their motivations to help. Answers to the questions were used as a second dependent variable to

understand grandiose and vulnerable narcissists' motivations to help. We used five items rated on a 5-point Likert scale, from "Strongly Disagree" to "Strongly Agree". Items include motivations we expect grandiose narcissists to exhibit (e.g. "I helped because it would make me seem like a good person" and "I helped to feel good about myself"), and motivations we expect vulnerable narcissists to exhibit (e.g. "I helped because I wanted to be likable," "I helped because I didn't want the researcher to judge me," "I helped because I didn't want the participant to judge me.") Items were looked at individually in the analyses.

Feelings After Helping Participants answered follow-up questions about their feelings or benefits they got after helping. We used nine items rated on a 5-point Likert scale, from "Strongly Disagree" to "Strongly Agree". Items include feelings we expect grandiose narcissists to have based on past literature (e.g. "I felt like a hero after helping," "After helping I felt superior," "After helping I felt like people would respect me," "After helping I felt like surely I must be a special person," and "After helping I felt like I could use my experience in this study to show off to my friends"), and feelings we expect vulnerable narcissists to have (e.g. "After helping I felt like the other participant would accept me," "After helping I felt like surely I must be a special person," "I felt used after helping," and "After helping I felt inferior.")

Results

The present research used a combination of linear regression, multiple regressions, and general linear modeling (GLM) to analyze the combination of continuous and categorical variables. The results section is presented in four parts. The first section reports preliminary analyses, including correlations between our main continuous variables and our manipulation check. The second section presents grandiose narcissists' motivations for helping and feelings

after helping. The third section presents vulnerable narcissists' motivations for helping and feelings after helping. The fourth section reports the distinction between grandiose and vulnerable narcissists feelings after helping, and how they are independent of each other.

Preliminary Analyses

Correlations. Table 1 outlines the bivariate correlations, means, and standard deviations for all scales in this study. Although the NPI and HSNS are usually uncorrelated in previous research, these variables showed a significant positive correlation in this study. For that reason, we controlled for scores on the other narcissism scale in our later analyses. As anticipated, both the NPI and HSNS showed significant positive correlations with self-image goals and significant negative correlations with compassionate goals, suggesting both grandiose and vulnerable narcissists are high in self-image goals and do not hold compassionate goals. The NPI was also positively correlated to the balanced inventory of desired responding (self-deceptive positivity scale) and negatively correlated to the balanced inventory of desired responding (impression management scale) suggesting grandiose narcissists are aware of their self-enhancement tendencies but care less about how their behavior appears to others. The HSNS was negatively correlated to both the balanced inventory of desired responding (self-deceptive positivity scale) and the balanced inventory of desired responding (impression management), suggesting vulnerable narcissists do not try to craft positive self-perceptions and care less about responding in socially desirable ways. The HSNS was negatively correlated to need for cognition, such that individuals higher in vulnerable narcissism had a lower need for cognition, compared to the NPI which had a marginal positive correlation to need for cognition. Finally, we observed a positive correlation between gender and number of tangrams completed such that females were more

likely to complete more tangrams. Due to these differences, we controlled for the balanced inventory of desired responding (self-deceptive positivity scale and impression management scales), the need for cognition scale, and Gender in all our later analyses.

The majority of participants (94%) decided to help their fictitious partner on the tangram task, thus there were no significant differences between choice to help and either grandiose or vulnerable narcissism. There was also no difference between time spent helping in either grandiose or vulnerable narcissism as well as amount of help provided in either grandiose or vulnerable narcissism. When analyzing the data further it appears that these lack of differences are due to a lack of variability on the dependent measures such that the majority of participants decided to help, helped for the full amount of time allotted to work on the task, and completed as many tangrams as they could in the time frame given. Thus, participants' decision to help and amount of help offered to their presumed partner did not differ as a function of grandiose or vulnerable narcissism compared to individuals low in narcissism. Since the number of tangrams completed had the most variability, we used this as our main dependent measure of helping behavior.

