# **GRANDIOSE NARCISSISTS SEEK STATUS SELECTIVELY**

Miranda Giacomin, Ashley M. Battaglini, and Nicholas O. Rule *University of Toronto* 

Grandiose narcissists (individuals with a tendency to be self-focused, egotistical, and vain) overwhelmingly desire celebrity status. Here, we examined the conditions underlying narcissists' fame motivation. In Study 1, we assessed participants' desire to become a social media user who attained high status, tried to attain status but failed, or had no status-attainment goal. In Study 2, we assessed how participants' self-perceived similarity to high-status targets (e.g., Hollywood/social media celebrities) influences their desire to become them. We found that participants reporting high narcissism were most motivated to become successful social media celebrities, disliking people who tried to attain status but failed more than they disliked people who had no goal for fame (Study 1). Moreover, narcissists emulated high-status targets only when they felt similar (vs. dissimilar) to them (Study 2). Thus, narcissists do not perceive all fame as equally desirable and only express a desire for fame when it is attainable.

Keywords: fame, narcissism, person perception, social media, status

Grandiose narcissism (the tendency to be egotistical, self-focused, and vain) has become synonymous with social media and celebrity status in contemporary culture. Despite the strong association between narcissism and a desire for status and fame (e.g., Greenwood, Long, & Dal Cin, 2013; Maltby, 2010), it remains unclear whether narcissists' desire for fame depends on particular factors, such as the attainability of status. Here, we explored the boundaries of narcissists' desire for fame at different levels of success in meeting the goal of achieving fame (i.e., success, failure, and a no-goal control) and its attainability (i.e., similarity vs. dissimilarity to a high status target). We expected that narcissists would desire a high

This research was supported in part by funding from the Social Sciences and Humanities Research and National Science and Engineering Research Councils of Canada to NOR.

Correspondence concerning this article should be addressed to Miranda Giacomin, Department of Psychology, University of Toronto, 100 St. George Street, Toronto, Ontario, Canada, M5S 3GS; E-mail: miranda.giacomin@utoronto.ca.

level of fame and would express more motivation to achieve high status when they felt it within their grasp.

## GRANDIOSE NARCISSISM AND STATUS

Grandiose narcissism<sup>1</sup> is a personality trait typically associated with a sense of entitlement, superiority, overly positive self-views, high self-esteem, social fearlessness, and reduced concern for others (Campbell & Foster, 2007). Though often selfish, disagreeable, and hostile, narcissists can also be extraverted, charismatic, and self-confident (Paulhus, 2001). They see themselves as special, unique, and talented, and want others to see them this way as well. Narcissists therefore strategically seek opportunities to brag about their agentic qualities (e.g., physical attractiveness, competence, intelligence, power, and status) to gain others' attention and admiration, and will buy expensive and flashy material goods to distinguish themselves from others (Campbell, Rudich, & Sedikides, 2002; Cisek, Sedikides, Hart, Godwin, Benson, & Liversedge, 2014; Sedikides, Gregg, Cisek, & Hart, 2007). Thus, narcissists enjoy feeling superior to other people.

They are somewhat successful in meeting this goal. Narcissists' charismatic personality often makes them popular and well liked by others (at least initially), which can help them attain higher status faster than non-narcissists (e.g., Back, Schmukle, & Egloff, 2010; Küfner, Nestler, & Back, 2013). Moreover, trait narcissism not only predicts the desire for recognition, status, and visibility, but also the belief that future fame is realistic and attainable (Greenwood et al., 2013; Maltby, 2010; Southard & Zeigler-Hill, 2016). This desire for attention and admiration often draws narcissists to the entertainment industry; indeed, society's favorite celebrities and reality television stars are often highly narcissistic (Gentile, 2011; Young & Pinsky, 2006). For example, Rubinstein (2016) found that reality television show candidates were significantly more narcissistic than non-candidates were. Although narcissists demonstrate a strong propensity for fame and status, sometimes pursuing fame can incur costs upon their self-views.

## THE PURSUIT OF STATUS

The pursuit of status can be particularly risky: there are winners and losers, Alist and D-list celebrities, and successful and unsuccessful chief executive officers (CEOs; see Mahadevan, Gregg, Sedikides, & de Waal-Andrews, 2016). Hierometer theory suggests that a person's perceived self-regard (i.e., self-esteem, narcissism)

<sup>1.</sup> We focus on grandiose narcissism as a subclinical personality trait, rather than narcissistic personality disorder or pathological forms of narcissism. We distinguish grandiose narcissism from vulnerable narcissism, a maladaptive form of narcissism characterized by low self-esteem and high neuroticism (e.g., Miller & Campbell, 2008; Miller et al., 2017). In addition, we refer to individuals high (low) in grandiose narcissism as "narcissists" ("non-narcissists") for short, despite using narcissism as a continuous measure.

tracks his or her social status, with both components rising and falling in tandem (Mahadevan et al., 2016). Having high social status and self-regard may lead people to adopt more assertive behavior. For instance, people higher in social class often rank higher in other social hierarchies, achieve greater fame, and may behave more assertively (Mahadevan et al., 2016). Thus, individuals' position in the social hierarchy regulates how positively they feel about themselves.

Pursuing status may benefit one's self-regard if success is attained; however, it may also impair one's self-regard if such attempts are not successful. Indeed, people often choose activities based on their probability for success. For example, previous research has demonstrated that people will engage in contests they think they can win but avoid contests they think they might lose (Gilbert, Price, & Allan, 1995; Sloman & Price, 1987). Individuals may therefore avoid domains in which they lack status, try and fail to attain status, expect their status will be questioned, or in which they possess only a mediocre ranking. Doing so may help them to maintain their positive self-views (e.g., self-esteem) and defend them from the threatening experience of being low in status.

Narcissists' sense of superiority leads them to believe that they are higher in status and deserve favorable outcomes more than other people (Brunell et al., 2008; Krizan & Bushman, 2010). For example, narcissists expect higher academic grades and feel overqualified for jobs, even when objective evidence suggests otherwise (Farwell & Wohlwent-Lloyd, 1998; Lobene, Meade, & Pond, 2015; Maynard, Brondolo, Connelly, & Sauer, 2015). Yet, despite their desire for fame, narcissists may also recognize that failing to achieve high status could impair their positive selfviews. Indeed, grandiose narcissists tend to strategically select the opportunities they pursue (Campbell & Foster, 2007; Rhodewalt & Morf, 1998). For example, grandiose narcissists tend to selectively engage in situations that provide opportunities for self-enhancement, suggesting that they invest their energy in activities that will improve their status (Wallace & Baumeister, 2002). They also neglect (or misremember) unfavorable feedback, making them resilient in the face of difficulty (e.g., Horton & Sedikides, 2009; Rhodewalt & Eddings, 2002; Sedikides & Gregg, 2001). Narcissists may also lash out when their need for status is unsatisfied; for example, narcissists were unhappy when placed in a subordinate (vs. leadership) position, consequently engaging in destructive activities that do not benefit the group (Benson, Jordan, & Christie, 2016). Together, this may suggest that narcissists are motivated to achieve fame but only when achieving fame is relatively guaranteed.