Table 1												
Study Variables: Correlations, Means, and Standard Deviations												
Variable	1	2	3	4	5	6	7	8	9	10	Mean	SD
1. NPI											15.59	7.06
2. HSNS	.20*										39.88	9.33
3. SIG	.19*	.36**									24.93	6.80
4. CG	17*	17*	.14								35.10	5.31
5. BIDRsdp	.16 [†]	45**	15 [†]	.13							81.51	12.32
6. BIDRim	30**	39**	16 [†]	.22**	.42**						79.35	16.57
7. NFC	.16 [†]	28**	.05	.27**	.33**	.21*					19.27	5.64
8. Gender	01	13	17*	.19*	03	.15	01				1.65	.48
9. Decision to Help	.03	02	.01	03	.07	.13	.11	.01			.92	.27
	03	12	02	.03	10	.03	03	.19*	03		4.93	3.29
10. Tangrams completed	03	12	02	.03	10	.03	03	.19	03		4.73	3.29
11. Time Helping	07	13	02	.05	.03	.04	.06	.07	.12	.10	695.64	250.75

Note. NPI = Narcissistic Personality Inventory measure of grandiose narcissism; HSNS = Hypersensitivity Scale measure of vulnerable narcissism; SIG= Self-image Goals Scale; CG= Compassionate Goals Scale; BIDRsdp= Balanced Inventory of Desired Responding - Self-Deceptive Positivity Scale; BIDRim= Balanced Inventory of Desired Responding - Impression Management Scale; NFC= shortened Need for Cognition Scale; Gender (coded as: male 1, female 2). † p < .80; * $p \leq .05$; ** $p \leq .01$

Manipulation Checks. After asking participants "who did you help during the study," we coded their open-ended responses on whether they reported helping a high schooler, peer/fellow student, or graduate student which represents the low-status, control, and high-status conditions. A one-way ANOVA revealed that participants knew the status of the person they were helping (F(1,74) = 85.47, p < .0001), low-status condition, M = -1, control condition, M = 1, high-status condition, M = 0.

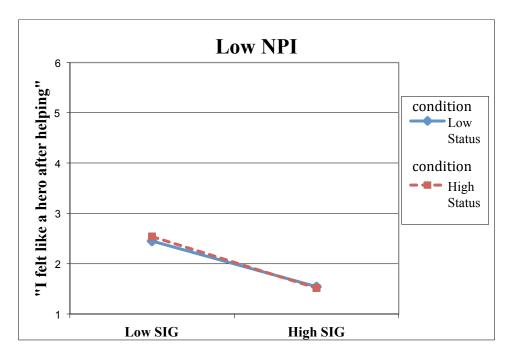
Grandiose Narcissism and Helping

We used multiple linear regressions to investigate hypotheses 2 and 4: that grandiose narcissists will be motivated to help a high-status individual and that self-image goals will moderate narcissists' helping experience. We observed a nonsignificant 3-way interaction when regressing the dependent variable of number of tangrams completed on the NPI, self-image goals, condition, and the relevant interactions (b = .002, SE = .01, t(7,124), p = .85). Because the 3-way interaction was not significant, we trimmed it from the regression model. We then regressed the number of tangrams completed onto the NPI, condition, and their interaction. The 2-way interaction between grandiose narcissism and their partner's status did not influence helping behavior (b = -.05, SE = .05, t(3,128) = -1.05, p = .29). Looking at the main effects we

² To verify random assignment, we ran a one-way ANOVA on our independent variables of interest, including the NPI, HSNS, self-image goals, compassionate goals, the balanced inventory of desired responding, and the need for cognition. While the HSNS, self-image goals, compassionate goals, the balanced inventory of desired responding, and the need for cognition did not vary based by condition (F(2, 136) < 1.65, p > .18), we did observe an unexpected failure of random assignment for the NPI (F(2, 136) = 4.91, p < .01). Individuals assigned to the low-status condition were significantly lower in grandiose narcissism (M=13.04) than individuals in the control or high-status condition (M = 17.36 and M = 16.35, respectively). This observation should be taken into consideration when interpreting later reported analyses.

see that the NPI did not predict helping behavior (b = -.02, SE = .04, t(3,128) = -.56, p = .57) and condition, or partner status, did not predict helping behavior (b = 1.20, SE = .81, t(3,128) = 1.59, p = .14). Next, we regressed the number of tangrams completed onto the NPI, self-image goals, and their interaction. Once again, the 2-way interaction was nonsignificant (b = -.0003, SE = .01, t(3,129) = -.06, p = .95). Moreover, the main effects show the NPI did not predict helping behavior (b = -.006, SE = .17, t(3,128) = -.03, p = .97) and self-image goals did not predict helping behavior (b = -.0006, SE = .10, t(3,128) = -.006, p = 1.00). These results suggest that behaviorally, individuals high in grandiose narcissism were no more likely to help a high- or low-status partner than individuals low in grandiose narcissism. In addition, grandiose narcissists' self-image goals did not influence their helping behavior.

We next investigated hypothesis 5: whether narcissists' perceptions and experiences after helping differed. First, we regressed whether or not participants felt like a hero after helping onto the NPI, self-image goals, condition, and the relevant interactions and observed a significant 3-way interaction (b = -.03, SE = .01, t(7,55) = -2.32, p = .02). As anticipated, individuals high in grandiose narcissism and high in self-image goals felt more like a hero after helping a low-status individual (see Figure 1), even when controlling for the HSNS, balanced inventory of desired responding, the need for cognition and gender (3-way: b = -.03, SE = .01, t(11,51) = -2.56, p = .01). The NPI, self-image goals, condition, and relevant interactions did not interact to predict other hypothesized dependent variables such as helping to feel good, or feeling superior, respected, special, and like they could show off about their helping experience (all 3-ways: b < -.01 SE < .004, t(7,55) < -.1.41 p > .16).



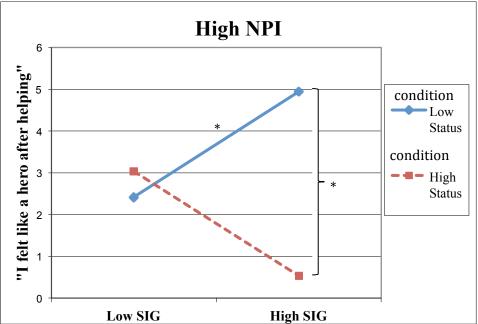


Figure 1 Feeling like a hero after helping as a function of grandiose narcissism (NPI), Self-image Goals (SIG), and status of the target, p = .02

Because we did not observe significant 3-way interactions between grandiose narcissism, condition, and self-image goals to predict helping to feel good, or feeling superior, respected, special, and like they could show off, we trimmed the 3-way interaction from each regression

model. To explore hypothesis 5, we observed a nonsignificant 2-way interaction between the NPI and self-image goals when predicting the anticipated dependent variables such as helping to feel good, or feeling superior, respected, special, or like they could show off about their helping experience (b < -.004, SE < .003, t(3,59) < 1.60, p > .11). However, we did observe significant 2-way interactions when investigating grandiose narcissism and condition, or the status of their partner. First, we regressed whether or not participants felt like people would respect them after helping onto the NPI, condition, and their interaction (2-way: b = -.05, SE = .02, t(3,58) = -2.27, p = .03). As anticipated, individuals high in grandiose narcissism felt more respected after helping a low-status individual (see Figure 2).

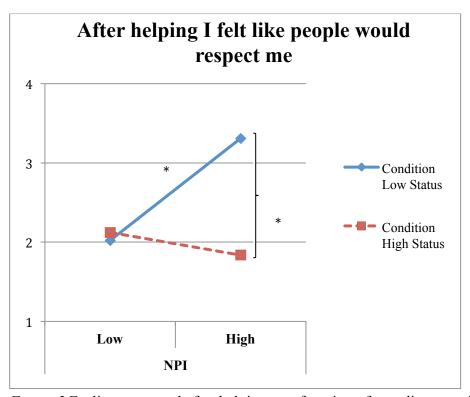


Figure 2 Feeling respected after helping as a function of grandiose narcissism (NPI) and status of the target, p = .03

³ This effect becomes trending when controlling for the HSNS, balanced inventory of desired responding, the need for cognition, and Gender (b = -.03, SE = .02, t(7,55) = -1.48, p = .14).