Narcissists have an overarching goal to attain status and admiration from others and demonstrate a propensity toward high-status people and behaviors (Campbell & Foster, 2007; Maltby, 2010; Rubinstein, 2016). Attaining celebrity status thus gives narcissists a way to reinforce their positive self-views. But these may be challenged if they fail to achieve an admirable level of success. Though narcissists tend to be competitive and are more likely to enter competitive contests (Luchner, Houston, Walker, & Houston, 2011), they may be less willing to compete when the

opportunity for failure is high. For example, becoming a lesser-known (D-list) celebrity may not appeal to narcissists who believe that they should be more popular (i.e., A-list), and who wish to gain broad recognition that supports their self-views. Narcissists may perceive achieving only a moderate level of fame as a relative failure that does not allow enough opportunity to elicit praise from others. Moreover, just as Olympic silver medalists experience more negative outcomes than lesserperforming bronze medalists (Medvec, Madey, & Gilovich, 1995), narcissists may prefer to have been perceived never to have tried than as having tried but only achieved second standing. Narcissists may therefore have a low desire to attain high-level positions that carry the potential for failure (i.e., to not meet their goal of attaining high status), especially if they do not feel that success is attainable.

### THE CURRENT RESEARCH

Despite narcissists' desire for fame as a means to acquire power, status, influence, and wealth, little research has investigated what limits it. Here, we examined situations that might attenuate narcissists' motivation to attain higher status. In Study 1, we examined how narcissists react to targets who hold an overarching goal of attaining status but are either successful or unsuccessful in achieving that goal. In Study 2, we examined whether the perceived attainability of status influences narcissist's motivation to be famous.

More specifically, in Study 1, we assessed narcissists' perceptions of target individuals who experienced different levels of success attaining their goal to become a social media celebrity (i.e., success, failure, or a no-goal control condition). Because narcissists tend to like others who also seem narcissistic, we expected them to feel more similar to targets with a goal to attain high status and attribute more positive qualities to them (i.e., Facebook; e.g., Wallace, Grotzinger, Howard, & Parkhill, 2015). We accordingly expected narcissists to emulate successful highstatus targets and possibly express relative dislike and contempt for targets who have tried but failed to attain success (even if those individuals can boast more fame than people who have not tried at all).

Along these lines, we explored whether the perception of fame's attainability influences narcissists' emulation of high-status targets in Study 2. There, we examined whether narcissists' perceived similarity to high-status targets (i.e., Hollywood celebrities, social media celebrities, and CEOs) influences their desire to become those targets. We expected that narcissists would only express a desire to become a high-status target when they perceived themselves as similar enough that the target's status seemed attainable. In other words, narcissists would rate high-status targets positively and express a desire to become them when they perceive them as similar. Thus, we tested when, and under what circumstances, narcissists express an explicit desire to become famous.

## STUDY 1

As both a contributor and consequence of narcissism's recent social proliferation, social media provide a means for everyday people to gain fame in an unprecedented way (Bergman, Fearrington, Davenport, & Bergman, 2011; Greenwood et al., 2013). Platforms such as Instagram, YouTube, and Twitter allow ordinary individuals to amass wide international followings that afford them celebrity status (Marwick, 2015). To understand the relationship between narcissism and the desire for this variety of fame, participants in Study 1 completed a measure of grandiose narcissism and rated contrived social media profiles of people who had no desire for fame (i.e., no goal), desired fame but failed to achieve it (i.e., goal failure), or achieved high levels of fame (i.e., goal success). We expected that more narcissistic participants would perceive the high-status or famous target as more desirable than targets who failed to achieve fame or who did not desire fame, to whom they would feel superior. Furthermore, we expected narcissists to respond less positively toward, and be less motivated to become, people who failed to achieve success compared to non-narcissists. Such a pattern of results might suggest that narcissists perceive someone who has failed to achieve higher status as second rate, unable to satisfy their grandiose self-views, and threatening to their sense of self. Conversely, we expected that non-narcissists would indicate less desire to be famous overall.

### METHOD

*Participants*. Anticipating that this would be a relatively small effect (as are most in social and personality psychology; Gignac & Szodorai, 2016), an a priori power analysis conducted using G\*Power indicated that we needed 263 participants to achieve 80% power in a multiple linear regression with five predictor variables ( $f^2 = .05$ ; Faul, Erdfelder, Lang, & Buchner, 2007). We then recruited American Mechanical Turk (MTurk) workers,  $f^2$  who participated in exchange for monetary compensation (final N = 287; 114 female, 173 male;  $M_{age} = 24.47$  years, SD = 4.77; obtained power = 84%).<sup>3</sup> We excluded two participants for responding uniformly to all items; the pattern of results remains identical when including these participants in the analyses.

### MATERIALS

*Trait Narcissism.* Participants completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which consists of 40 two-forced-choice items. One option indicates greater narcissism (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

<sup>2.</sup> Crowdsourcing platforms such as MTurk tend to provide more demographically diverse samples that tend to be as reliable as traditional methods of participant recruitment (e.g., Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, & Hackett, 2013).

<sup>3.</sup> In both studies, we collected 10% more participants than required by the power analysis to anticipate losses due to normal participant attrition.

out of me") and participants select the option with which they identify most. We summed the number of narcissistic choices to create a trait narcissism score ( $\alpha$  = .92).

*Status Goal Manipulation.* We randomly assigned each participant to one of three conditions: No Goal (n = 96), Goal Failure (n = 96), and Goal Success (n = 95). Participants read a short description about a person and ostensibly viewed their social media account on Instagram, which illustrated the number of photographs posted by the person, the person's number of followers, and the number of other people the person is following (see Appendix). The stimuli were designed to depict a high-status social media celebrity (Goal-Success condition), a target who had tried but failed to achieve social media celebrity status (Goal-Failure condition), and a typical social media user (No-Goal condition).

Each target was presented within the webpage of an Instagram account accompanied by descriptive text. In the Goal-Success condition, the high-status social media celebrity account showed 1,057 posted photographs, 600 people the target is following and 4.8 million followers; and was described as having an increasing number of followers, as frequently posting photographs, as receiving corporate advertising opportunities, and as hosting meet-and-greet events with fans. In the Goal-Failure condition, the social media account also showed 1,057 posted photographs and 600 people the target is following but only 554 followers. The target was described as having a more difficult time recruiting followers (despite posting photographs frequently) and as receiving no contact from companies or fans reaching out. Notably, this target is someone who has tried but failed to achieve the goal of becoming a high-status social media celebrity. In the No-Goal condition, the social media account resembled that of a typical Instagram user, showing 226 posted photographs, 166 people the target is following and 130 followers (Jang, Han, Shih, & Lee, 2015; Manikonda, Hu, & Kamphampati, 2014). This target was described as sometimes posting photographs but having little concern for attracting followers. We did not include photographs of the targets and did not specify the gender of the target; this allowed participants' perceptions of the target to vary naturally.

### PROCEDURE

Participants completed the NPI, read their randomly assigned description, and then rated the target for how attractive, likeable, powerful, influential, popular, narcissistic (defined as egotistical, self-focused, and vain), successful, deserving of success, and respected the person was on a scale from 1 (*not at all*) to 7 (*extremely*) in this fixed order. Two additional questions assessed the participant's motivation to become the target; "How much do you want to become this person?" from 1 (*not at all*) to 7 (*extremely*), and "How often do you fantasize about being this person?" from 1 (*never*) to 7 (*very often*). Next, participants indicated how they felt compared to the target across a series of dimensions (i.e., inferior/superior, incompetent/ competent, unlikeable/likeable, left out/accepted, untalented/more talented, weaker/stronger, unconfident/confident, undesirable/desirable, unattractive/

Dependent Variables		Status Goal Condition	1
	No Goal	Goal Failure	Goal Success
Target Positive Attributes	4.14 (0.85) <sub>a</sub>	3.49 (1.09) <sub>b</sub>	4.85 (0.93) <sub>c</sub>
Target narcissism	2.58 (1.43) <sub>a</sub>	4.64 (1.72) <sub>b</sub>	5.39 (1.30) <sub>c</sub>
Participant Motivation	3.09 (1.40) <sub>a</sub>	2.23 (1.47) <sub>b</sub>	3.03 (1.65) <sub>a</sub>
Target-Participant Comparison	5.88 (1.18) <sub>a</sub>	6.26 (1.51) <sub>ab</sub>	5.48 (1.83) <sub>b</sub>
Target-Participant Similarity	5.79 (1.52) <sub>a</sub>	4.48 (1.88) <sub>b</sub>	4.67 (2.20) <sub>b</sub>

TABLE 1. Means and Standard Deviations by Condition for the Responses Measured in Study 1

Note. Standard deviations in parentheses. Within each row, means with different subscripts significantly differ (all ps < .001).

attractive, unpopular/popular; Allan & Gilbert, 1995) using 10-point scales (e.g., from 1 [*unlikable*] to 10 [*more likable*]) in which higher ratings indicated feeling superior to the target. Last, participants rated how similar they felt to the target in terms of attractiveness, intelligence, attitudes, popularity, ambition, success, resources, status, and personality from 1 (*not at all*) to 10 (*extremely*).