In addition, we observe a significant 2-way interaction when regressing whether or not participants felt like they must be special after helping onto the NPI, condition, and the interaction (b = -.06, SE = .02, t(3,59) = -2.98, p = .004). As anticipated, individuals high in grandiose narcissism felt more special after helping a low-status individual (see Figure 3), even when controlling for the HSNS, balanced inventory of desired responding, the need for cognition, and Gender (b = -.05, SE = .02, t(7,55) = -2.56, p = .01). Regressing other relevant dependent variables, including helping to feel good, and feeling like they were superior, or could show off after helping onto the NPI, condition, and their 2-way interaction was not significant (all 2-ways: b < -.03. SE < .02, t(11,51) < -.1.20, p > .24). These results support hypothesis 5, that grandiose narcissists would feel respected, special, and like a hero after helping low status individuals.

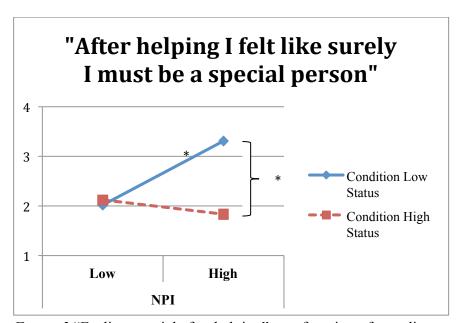


Figure 3 "Feeling special after helping" as a function of grandiose narcissism (NPI) and status of the target, p = .004

Finally, because the 2-way interactions predicting helping to feel good about themselves, and to look like a good person, and feeling superior, and like they could show off about their

experience, were not significant, we trimmed it from our regression models to observe the main effects relevant to our hypotheses. Simple linear regressions revealed that individuals high on the NPI helped because they wanted to "feel good about themselves when helping" (b = .29, SE = .13, t(1,60) = 2.29, p = .03). This effect becomes trending after controlling for the balanced inventory of desired responding, the need for cognition, HSNS and Gender (b = .27, SE = .17, t(6,55) = 1.62, p = .11). Individuals high on the NPI also wanted to help because it would make them seem like a good person (b = .03, SE = .02, t(1,60) = 1.88, $p = .07^{\dagger}$), even after controlling for the balanced inventory of desired responding, the need for cognition, HSNS, and Gender (b = .06, SE = .02, t(6,55) = 2.63, p = .01). In addition, we observed that individuals high on the NPI felt superior after helping (b = .06, SE = .02, t(6,55) = 3.36, p = .001), even after controlling for the balanced inventory of desired responding, the need for cognition, HSNS, and Gender (b = .04, SE = .02, t(6,55) = 1.96, p = .05).

The NPI did not predict helping to be liked, or to avoid being judged by the researcher or participant, and did not feel accepted, inferior, used, or like they could show off after helping, (all b < -.03, SE < .02, t(1,60) < -1.64, p > .11), which did not change after controlling for the balanced inventory of desired responding, HSNS, need for cognition, and gender (all b < -.03, SE < .02, t(6,55) < -1.31, p > .20). These null effects are expected as we predicted these motivations would relate to vulnerable narcissism, with the exception of showing off after helping. These results suggest grandiose narcissists were not helping for social approval reasons, but were more likely to help others, compared to non-narcissists, because they wanted to feel good about themselves.

Vulnerable Narcissism and Helping

⁴ Reached significance when controlling for the balanced inventory of desired responding, the need for cognition, the HSNS and Gender separately in the model (b < .33, SE < .16, t < 2.26, p > .04).

We used multiple linear regressions to investigate hypotheses 3 and 4: to explore who vulnerable narcissists are motivated to help and test the prediction that self-image goals will moderate narcissists' helping experience. We observed a nonsignificant 3-way interaction when regressing the number of tangrams completed onto the HSNS, self-image goals, condition, and the relevant interactions (b = -.002, SE = .006, t(7.124) = -.25, p = .81). Because the 3-way interaction was not significant, we trimmed it from the regression model. We then regressed the number of tangrams completed onto the HSNS, self-image goals, and their interaction. The 2way interaction between vulnerable narcissism and their self-image goals did not influence helping behavior (b= .0003, SE = .004, t(3,128) = .07, p = .94). Moreover, the main effects show that the HSNS did not predict helping behavior (b = -.05, SE = .11, t(3,128) = -.50, p = .61) and self-image goals, did not predict helping behavior (b= .002, SE = .18, t(3.128) = .01, p = .99). However, vulnerable narcissism did interact with condition. We observed a significant 2-way interaction when regressing the number of tangrams completed onto the HSNS, condition, and their interaction (b = .08, SE = .04, t(3,128) = 1.97, p = .05). As seen in Figure 4, vulnerable narcissists helped low-status people less; this effect remains significant even after controlling for the balanced inventory of desired responding, the need for cognition, NPI, and Gender (b = .09, SE = .04, t(7,123) = 2.17, p = .03). These results suggest that vulnerable narcissists prefer to help low status individual less, however, they do not use self-image goals as a strategy when helping.

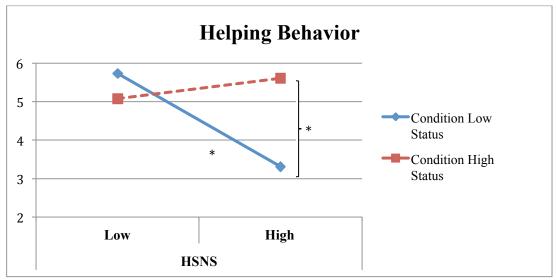


Figure 4 Helping Behavior as a function of vulnerable narcissism (HSNS) and status of the target, p=.05

Contrary to hypothesis 6, the HSNS, self-image goals, condition, and relevant interactions did not predict helping to be likeable, to not be judged by the researcher or participant, or feeling accepted, special, used, and inferior after helping (all 3-ways: b < -.004, SE < .003, t(7,55) < 1.48, p > .14). Because the 3-way interactions were not significant, we trimmed it from the regression models to investigate the relevant 2-way interactions. The HSNS and self-image goals did not interact to predict the relevant dependent variables, including helping to be likeable, to not be judged by the researcher or participant, and feeling accepted, special, used, and inferior after helping (all 2-ways: b < -.002, SE < .003, t(2,128) < -1.39, p > .17). The HSNS and condition also did not interact to predict the relevant dependent variables (2way: b < .02, SE < .02, t(3,59) < 1.66, p > .10).

Finally, because the 2-way interactions were not significant, we investigated the main effects relevant to our hypotheses. Specifically, we regressed the HSNS onto helping to be likeable, to not be judged by the researcher, to not be judged by the participant, and reports of feeling accepted, special, used, and inferior after helping. Contrary to hypotheses, vulnerable narcissists did not feel more accepted or used after helping (b < .02, SE < .01, t(1,60) < 1.38, p >

.17). While there was a marginal effect of vulnerable narcissists feeling special after helping (b < -.03, SE < .01, t(1,60) < 1.94, p > .06) and feeling like they could show off (b < -.02, SE < .01, t(1,60) < 1.76, p > .08), these effects disappeared after controlling for the balanced inventory of desired responding, the need for cognition, NPI, and Gender (b < -.02, SE < .02, t(6,55) < 1.00, p > .34; b < .007, SE < .01, t(6,55) < .51, p > .61 respectively).

In line with predictions, individuals high on the HSNS were more likely to report that they helped to be seen as more likable (b = .05, SE = .02, t(1,60) = 3.03, p = .004), even when controlling for the balanced inventory of desired responding, the need for cognition, NPI and Gender (b = .05, SE = .02, t(6,55) = 2.48, p = .02). As predicted we observed that vulnerable narcissists felt inferior after helping (b = .03, SE = .01, t(1,60) = 2.22, p = .03). However, this effect becomes nonsignificant after controlling for the balanced inventory of desired responding, the need for cognition, HSNS and Gender (b = .02, SE = .01, t(6,55) = 1.35, p = .18). Moreover, vulnerable narcissists helped because they didn't want to be judged by the other participant (b = .04, SE = .01, t(1,60) = 3.13, p = .003) or by the researcher (b = .044, SE = .016, t(1,60) = 2.81, p = .007), even when controlling for the balanced inventory of desired responding, the need for cognition, NPI and Gender (b = .03, SE = .02, t(6,55) = 2.01, p = .05 and b = .04, SE = .02, t(6,55) = 2.24, p = .03, respectively).