#### RESULTS

*Rating Summaries.* The positively valenced attributes all significantly correlated (all  $rs \ge .23$ , ps < .001); we therefore averaged them to create a Target Positive Attribute score ( $\alpha = .90$ ). We kept target narcissism as a single item, similar to the Single-Item Narcissism Scale (SINS; Konrath, Meier, & Bushman, 2014). We created composites for Participant Motivation ( $\alpha = .84$ ), Target-Participant Comparison ( $\alpha = .94$ ), and Target-Participant Similarity ( $\alpha = .94$ ). See Table 1 for descriptive statistics by condition.

Differences Between Conditions. The results of one-way between-subjects ANO-VAs for each of the dependent variables (Bonferroni-corrected  $\alpha$  = .01) showed significant differences between the conditions for each of the Target Positive Attribute, *F*(2, 284) = 48.11, *p* < .001,  $\eta_p^2$  = .25, target narcissism, *F*(2, 284) = 90.35, *p* < .001,  $\eta_p^2$  = .39, Participant Motivation, *F*(2, 284) = 9.71, *p* < .001,  $\eta_p^2$  = .06, Target-Participant Comparison, *F*(2, 284) = 6.17, *p* = .002,  $\eta_p^2$  = .04, and Target-Participant Similarity scores, *F*(2, 284) = 13.61, *p* < .001,  $\eta_p^2$  = .09.

Planned linear contrasts showed that participants tended to rate the target in the No-Goal condition as possessing fewer positive qualities, fewer narcissistic tendencies, and as more similar to themselves than in the Goal-Failure (all  $ts \ge 4.15$ , ps < .001,  $ds \ge .60$ ) and Goal-Success conditions (all  $ts \ge 4.12$ , ps < .001,  $ds \ge .60$ ). Participants did not differ in their social comparison ratings or in their motivation to become the target between the No-Goal and Goal-Success conditions (all  $ts \le 1.81$ ,  $ps \ge .073$ ,  $ds \le .26$ ). Participants rated the target more positively, as more narcissistic, and as superior to themselves, and expressed more motivation to become the person in the Goal-Success condition than in the Goal-Failure condition (all  $ts \ge 3.20$ ,  $ps \le .002$ ,  $ds \ge .47$ ).

Moderation Analyses. To determine how participants' narcissism influenced their perceptions, we next regressed participants' narcissism (mean centered), condi-

tion (effect coded: -1, -1 = No Goal; 0, 1 = Goal Failure; 1, 0 = Goal Success), and their interaction terms onto each of the Target Positive Attribute, target narcissism, Participant Motivation, Target-Participant Comparison, and Target-Participant Similarity scores. Results revealed a significant two-way interaction between participants' narcissism and status condition for all but the Target-Participant Comparison measure, F(2, 281) = 1.26, p = .287,  $R^2 = .40$ ,  $\Delta R^2 = .01$ ; all other  $Fs \ge 3.42$ , all  $ps \le .034$ , all  $R^2s \ge .29$ .

We decompose the interaction for each variable below. We first describe the simple slopes by examining the main effect of narcissism in each condition (i.e., whether participants' narcissism scores predicted their responses within each condition). We then describe the simple effects by comparing scores across conditions for participants at one standard deviation above (narcissists) and below (non-narcissists) the sample mean on trait narcissism (Aiken & West, 1991).

*Target Positive Attribute.* Participants' narcissism did not relate to their Target Positive Attribute scores in the No-Goal condition,  $\beta = -.09$ , t(281) = -0.91, p = .365, but positively predicted the Target Positive Attribute scores in both the Goal-Failure,  $\beta = .20$ , t(281) = 2.33, p = .020, and Goal-Success conditions,  $\beta = .22$ , t(281) = 2.60, p = .010, such that narcissists rated higher-status targets more positively than non-narcissists did.

Comparing across conditions, both narcissists and non-narcissists rated the target as having more positive qualities in the Goal-Success condition compared to both the Goal-Failure and No-Goal conditions ( $\beta s \ge .16$ ,  $ts \ge 1.86$ ,  $ps \le .065$ ). Non-narcissists rated targets as having significantly less positive qualities in the Goal-Failure condition than in the No-Goal condition, however,  $\beta = -.41$ , t(281) = -4.95, p < .001, whereas narcissists did not significantly differ in their ratings between the Goal-Failure and No-Goal conditions,  $\beta = -.14$ , t(281) = -1.68, p = .094. See Figure 1A.

*Target Narcissism.* Participants' narcissism positively related to their perceptions of the targets' narcissism in the No-Goal condition,  $\beta = .18$ , t(281) = 2.04, p = .042, but negatively related to their perceptions of the targets' narcissism in the Goal-Failure,  $\beta = -.20$ , t(281) = -2.61, p = .010, and Goal-Success conditions,  $\beta = -.16$ , t(281) = -2.14, p = .033. Thus, more narcissistic people perceived the target as more narcissistic in the No-Goal condition but as less narcissistic in the Goal-Failure and Goal-Success conditions.

More important, comparisons across conditions showed that both narcissists and non-narcissists rated the target as more narcissistic in the Goal-Failure and Goal-Success conditions compared to the No-Goal condition ( $\beta s \ge .33$ ,  $ts \ge 4.32$ ,  $ps \le .001$ ), and as more narcissistic in the Goal-Success versus Goal-Failure condition ( $\beta s \ge .18$ ,  $ts \ge 2.90$ ,  $ps \le .004$ ). See Figure 1B.

*Participant Motivation.* Participants' narcissism did not relate to their motivation to be like the target in the No-Goal condition,  $\beta = .07$ , t(281) = 0.72, p = .471, but positively predicted their motivation to be like the target in the Goal-Failure,  $\beta = .28$ , t(281) = 3.11, p = .002, and Goal-Success conditions,  $\beta = .53$ , t(281) = 5.87, p < .001.

Non-narcissists were less motivated to become the target in the Goal-Failure condition,  $\beta = -.36$ , t(281) = -4.09, p < .001, and in the Goal-Success condition,  $\beta = -.36$ , t(281) = -.409, p < .001, and in the Goal-Success condition.



FIGURE 1. (A) Target Positive Attribute, (B) target narcissism, (C) Participant Motivation, and (D) Target-Participant Similarity as a function of goal condition and participant narcissism in Study 1.

-.25, t(281) = -2.78, p = .006, compared to the No-Goal condition, and did not show a preference for becoming the target across the Goal-Failure and Goal-Success conditions,  $\beta = .11$ , t(281) = 1.28, p = .203. But, as expected, narcissists were marginally less motivated to become the target in the Goal-Failure condition than in the No-Goal condition,  $\beta = ..17$ , t(281) = -1.85, p = .065, more motivated to become the target in the Goal-Success condition than in the No-Goal condition,  $\beta = .18$ , t(281)= 2.01, p = .045, and more motivated to become the target in the Goal-Success condition than in the Goal-Failure condition,  $\beta = .35$ , t(281) = 4.09, p < .001. See Figure 1C.