The HSNS did not predict hypothesized grandiose narcissistic motivations, including helping to be feel good about themselves, to look like a good person, and did not feel respected, superior, or like a hero after helping (b < -.04, SE < .11, t(1,60) < 1.23, p > .22), and this did not change after controlling for the balanced inventory of desired responding, the need for cognition, NPI, and Gender (b < -.05, SE < .12, t(6,55) < .60, p > .55). These results suggest vulnerable narcissists were more likely to help others, compared to non-narcissists, for social approval

reasons. They wanted to be more likeable, avoid being judged by the researcher or the participant, and felt inferior after helping.

Unique Helping Differences Among the Narcissistic Subtypes

Next, we explored hypotheses 5 and 6 to understand grandiose and vulnerable narcissists' unique feelings after helping. We regressed feeling ratings (e.g. superiority, inferiority) on the NPI, HSNS, narcissism subscale type, and the interactions of these terms using general linear modeling (GLM). We observed significant dissociation between grandiose narcissists' feelings after helping and vulnerable narcissists' feelings after helping (NPI: F(1, 60) = 13.45, p = .001; HSNS: F(1,60) = 3.16, p = .08). Specifically, the HSNS uniquely predicted feeling inferior (b = .03, SE = .01, t = 2.22, p = .03), but not superior after helping (b = .003, SE = .013, t = .25, p = .80) and the NPI uniquely predicted feeling superior (b = .06, SE = .02, t = 3.26, p = .002), and not inferior after helping (b = -.004, SE = .02, t = -.25, p = .80). After controlling for the balanced inventory of desired responding, the need for cognition, and Gender, the interaction with the NPI remained significant (F(6,55) = 4.54, p = .04), while the interaction with the HSNS became nonsignificant (F(6,55) = .62, p = .44).

Discussion

Results generally supported hypotheses regarding grandiose and vulnerable narcissists' helping behavior. We found support for hypothesis 1, that grandiose and vulnerable narcissists do not differ in choice to help others. Both narcissists helped in our study; thus, when helping was seen as normative, narcissists were willing to offer social support. In our study, we had an authority figure (i.e. the experimenter) directly asking participants if they would like to help.

⁵ Reached significance when controlling for NFC and Gender separately in the model (B<.03, SE<.01, t<2.20, p>.03).

These features of the situation are likely why over 90% of participants helped, including narcissists.

We did not find support for hypothesis 2 that grandiose narcissists would be motivated to help a high-status individual more than a low-status individual. Instead, grandiose narcissists reaped certain benefits after helping low-status individuals (e.g. feeling respected, special, and like a hero). In comparison, for our exploratory hypothesis 3, vulnerable narcissists were less likely to help a low-status partner on the tangram helping task. In addition, we found some evidence to support hypothesis 4 that self-image goals would interact with the narcissistic subtypes. We found that grandiose narcissists who are high in self-image goals felt like a hero after helping a low-status partner, but we did not find any significant interactions with vulnerable narcissism and self-image goals.

Hypothesis 5, that grandiose narcissists will help because they want to feel good about themselves and look like a good person, and that they will feel superior, respected, special, and like they could show off about their experience after helping was partially supported by the data. Namely, grandiose narcissists helped to feel good about themselves and look like a good person. In addition, they did not care about the researcher or participant judging them when helping. After helping they felt like a hero, respected, special, and superior. However, we did not find that they helped to show off.

In comparison, vulnerable narcissists' motivations to help, hypothesis 6, was somewhat supported. To recall, we predicted vulnerable narcissists may help because they desire social approval, want to be likable, and don't want to be judged by either the participant or the researcher. After helping, we predicted vulnerable narcissists will feel accepted and special, but they may also feel used and inferior. We supported the predictions that vulnerable narcissists

would help to be likeable and because they didn't want to be judged by the researcher or the participant. In addition, after helping they felt inferior. However, we did not observe effects for vulnerable narcissists feeling like others would accept them after helping, or that they felt used after helping.

The differences between grandiose and vulnerable narcissists' experiences after helping were further demonstrated when we examined their unique effects. We found that after helping, grandiose narcissists predicted feeling superior after helping, but not inferior. Whereas after helping, vulnerable narcissists predicted feeling inferior after helping, but not superior. These results support hypotheses 5 and 6 and suggest that grandiose and vulnerable narcissism uniquely accounts for superiority and inferiority after helping respectively.