*Target-Participant Similarity.* As expected, narcissists saw themselves as less similar to the target than non-narcissists did in the No-Goal condition,  $\beta$  = -.25, *t*(281) = -2.52, *p* = .012; but they felt more similar to the target in the Goal-Failure,  $\beta$  = .28, *t*(281) = 3.28, *p* = .001, and Goal-Success conditions,  $\beta$  = .59, *t*(281) = 6.81, *p* < .001, than non-narcissists did.

Comparing across conditions, non-narcissists rated themselves as being much more similar to the target in the No-Goal condition than in the Goal-Failure,  $\beta = -.56$ , t(281) = -6.63, p < .001, and Goal-Success conditions,  $\beta = -.67$ , t(281) = -7.89, p = .001, which did not differ,  $\beta = -.12$ , t(281) = -1.39, p = .165. Unexpectedly, narcissists perceived themselves as equally similar to the target in the No-Goal condition as in the Goal-Failure,  $\beta = -.06$ , t(281) = -0.71, p = .480, and Goal-Success conditions,  $\beta = .11$ , t(281) = 1.29, p = .199. They did, however, rate themselves as significantly more similar to the target in the Goal-Success condition than in the Goal-Failure condition,  $\beta = .17$ , t(281) = 2.11, p = .036. See Figure 1D.

### DISCUSSION

As hypothesized, narcissists were primarily interested in large amounts of success and fame. They demonstrated less desire to become someone who had tried but failed to achieve high status compared to both the successful high-status target and even the target who had garnered no fame at all. Narcissists may therefore consider gaining only a moderate amount of success through fewer followers on Instagram (i.e., 554 vs. 4.8 million followers despite the same number of posts) as a relative failure, especially when they desire a higher degree of fame. Narcissists may wish to emulate people that are successful at achieving status versus people who struggle to achieve the fame they desire. Trying to be famous but not quite succeeding may therefore seem worse to narcissists than not being famous at all.

Although narcissists displayed decreased motivation to become the Goal-Failure target, they rated that person more positively and more like themselves compared to the target in the No-Goal condition. Despite the Goal-Failure target failing to achieve a higher degree of success, narcissists may view people who have some degree of fame (i.e., a greater number a followers) more positively than someone who has none at all. Because they would rather be extremely successful, however, they are more motivated to emulate those who have achieved greater success or attracted more attention.

Notably, the description of the Goal-Failure target may have led to multiple interpretations of that target's level of success. It is possible that narcissists interpret the target in the Goal Failure condition more harshly than non-narcissists do. It may be that non-narcissistic participants perceive the target in the Goal Failure condition as still moderately successful or as striving to achieve greater fame (despite not yet reaching such levels of success). It is also possible that participants perceived the Goal-Failure target as potentially able to gain the same number of followers as the successful target in the future and thus viewed that person's status as having the potential to improve over time. Though we cannot fully decipher participants' opinions of the different targets based on the present data, these alternative interpretations could lead to future research investigating narcissists' and non-narcissists perceptions of others according to whether they attain their goals.

Interestingly, narcissists perceived themselves as equally similar to the No-Goal target as they did to both the Goal-Success and Goal-Failure targets. Thus, in Study 2, we examined how perceived similarity moderates the association between narcissism and the desire to become a high-status target. We hypothesized that narcissists would only emulate a famous target when they perceive themselves as highly similar to that person already because it would signal a greater chance of attaining that person's status.

## **STUDY 2**

Narcissists often have a strong desire for fame and status (e.g., Maltby, 2010); however, we suggest this may only occur when narcissists *feel similar* to high-status individuals. Here, we used participants' perceptions of how similar they are to high-status targets as a measure of how attainable they believed their status might be. People regularly compare how similar they are to others as a means of selfevaluation and self-enhancement (see Wood, 1989, for review). Thus, seeing oneself as similar to a high-status person may encourage one to believe that a similar level of status is obtainable (Collins, 2000; Lockwood & Kunda, 1997). We therefore hypothesized that narcissists would express greater motivation to emulate highstatus targets (whom we expected they would view positively) as a function of how similar they feel they are to them already.

Given narcissists' general disfavor for those who have achieved only moderate success, in Study 2 we focused only on targets who had achieved a great deal of success. Participants read prototypical descriptions of high-status figures (e.g., celebrity, CEO), and indicated how similar they felt to the targets, how narcissistic and successful they perceived the targets to be, and their motivation to become the targets.

### METHOD

*Participants.* We again conducted a power analysis using G\*Power, which suggested that we needed 184 participants to achieve 80% power in a repeated measure design with a between-subjects interaction, again anticipating a small effect (f = .40). We then recruited MTurk workers to participate in exchange for monetary compensation (final N = 197, 99 female, 98 male;  $M_{age} = 30.50$  years, SD = 10.01; obtained power = 88%).

*Procedure.* Participants read descriptions of a Hollywood celebrity, social media celebrity, and CEO in random order. The Hollywood celebrity was described as starring in films, getting attention from fans and paparazzi, travelling, and being nominated for awards. We used the description from the Goal-Success condition in Study 1 to depict the popular social media celebrity. The CEO was described as the highest-ranking person in a company, and as exhibiting superior leadership ability (see Appendix).

As in Study 1, participants completed the same Target Positive Attribute ( $\alpha$  = .85), target narcissism, Participant Motivation ( $\alpha$  = .89), Target-Participant Comparison ( $\alpha$  = .96), and Target-Participant Similarity ( $\alpha$  = .93) rating scales in the same fixed order for all three targets, as well as the NPI ( $\alpha$  = .91) to measure their own narcissism levels. Here, however, we counterbalanced whether they completed the NPI before or after rating the targets. The order in which participants completed the NPI and rating tasks did not moderate any of our findings and is not discussed further.<sup>4</sup>

<sup>4.</sup> We also included the Fame Interest Scale (FIS; Maltby, 2010) to use as a covariate in our analyses. Trait narcissism positively correlated with each of the FIS subscales (all  $rs \ge .27$ ,  $ps \le .001$ ). None of our results differed when including these scores in our models, however, and so we do not discuss them further.

	Target Type		
Dependent Variables	Hollywood Celebrity	Social Media Celebrity	CEO
Target Positive Attributes	5.42 (0.89) <sub>a</sub>	4.44 (1.12) <sub>b</sub>	5.40 (0.80) <sub>a</sub>
Target narcissism	4.92 (1.44) <sub>a</sub>	5.31 (1.62) <sub>b</sub>	4.29 (1.63) <sub>c</sub>
Participant Motivation	3.33 (1.90) <sub>a</sub>	2.68 (1.85) <sub>b</sub>	3.87 (1.80) <sub>c</sub>
Target-Participant Comparison	5.88 (1.18) <sub>a</sub>	6.26 (1.51) <sub>ab</sub>	5.48 (1.83) <sub>b</sub>
Target-Participant Similarity	4.23 (2.03) <sub>a</sub>	4.80 (2.00) <sub>b</sub>	4.92 (1.96) <sub>b</sub>

TABLE 2. Means and Standard Deviations by Target Type for the Responses Measured in Study 2

*Note.* Standard deviations in parentheses. CEO = Chief Executive Officer. Within each row, means with different subscripts significantly differ at p < .001.

### RESULTS

*Mean Differences Across Targets.* Results of a repeated measures ANOVA indicated that participants rated the three targets differently on each of the Target Positive Attribute, F(2, 392) = 116.05, p < .001,  $\eta_p^2 = .37$ , target narcissism, F(2, 392) = 28.29, p < .001,  $\eta_p^2 = .13$ , Participant Motivation, F(2, 392) = 53.79, p < .001,  $\eta_p^2 = .22$ , Target-Participant Comparison, F(2, 392) = 35.66, p < .001,  $\eta_p^2 = .15$ , and Target-Participant Similarity, F(2, 392) = 22.60, p < .001,  $\eta_p^2 = .10$ , measures (Bonferroni-corrected  $\alpha = .01$ ); see Table 2 for descriptive statistics.

*Correlations.* Participants' narcissism scores positively correlated with their Participant Motivation, Target-Participant Comparison, and Target-Participant Similarity ratings for all three types of targets. Their narcissism scores did not significantly correlate with Target Positive Attribute ratings or their ratings of the target's narcissism for any of the three targets, however. See Table 3.

*Moderation Analyses.* To determine how participants' narcissism and perceived similarity to the targets influenced their perceptions, we regressed the Target-Participant Similarity scores (mean centered), participant narcissism (mean centered), and corresponding two-way interaction onto each of the Target Positive Attribute, target narcissism, Participant Motivation, and Target-Participant Comparison scores. Because the pattern of results remained the same when we examined the target types separately, we averaged the three target scores into one for each measure. Results revealed a significant two-way interaction between Target-Participant Similarity and the participants' own narcissism for all of the measures, all  $\beta s \ge .20$ ,  $ts \ge 3.49$ , all  $ps \le .001$ , except the Target-Participant Comparison,  $\beta = -.06$ , t(193) = -1.26, p = .209.

We decompose the interaction for each variable below, testing simple effects and simple slopes at  $\pm 1$  *SD* from the sample mean of participant narcissism and Target-Participant Similarity, respectively (Aiken & West, 1991). For brevity, we refer to targets perceived as low and high in similarity as "dissimilar" and "similar" in the analyses below, and to individuals low and high in narcissism again as "non-narcissists" and "narcissists."

Dependent Variables	Target Type			
	Hollywood Celebrity	Social Media Celebrity	CEO	
Target Positive Attributes	.07	.15	.04	
Target narcissism	08	.01	.09	
Participant Motivation	.47**	.47**	.39**	
Target-Participant Comparison	.41**	.34**	.41**	
Target-Participant Similarity	.51**	.44**	.41**	

TABLE 3. Correlations Between Participants' Narcissism Scores and Their Ratings of each Type of Target in Study 2

Note. N = 197. CEO = Chief Executive Officer. \*\*p < .01.

*Target Positive Attribute.* Although non-narcissists did not differ in how positively they viewed similar versus dissimilar targets,  $\beta = -.11$ , t(193) = -0.93, p = .354, narcissists rated similar targets more favorably than dissimilar targets,  $\beta = .45$ , t(193) = 4.80, p < .001, as expected. In addition, narcissism positively related to Target Positive Attribute ratings when participants perceived the target as similar to themselves,  $\beta = .28$ , t(193) = 2.66, p = .009, and negatively related to Target Positive Attribute ratings when they perceived the target as dissimilar to themselves,  $\beta = -.28$ , t(193) = -2.72, p = .007. See Figure 2A.

*Target Narcissism.* Non-narcissists rated similar targets as significantly less narcissistic than dissimilar targets,  $\beta = -.41$ , t(193) = -3.43, p = .001. Narcissists rated similar and dissimilar targets as equally narcissistic, however,  $\beta = .14$ , t(193) = 1.41, p = .160. Participants' narcissism positively predicted their perceptions of the targets' narcissism when participants perceived themselves as *similar* to the targets,  $\beta = .32$ , t(193) = 3.01, p = .003, and negatively predicted their perceptions of the targets' narcissism when participants perceived themselves as *dissimilar* to the targets,  $\beta = .32$ , t(193) = -2.07, p = .040. See Figure 2B.

*Participant Motivation.* Non-narcissists were not more motivated to become like the targets as a function of how similar they perceived themselves to them,  $\beta = .14$ , t(193) = 1.50, p = .135. As predicted, however, narcissists expressed more motivation to become the targets when they perceived themselves as already similar to them,  $\beta = .53$ , t(193) = 6.86, p < .001. Indeed, narcissism positively predicted the desire to become the targets when the participants perceived themselves as similar to the targets,  $\beta = .51$ , t(193) = 5.92, p < .001, but did not predict their desire to become the targets when they perceived themselves as dissimilar to the targets,  $\beta = .12$ , t(193) = 1.43, p = .156. See Figure 2C.

## DISCUSSION

As expected, narcissists felt significantly more similar to the high-status targets than non-narcissists did. Narcissists rated targets as more narcissistic and successful as a function of how similar they felt to them, consequently indicating a greater desire to become them. Feeling similar to high-status individuals therefore seems to facilitate narcissists' desire to be famous and successful. In addition, narcissists' perceptions of targets' positive attributes enhanced their desire to become the



high-status targets when they felt similar to them, whereas perceptions of targets' narcissism did not. Together, these data suggest that narcissists are motivated to achieve a high-status lifestyle, but perhaps only when that success seems attainable.

## **GENERAL DISCUSSION**

Grandiose narcissists are widely known for their overinflated self-views, selfenhancing tendencies, and, most pertinently, desire for fame and status. Despite their broad desire to be well-known and famous, narcissist's sense of superiority and chronic need to thwart self-threats may lead them to favor some high-status contexts over others. Here, we examined conditions bounding the extent to which narcissists are motivated toward fame. Do they blindly adore all individuals with some level of status, or is their aspiration for stardom nuanced?

In Study 1, we manipulated the success of social media users, finding that narcissists only emulated a high-status, successful target. Interestingly, they indicated less desire to become a target who tries but fails to achieve high levels of fame compared to a typical target with no goal of ever being famous, suggesting that moderate amounts of fame may not appeal to narcissists particularly when they are trying to attain higher levels of fame. We examined whether perceptions of narcissists' similarity to high-status targets modulated their ambitions to become them in Study 2. Indeed, narcissists only expressed more motivation to become high status when they perceived themselves as similar to high-status targets. These findings suggest that narcissists are motivated only to attain the highest degree of fame possible, and likely only when they feel as though that success is attainable.

The present research supports and extends hierometer theory (Mahadevan et al., 2016), which suggests that people's self-regard (i.e., self-esteem, narcissism) and

social status cohere. So far as self-regard tracks status, narcissists may not emulate individuals who unsuccessfully attempt to obtain status because being like them would challenge their otherwise grandiose self-views. Indeed, narcissists' pride and sense of superiority may lead them to desire high degrees of fame versus more modest amounts (i.e., 4.8 million vs. 554 Instagram followers). Reminiscent of past work showing that people dislike out-group members because they see them as different from themselves (Chen & Kenrick, 2002) or showing that people prefer relevant role models when their success seems attainable (Lockwood & Kunda, 1997), narcissists seem to only like high-status people to whom they feel similar or whose success appears attainable. Given that pursuing status can be risky (some people may successfully attain high levels of status and fame whereas others may only reach mediocre levels, or try and fail to become famous), narcissists may defensively distance themselves from individuals who desire yet fail to attain high status, and from high-status persons to whom they do not feel similar, to avoid threats to their excessively positive self-views.