Observing grandiose narcissists' interaction with self-image goals and reports of feeling special, superior, and like a hero, ties into past literature that grandiose narcissists prefer to dominate others to self-enhance (Campbell & Foster, 2007; Dickinson & Pincus, 2003; Morf & Rhodewalt, 2001; Pincus et al., 2009; Sedikides & Gregg, 2001). In addition, many of these benefits occurred after helping a low-status individual. This might imply that grandiose narcissists' use helping low-status people to feel good about themselves. The social comparison could explain why they felt better after helping the low-status individual. The partner was someone that they could impress and who was not threatening to their ego. These results suggest that grandiose narcissists not only help to maintain their sense of heightened superiority, but they use their helping experience to their advantage to boost their ego.

Interestingly, grandiose narcissists did not report helping because they were worried about the researcher or participant judging them, and they did not feel like they could show off after helping. Since participants were not interacting face-to-face with a partner, perhaps

grandiose narcissists did not perceive the normative helping situation as an opportunity to show off. Alternatively, what matters more to a grandiose narcissist may be self-enhancing for their own benefit, and not for the need of others' approval, which aligns with their reports of helping to feel good about themselves. Unlike vulnerable narcissists who need positive feedback for their self-esteem, grandiose narcissists do not seek the same feedback. Although grandiose narcissists can react aggressively when others have negative opinions of them (Bushman & Baumeister, 1998), grandiose narcissists are most content when they have a passive audience (Arkin & Lakin, 2001). They enjoy attention but do not rely on others' positive feedback to manage their self-esteem. Therefore, grandiose narcissists' reported motivations might reflect their desire and ability to boost their own egos. They were motivated to help for self-serving reasons, and they successfully used their helping experience to reinforce their positive self-perceptions.

In contrast, while vulnerable narcissism did not interact with self-image goals, vulnerable narcissists were less likely to help a low-status partner and reported several distinct motivations compared to grandiose narcissists. Vulnerable narcissists may have been less helpful to a low-status individual because they see themselves as disadvantaged or low in status and do not recognize similar features in others. Specifically, because vulnerable narcissists do not like themselves, they tend to also dislike individuals who hold similar features (Allen, Freis, Carroll, 2017). Therefore, vulnerable narcissists may have intentionally helped low status people less as doing so may have made them appear worse by affiliation. For example, connecting with low status partners may have made the vulnerable narcissists seem, even more, like a low status individual. Not helping low-status individuals had consequences for vulnerable narcissists. Unlike grandiose narcissists who were able to use their experience of helping a low-status person to boost their ego, vulnerable narcissists had less of an opportunity to do so since they helped the

low-status individuals less. Nonetheless, moving beyond behavioral effects, we observed support for predictions on vulnerable narcissists' motivations.

We predicted that vulnerable narcissists would help others to boost their ego through social approval. In our study, vulnerable narcissists helped in order to be likable, and to not be judged by the researcher or the participant. These motivations for helping fit into vulnerable narcissists goals of being accepted by others (Zeigler-Hill et al., 2008). Surprisingly, vulnerable narcissists did not say they felt accepted or special after helping. Therefore, it appears that the motivation to gain approval motivated the vulnerable narcissists' behavior, but did not lead to an ego boost afterwards. This suggests that vulnerable narcissists had a more difficult time using motivated reasoning to translate their helping experience into reasons to feel good about themselves, perhaps because while vulnerable narcissists crave others' approval, they simultaneously discredit their need and others' responses. Vulnerable narcissists do not trust others (Miller, Price, Gentile, Lynam, & Campbell, 2012), especially when they receive positive feedback (Atlas & Them, 2008; Freis et al., 2015; Malkin, Zeigler-Hill, Barry, & Southard, 2013,), and they are not satisfied with themselves, feeling guilty or shameful for having needed others' approval in the first place (Besser & Priel, 2010). Therefore, while vulnerable narcissists' helpful behavior may have benefited the individual they were helping, they were not able to use this positive behavior to feel better about themselves.

Limitations

There were a number of limitations in the present study that should be considered. First, we observed an unexpected failure of random assignment for the NPI (F=4.91, p=.01). People assigned to the low status condition were significantly lower in grandiose narcissism (M=13.04) than people in the control or high status condition (M=17.36 and M=16.35). This may affect the

interpretation of our results because we only had few participants who are considered to be high in narcissism, so the effect that we observed was for a small sample and should be replicated to ensure our observations were not the result of a few unique individuals.