## NARCISSISM AND PERCEPTIONS OF HIGH-STATUS OTHERS

This research has implications for understanding how narcissists and non-narcissists differ in their perceptions of others. Previous studies found that narcissists tend to fraternize with other narcissists and that they like people who display more narcissistic traits (e.g., Campbell, 1999; Hart & Adams, 2014; Maaß, Lämmle, Bensch, & Ziegler, 2016). They thus tend to be less bothered by others' narcissistic traits (e.g., aggression, rudeness, selfishness, flashiness) and are more accepting of people described as narcissistic because they view narcissistic qualities as more desirable than non-narcissists do (Adams, Hart, & Burton, 2015; Burton, Adams, Hart, Grant, Richardson, & Tortoriello, 2017; Carlson & DesJardins, 2015; Wallace et al., 2015). Although narcissists may be more tolerant of others' narcissistic behavior, they may also underestimate the extent to which high-status individuals are narcissistic. Here, we found that narcissists varied less in their ratings of others' narcissism than non-narcissists did. More specifically, non-narcissists rated high-status targets as more narcissistic in Study 1 and tended to map their ratings of targets' narcissism onto their degree of perceived similarity to them in Study 2 (i.e., they rated similar targets as less narcissistic and dissimilar targets as more narcissistic). Narcissists did not perceive large differences in the targets' narcissism, however. Perhaps non-narcissists are especially sensitive to others' narcissistic attributes (potentially because they perceive those attributes negatively), or perhaps narcissists fail to recognize narcissistic behavior because they are more accepting of it or simply see it as normal. Perceptions of others' narcissism or narcissistic behavior may therefore be attenuated by people's own narcissism. Understanding the biases that might explain how narcissists and non-narcissists perceive others' narcissism differently surely requires further investigation.

More broadly, this research provides insight into how people perceive others' attention-seeking behavior. Compared to traditional celebrities, who have the en-

dorsement of large organizations and vast resources, "social media celebrities" may supply greater motivation and opportunity for narcissists to distinguish themselves through attention-seeking behavior, rather than through genuine accomplishment. Accordingly, participants in Study 1 disliked relatively unsuccessful social media celebrities and participants in Study 2 liked social media celebrities less than traditional Hollywood celebrities. This relative dislike for social media celebrities may stem from lay hypotheses about why such individuals engage in attention-seeking behavior (e.g., low self-esteem). Indeed, previous studies have reported that narcissists use social media to accumulate as many followers as possible, to advertise their activities broadly, and to cultivate a positive public image (Bergman et al., 2011). Knowledge of these self-effacing motives may represent a distinction between appreciating tangible talent (as with Hollywood celebrities or CEOs) versus teleological fame and promote dislike of social media attention seekers. Thus, future research might consider whether narcissistic behavior in some contexts (e.g., Hollywood, business) is viewed more favorably than in other contexts (e.g., on social media).

### LIMITATIONS

Limitations in the current studies highlight several additional avenues for further investigation. In Study 1, the stimuli we used were highly arbitrary and the targets' actual narcissism levels were unknown. Moreover, because participants' expectations about normal social media use have not been calibrated, the information given about the No-Goal target in Study 1 could have inadvertently portrayed the person as more narcissistic than we intended. The types of posts that social media users make (e.g., selfies) could also heavily influence their relative success and perceived narcissism (e.g., Re, Wang, He, & Rule, 2016). We did not describe the kinds of posts constituting the targets' Instagram photos. Participants may have therefore inferred that a greater number of uninteresting photographs posted by the Goal-Failure target led to the person never attaining a large number of followers. In addition, because interpretation of the description of the Goal-Failure condition is subjective, participants may have interpreted the trajectory of the targets' success or failure differently (e.g., striving for success vs. failed to achieve success); an interpretation that may depend on the participant's own narcissism level. We also investigated only three potential levels of fame in Study 1; it may thus be interesting to understand how narcissists react to a wider range of status levels by varying the number of Instagram followers continuously.

Moreover, we used broad social categories in Study 2, relying on people's stereotypes of CEOs, Hollywood celebrities, and social media stars to stratify them. Yet the thresholds that govern whether individuals seem narcissistic may differ within each of these categories, requiring greater nuance than the descriptions provided. In addition, we used participant-target similarity as a proxy for goal attainability in Study 2, assuming that participants who feel similar to high-status targets would feel that achieving high status is more attainable. Higher perceived similarity also relates to greater interpersonal attraction and liking, however, which may offer an alternative explanation for our research (e.g., Montoya, Horton, & Kirchner, 2008). Manipulating the extent to which narcissists felt similar to high status targets or measuring their beliefs about status attainability more directly may have provided more straightforward tests that allow us to draw stronger conclusions about the association between perceived similarity and narcissists' desire to gain status.

## CONCLUSIONS AND FUTURE DIRECTIONS

Future research should investigate how facets of narcissism may influence how narcissists react to individuals seeking high-status positions. Grandiose narcissism can be separated into narcissistic admiration (the tendency to seek social admiration through self-promotion or assertive self-enhancement) and narcissistic rivalry (the tendency to prevent social failure through self-defense or antagonistic self-protection; Back et al., 2013). Understanding the motivation underpinning narcissists' reactions to successful and unsuccessful targets may therefore be elucidated by examining whether these reactions are driven by narcissists' need for admiration or supremacy.

Examining trends between grandiose narcissism and the desire for fame is important, considering that successive generations may be more narcissistic than previous generations, and as the use of social networking sites continues to increase (Cai, Kwan, & Sedikides, 2012; Ellison, Steinfield, & Lampe, 2007; Kwon & Wen, 2010; Twenge, Konrath, Foster, Campbell, & Bushman, 2008; though see Trzesniewski, Donnellan, & Robins, 2008). Both popular media and social media profoundly affect society (e.g., Watts et al., 2013): Celebrities are often held in high esteem and their narcissistic behavior may often be viewed as an excusable or even desirable contributor to their success. Widespread acceptance of such narcissistic behavior may facilitate the spread of narcissism (Twenge & Campbell, 2009). Recent research has found that using social networking sites can reinforce people's narcissistic tendencies (Halpern, Valenzuela, & Katz, 2016), and exposure to reality television positively predicts viewers' narcissism (Gibson, Hawkins, Redker, & Bushman, 2016; Lull & Dickinson, 2016). Researchers should therefore continue to investigate grandiose narcissists' motivation to achieve celebrity status, particularly as narcissistic and attention-seeking behaviors become more rewarded in society.

## APPENDIX

### STUDY 1 MATERIALS

*Goal-Success Condition.* "I spend most of my time perfecting my social media platforms such as Instagram and YouTube. I have a massive amount of followers and they keep growing in numbers. I like to post at least once a day. My social media accounts are a reflection of my image and I thrive on the likes and comments I receive hourly. Companies have been contacting me for modelling opportunities, product endorsements, and other forms of advertising. This year I had meet-and-greet events in some cities across the country where my fans lined up for hours to see me."



*Goal-Failure Condition.* "I work really hard to enhance my social media platforms such as Instagram and YouTube. I am having a hard time increasing my follower count. I like to post at least once a day. My social media accounts are a reflection of my image and I thrive when I receive even a few likes or comments a week. No one has contacted me for any modelling opportunities, product endorsements, or other forms of advertising yet. Few people have expressed admiration and desire to meet me."



*No-Goal Condition.* "Sometimes I will post on social media platforms such as Instagram and YouTube. My follower number is average and I'm not concerned about them growing. I like to post once in a while when something interesting has happened in my life. Likes and comments don't concern me. Sometimes friends will contact me and it's nice to keep in touch."



### STUDY 2 MATERIALS

*Hollywood Celebrity.* "I have starred in many movies and TV shows. I am always auditioning for new projects. I am constantly being photographed by paparazzi and I require security for all the fan attention that I receive when I am walking the red carpet. My job pays extremely well and it involves a lot of travelling to different cities around the world, mostly for filming. I have been nominated for many awards for my performances and have recently placed my star on the Hollywood Walk of Fame."

*Social Media Celebrity.* "I spend most of my time enhancing my social media platforms such as Instagram and YouTube. I have a huge amount of followers and they keep growing in numbers. I like to post at least once a day to keep my popularity high. I love posing for photos and I spend a lot of time thinking of different photo options. Companies have been contacting me for modelling opportunities, product endorsements, and other forms of advertising. I feel like my social media accounts are a reflection of my image and I thrive on the likes and comments I receive daily."

*Chief Executive Officer (CEO).* "I am the highest-ranking person in a company. As the leader of the company, I advise the Board of Directors, motivate employees, and drive changes within the organization. I set the tone and the vision for my organization. I am involved in all of the high-level decisions about policy and strategy. I manage the overall operations and resources of a company, and act as the main point of communication between the board of directors, the press, and corporate operations."

## REFERENCES

- Adams, J. M., Hart, W., & Burton, K. A. (2015). I only like the idea of you: Narcissists tolerate others' narcissistic traits but not their corresponding behaviors. *Personality and Individual Differences, 82*, 232-236. https://doi.org/10.1016/j. paid.2015.02.019
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Allan, S., & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences*, 19, 293-299. https://doi.org/10.1016/0191-8869(95)00086-L
- Back, M. D., Küfner, A. C., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality*

*and Social Psychology*, 105(6), 1013-1037. https://doi.org/10.1037/a0034431

- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism-popularity link at zero acquaintance. *Journal of Personality and Social Psychology*, 98, 132-145. https://doi.org/10.1037/ a0016338
- Benson, A. J., Jordan, C. H., & Christie, A. M. (2016). Narcissistic reactions to subordinate role assignment: The case of the narcissistic follower. *Personality and Social Psychology Bulletin*, 42, 985-999. https:// doi.org/10.1177/0146167216649608
- Bergman, S. M., Fearrington, M. E., Davenport, S. W., & Bergman, J. Z. (2011). Millennials narcissism, and social networking: What narcissists do on social networking sites and why. *Personality and Individual Differences*, 50, 706-711. https://doi. org/10.1016/j.paid.2010.12.022

- Brunell, A. B., Gentry, W. A., Campbell, W. K., Hoffman, B. J., Kuhnert, K. W., & DeMarree, K. G. (2008). Leader emergence: The case of the narcissistic leader. *Personality and Social Psychology Bulletin*, 34, 1663-1676. https://doi. org/10.1177/0146167208324101
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet highquality, data? *Perspectives on Psychological Science*, 6, 3-5. https://doi. org/10.1177/1745691610393980
- Burton, K. A., Adams, J. M., Hart, W., Grant, B., Richardson, K., & Tortoriello, G. (2017). You remind me of someone awesome: Narcissistic tolerance is driven by perceived similarity. *Personality and Individual Differences*, 104, 499-503. https:// doi.org/10.1016/j.paid.2016.09.019
- Cai, H., Kwan, V. S., & Sedikides, C. (2012). A sociocultural approach to narcissism: The case of modern China. European Journal of Personality, 26, 529-535. https://doi.org/10.1002/per.852
- Campbell, K. W. (1999). Narcissism and romantic attraction. Journal of Personality and Social Psychology, 77, 1254-1270. https:// doi.org/10.1037/0022-3514.77.6.1254
- Campbell, W. K., & Foster, J. D. (2007). The narcissistic self: Background, an extended agency model, and ongoing controversies. In C. Sedikides & S. Spencer (Eds.), *Frontiers in social psychology: The self* (pp. 115-138). Philadelphia: Psychology Press.
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, 28, 358-368. https://doi. org/10.1177/0146167202286007
- Carlson, E. N., & DesJardins, N. M. L. (2015). Do mean guys always finish first or just say that they do? Narcissists' awareness of their social status and popularity over time. *Personality and Social Psychology Bulletin*, 41, 901-917. https://doi. org/0146167215581712
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. Computers in Human

*Behavior, 29, 2156-2160.* https://doi. org/10.1016/j.chb.2013.05.009

- Chen, F. F., & Kenrick, D. T. (2002). Repulsion or attraction? Group membership and assumed attitude similarity. *Journal of Personality and Social Psychology*, 83, 111-125. https://doi.org/10.1037/0022-3514.83.1.111
- Cisek, S. Z., Sedikides, C., Hart, C. M., Godwin, H. J., Benson, V., & Liversedge, S. P. (2014). Narcissism and consumer behaviour: A review and preliminary findings. *Frontiers in Psychology*, 5(232), 1-9. https://doi.org/10.3389/ fpsyg.2014.00232
- Collins, R. L. (2000). Among the better ones. In J. Suls & L. Wheeler (Eds.), Handbook of social comparison: Theory and research (pp. 159-171). New York: Springer Science & Business Media.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer Mediated Communication*, 12, 1143-1168. https://doi.org/10.1111/ j.1083-6101.2007.00367.x
- Farwell, L., & Wohlwend Lloyd, R. (1998). Narcissistic processes: Optimistic expectations, favorable self evaluations, and self enhancing attributions. *Journal* of Personality, 66, 65-83. https://doi. org/10.1111/1467-6494.00003
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191. https://doi.org/10.3758/ BF03193146
- Gentile, B. (2011). Celebrity and narcissism. In W. K. Campbell & J. D. Miller (Eds.), The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments (pp. 403-409). Hoboken, NJ: Wiley. https:// doi.org/10.1002/9781118093108.ch36
- Gibson, B., Hawkins, I., Redker, C., & Bushman, B. J. (2016). Narcissism on the Jersey Shore: Exposure to narcissistic reality TV characters can increase narcissism levels in viewers. *Psychology* of *Popular Music Culture*. https://doi. org/10.1037/ppm0000140

- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, 102, 74-78. https://doi. org/10.1016/j.paid.2016.06.069
- Gilbert, P., Price, J., & Allan, S. (1995). Social comparison, social attractiveness and evolution: How might they be related? *New Ideas in Psychology*, 13, 149-165. https://doi.org/10.1016/0732-118X(95)00002-X
- Greenwood, D., Long, C. R., & Dal Cin, S. (2013). Fame and the social self: The need to belong, narcissism, and relatedness predict the appeal of fame. *Personality and Individual Differences*, 55, 490-495. https://doi.org/10.1016/j. paid.2013.04.020
- Halpern, D., Valenzuela, S., & Katz, J. E. (2016). "Selfie-ists" or "Narci-selfiers"? A crosslagged panel analysis of selfie taking and narcissism. *Personality and Individual Differences*, 97, 98-101. https://doi. org/10.1016/j.paid.2016.03.019
- Hart, W., & Adams, J. M. (2014). Are narcissists more accepting of others' narcissistic traits? *Personality and Individual Differences*, 64, 163-167. https://doi. org/10.1016/j.paid.2014.02.038
- Horton, R. S., & Sedikides, C. (2009). Narcissistic responding to ego threat: When the status of the evaluator matters. *Journal* of *Personality*, 77, 1493-1526. https://doi. org/10.1111/j.1467-6494.2009.00590.x
- Jang, J. Y., Han, K., Shih, P. C., & Lee, D. (2015, April). Generation like: Comparative characteristics in Instagram. In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (pp. 4039-4042). https://doi. org/10.1145/2702123.2702555
- Konrath, S., Meier, B. P., & Bushman, B. J. (2014). Development and validation of the Single Item Narcissism Scale (SINS). *PLOS One*, 9, e103469. https://doi. org/10.1371/journal.pone.0103469
- Krizan, Z., & Bushman, B. J. (2010). Better than my loved ones: Social comparison tendencies among narcissists. *Personality and Individual Differences, 50*, 212-216. https://doi.org/10.1016/j. paid.2010.09.031
- Küfner, A. C., Nestler, S., & Back, M. D. (2013). The two pathways to being an (un) popular narcissist. *Journal of Personality*,