Second, our dependent variable of helping behavior was taken from previously established measures but should still be interpreted with caution. We provided participants a maximum of 10 minutes that they could help in the hopes of observing variability in participants' helpfulness. However, the majority of participants helped for the full 10 minutes. Therefore, we used the number of tangrams completed as our primary measure of helping behavior. The tangram task requires problem-solving skills that some people simply may not have possessed. Although we tried to address these concerns by controlling for a need for cognition, we should still be careful when interpreting "helping behavior" in this study, as our helping task may not have not been an accurate representation of participants' willingness to help.

Third, we had a small sample size (N=62) for follow-up questions, which acted as our motivation-related dependent variables. This small sample size is a result of a significant number of participants incorrectly answering a question about whether or not they helped another individual in the study. This incorrect answer took participants to the end of the study (though skip logic) so they did not complete the additional follow-up questions. This likely occurred due to confusing wording or structure of the question. The question asked "which of the following was most true for you," and answer options included: "(1) I completed my own problem-solving task," (2) I needed to ask for help to complete my own problem-solving task, (3) I provided help to another participant to complete their problem-solving task." Since our manipulation check worked and our pilot study suggested participants believed there was a partner they were helping, we interpret this error due to the wording of the question. For example, if participants

did not carefully read the full question and all answer options, they would have likely chosen the first answer as they did complete the problem-solving task by themselves in their own room. Due to this small sample size, controlling for variables was difficult as we lost degrees of freedom. This may be the reason why some of the results came out nonsignificant when controlling for covariates in the model together. Due to the low sample size, we checked each result controlling for variables separately in the model (e.g. see footnote 4 and 5).

Future Directions

Further research is necessary to replicate our results. This research should be replicated with true random assignment and with a different helping task to test whether the results stay the same across studies. Using a different helping task may reveal if narcissists help in other situations due to their interpersonal goals. Furthermore, measuring self-esteem before and after helping would help support our theory more directly about narcissists getting an ego boost from helping.

In addition, incorporating dyad or group studies would provide a more comprehensive view of narcissists' behavior in real life. How do recipients feel when grandiose and vulnerable narcissists help? Questions such as this may reveal how a target will respond to the narcissist, and more interestingly if a targets' response would change how the narcissist felt after helping. For example, if a target feels irritated after being helped, would grandiose narcissists still feel like a hero after helping them? These studies can provide researchers with information about how people's relationships are affected by narcissistic individuals. Research has shown that while narcissists believe they are helping others, peers think of their behavior as individualistic (Kauten & Barry, 2014). Perhaps the narcissist is not fooling anyone by using their helping behavior to meet their own self-image and egotistical goals.

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Finally, conducting a follow-up study with different populations or in different situations could reveal more about narcissistic helping. For example, we set up the current study so helping was the situational norm, but it might be interesting to see whether or not narcissists *notice* that others need help under more realistic circumstances. Because narcissists are highly selfabsorbed, they might be particularly prone to ignore or remain unware of others in distress. They habitually direct their attention and focus toward themselves, so they may not notice another person who has dropped items in a hallway, has fallen down on a sidewalk, or is crying on the phone. However, if narcissists do notice that others need help, can they help depending on the specific needs of the individual? If narcissists notice *what* others need we will be able to determine *if* and *how* their helping behavior fits the needs of the individual. Researching how to assist narcissistic individuals overcome their self-absorption to fit others' needs may be necessary if we want them to be more prosocial in the real world.

Conclusion

This work investigated whether grandiose and vulnerable narcissists will help in a normative situation, and whether they have different motives for helping. We found that both types of narcissists help to benefit their egos. For grandiose narcissists, this meant helping to gain superiority or social standing, and for vulnerable narcissists this meant helping to gain social approval. However, grandiose narcissists were more successful in using their helping experience to boost their own ego—they felt more like a hero, special, and superior after helping. This research shows that grandiose and vulnerable narcissists have different motives for helping, and shows that narcissism and self-image goals can interact to predict reactions to helping. Future

research can potentially help narcissists' interactions and relationships they have with others, and understand interventions that could take place to improve these relationships.

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Appendix

Tangram Assignment Table.