*81*, 184-195. https://doi.org/10.1111/ j.1467-6494.2012.00795.x

- Kwon, O., & Wen, Y. (2010). An empirical study of the factors affecting social network service use. *Computers in Human Behavior*, 26, 254-263. https://doi. org/10.1016/j.chb.2009.04.011
- Lobene, E. V., Meade, A. W., & Pond, S. B., III (2015). Perceived overqualification: A multi-source investigation of psychological predisposition and contextual triggers. *The Journal of Psychology*, 149, 684-710. https://doi.org/10.1080/0022 3980.2014.967654
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73, 91-103. https:// doi.org/10.1037/0022-3514.73.1.91
- Luchner, A. F., Houston, J. M., Walker, C., & Houston, M. A. (2011). Exploring the relationship between two forms of narcissism and competitiveness. *Personality* and Individual Differences, 51, 779-782. 10.1016/j.paid.2011.06.033
- Lull, R. B., & Dickinson, T. M. (2016). Does television cultivate narcissism? Relationships between television exposure, preferences for specific genres, and subclinical narcissism. *Psychology of Popular Media Culture*. https://doi.org/10.1037/ ppm0000107
- Maaß, U., Lämmle, L., Bensch, D., & Ziegler, M. (2016). Narcissists of a feather flock together: Narcissism and the similarity of friends. *Personality and Social Psychology Bulletin*, 42, 366-384. https://doi. org/10.1177/0146167216629114
- Mahadevan, N., Gregg, A. P., Sedikides, C., & de Waal-Andrews, W. G. (2016). Winners, losers, insiders, and outsiders: Comparing hierometer and sociometer theories of self-regard. Frontiers in Psychology, 7, 1-19. https://doi. org/10.3389/fpsyg.2016.00334
- Maltby, J. (2010). An interest in fame: Confirming the measurement and empirical conceptualization of fame interest. *British Journal of Psychology*, 101, 411-432. https://doi. org/10.1348/000712609X466568
- Manikonda, L., Hu, Y., & Kambhampati, S. (2014). Analyzing user activities, demographics, social network structure and

user-generated content on Instagram. [*arXiv* preprint] *arXiv*:1410.8099.

- Marwick, A. E. (2015). Instafame: Luxury selfies in the attention economy. *Public Culture*, 27, 137-160. https://doi. org/10.1215/08992363-2798379
- Maynard, D. C., Brondolo, E. M., Connelly, C. E., & Sauer, C. E. (2015). I'm too good for this job: Narcissism's role in the experience of overqualification. *Applied Psychology*, 64, 208-232. https://doi. org/10.1111/apps.12031
- Medvec, V. H., Madey, S. F., & Gilovich, T. (1995). When less is more: Counterfactual thinking and satisfaction among Olympic medalists. *Journal of Personality and Social Psychology*, 69, 603-610. https://doi.org/10.1037/0022-3514.69.4.603
- Miller, J. D., & Campbell, W. K. (2008). Comparing clinical and social personality conceptualizations of narcissism. *Journal* of Personality, 76, 449-476. https://doi. org/10.1111/j.1467-6494.2008.00492.x
- Miller, J. D., Lynam, D. R., Vize, C., Crowe, M., Sleep, C., Maples Keller, J. L., et al. (2017). Vulnerable narcissism is (mostly) a disorder of neuroticism. *Journal of Personality*. https://doi.org/10.1111/ jopy.12303
- Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. Journal of Social and Personal Relationships, 25, 889-922. https://doi. org/10.1177/0265407508096700
- Paulhus, D. L. (2001). Normal narcissism: Two minimalist accounts. *Psychological Inquiry*, 12, 228-230. https://doi. org/10.2307/1449480
- Raskin, R., & Terry, H. (1988). A principalcomponents analysis of the Narcissistic Personality Inventory (NPI) and further evidence of its construct validity. *Journal* of Personality and Social Psychology, 54, 890-902. https://doi.org/10.1037/0022-3514.54.5.890
- Re, D. E., Wang, S. A., He, J., & Rule, N. O. (2016). Selfie indulgence: Self-favoring biases in perceptions of selfies. Social Psychological and Personality Science, 7, 588-596. https://doi. org/10.1177/1948550616644299

- Rhodewalt, F., & Eddings, S. K. (2002). Narcissus reflects: Memory distortion in response to ego-relevant feedback among high- and low-narcissistic men. *Journal* of Research in Personality, 36, 97-116. https://doi.org/10.1006/jrpe.2002.2342
- Rhodewalt, F., & Morf, C. C. (1998). On selfaggrandizement and anger: A temporal analysis of narcissism and affective reactions to success and failure. *Journal of Personality and Social Psychology*, 74(3), 672-685. https://doi.org/10.1037/0022-3514.74.3.672
- Rubinstein, G. (2016). Modesty doesn't become me. Journal of Individual Differences, 37, 223-230. https://doi.org/10.1027/1614-0001/a000209
- Sedikides, C., & Gregg, A. P. (2001). Narcissists and feedback: Motivational surfeits and motivational deficits. *Psychological Inquiry*, 12(4), 237-239. Retrieved from http://www.jstor.org/stable/1449482
- Sedikides, C., Gregg, A. P., Cisek, S., & Hart, C. M. (2007). The I that buys: Narcissists as consumers. *Journal of Consumer Psychology*, 17(4), 254-257. https://doi. org/10.1016/S1057-7408(07)70035-9
- Sloman, L., & Price, J. S. (1987). Losing behavior (yielding subroutine) and human depression: Proximate and selective mechanisms. *Ethology and Sociobiology*, 8, 99-109. https://doi.org/10.1016/0162-3095(87)90022-7
- Southard, A. C., & Zeigler-Hill, V. (2016). The Dark Triad traits and fame interest: Do dark personalities desire stardom? *Current Psychology*, 35, 288-267. https://doi. org/10.1007/s12144-016-9416-4
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2008). Is "Generation Me" really more narcissistic than previous generations? *Journal of Personality*, 76, 903-918. https://doi.org/10.1111/j.1467-6494.2008.00508.x
- Twenge, J. M., & Campbell, W. K. (2009). *The* narcissism epidemic: Living in the age of entitlement. New York: Simon and Schuster.
- Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (2008). Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory (NPI). *Journal of Personality*, 76, 875-901. https://doi.org/10.1111 /j.1467-6496.2008.00507

- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology*, 82, 819-834. https://doi. org/10.1037/0022-3514.82.5.819
- Wallace, H. M., Grotzinger, A., Howard, T. J., & Parkhill, N. (2015). When people evaluate others, the level of others' narcissism matters less to evaluators who are narcissistic. Social Psychological and Personality Science, 6, 805-813. https://doi. org/10.1177/1948550615587985
- Watts, A. L., Lilienfeld, S. O., Smith, S. F., Miller, J. D., Campbell, W. K., Waldman,

I. D., et al. (2013). The double-edged sword of grandiose narcissism implications for successful and unsuccessful leadership among U.S. Presidents. *Psychological Science*, 24, 2379-2389. https:// doi.org/10.1177/0956797613491970

- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106, 231-248. https://doi.org/10.1037/0033-2909.106.2.231
- Young, S. M., & Pinsky, D. (2006). Narcissism and celebrity. *Journal of Research in Personality*, 40(5), 463-471. https://doi. org/10.1016/j.jrp.2006.05.005