


Reality at Odds With Perceptions: Narcissistic Leaders and Group Performance

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**Barbora Nevicka, Femke S. Ten Velden, Annel H. B. De Hoogh, and
Annelies E. M. Van Vianen**

University of Amsterdam

Abstract

Although narcissistic individuals are generally perceived as arrogant and overly dominant, they are particularly skilled at radiating an image of a prototypically effective leader. As a result, they tend to emerge as leaders in group settings. Despite people's positive perceptions of narcissists as leaders, it was previously unknown if and how leaders' narcissism is related to the performance of the people they lead. In this study, we used a hidden-profile paradigm to investigate this question and found evidence for discordance between the positive image of narcissists as leaders and the reality of group performance. We hypothesized and found that although narcissistic leaders are perceived as effective because of their displays of authority, a leader's narcissism actually inhibits information exchange between group members and thereby negatively affects group performance. Our findings thus indicate that perceptions and reality can be at odds and have important practical and theoretical implications.

Keywords

narcissism, leadership, group performance, perceptions, personality, interpersonal interaction

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Narcissistic individuals are chronic self-enhancers who consider themselves exceptional performers across disparate domains. For example, narcissists tend to overestimate their intelligence (Campbell, Rudich, & Sedikides, 2002), creativity (Goncalo, Flynn, & Kim, 2010), academic abilities (Robins & Beer, 2001), and leadership capabilities (Judge, LePine, & Rich, 2006). Generally, other people do not agree with narcissists' idealized self-images and perceive narcissists as arrogant, egocentric, overly dominant, and even hostile (Paulhus, 1998). However, the context of leadership constitutes a notable exception in which narcissists tend to be judged positively. For example, individuals with high levels of narcissism receive higher leadership ratings than individuals with low levels of narcissism do (Judge et al., 2006) and tend to emerge as leaders in groups (Brunell et al., 2008; Nevicka, De Hoogh, Van Vianen, Beersma, & McIlwain, 2011). In addition, higher narcissism in U.S. presidents is associated with more positive evaluations of their leadership (Deluga, 1997). It is therefore not surprising that narcissistic characteristics are ascribed to many prominent leaders, such as Nicolas Sarkozy (De Sutter & Immelman, 2008) and Steve Jobs (Robins & Paulhus, 2001).

At the root of the congruence between narcissists' self-assessment as superior leaders and other people's positive

perceptions is the overlap between narcissistic characteristics and the prototypical attributes associated with effective leaders, such as authority, confidence, dominance, and high self-esteem (Judge, Ilies, Bono, & Gerhardt, 2002; Lord & Maher, 1991; Smith & Foti, 1998). What remains unclear, however, is whether narcissistic leaders positively affect the performance of the people they lead. Therefore, in the study reported here, we examined the effect of leaders' narcissism on both followers' perceptions and group performance.

Of the two prior studies investigating this question, one found no effects of narcissistic leadership on performance (Brunell et al., 2008), and the other showed that organizational performance was merely more volatile, but no worse or better, because of narcissistic leaders' risky decision making (Chatterjee & Hambrick, 2007). Unfortunately, neither of these studies examined the effects of narcissistic leaders on group dynamics, communication, and information exchange, factors that are critically important to group decision making (Stasser, 1999), group performance (De Dreu, Nijstad, &

Corresponding Author:

Barbora Nevicka, University of Amsterdam, Weesperplein 4, Amsterdam
1018XA, The Netherlands
E-mail: b.nevicka@uva.nl

van Knippenberg, 2008), and organizational effectiveness (Zaccaro, Rittman, & Marks, 2001).

In order to reach high-quality decisions, the members of a group need to exchange and use all problem-relevant information that is available to individual members (Greitemeyer, Schulz-Hardt, Brodbeck, & Frey, 2006). For example, when considering a candidate for a job opening, individual group members might possess unique information that, when discussed and combined, would lead to high-quality decisions. The role of leaders during group discussion and decision making is particularly important because the quality of group decisions is affected by the extent to which leaders facilitate idea sharing and extract relevant information from group members (De Dreu et al., 2008; Larson, Christensen, Franz, & Abbott, 1998). Indeed, leaders generally enhance information sharing by asking questions and repeating information (Larson et al., 1998). However, some leaders can have the opposite effect on group communication. For instance, highly directive leadership can undermine followers' independent and deliberate thinking and inhibit the flow of information (De Dreu et al., 2008).

We suggest that, in a similar vein, narcissistic leaders, with their characteristic self-absorption and egocentrism, are biased to focus on their own information rather than to solicit unique information from other group members. Research consistently shows that the quality of decisions is reduced when groups fail to concentrate on unshared information (i.e., information that is not available to all group members; for a review, see Stasser, 1999). Even though narcissistic leaders embody the leadership prototype, they may actually stifle information sharing and have a negative effect on the quality of their groups' decisions.

To test this general prediction, we used the hidden-profile paradigm (Stasser & Titus, 1985), which is particularly suitable for examining the quality of information exchange between group members and the effect of such exchange on group decision making. Because narcissists seek to show off their superiority (Wallace & Baumeister, 2002), we expected that once they assumed a leadership role, their displays of authority would match the prototypical image of a leader and cause group members to attribute greater leadership effectiveness to them than to leaders with low levels of narcissism. Therefore, we expected that leaders' displays of authority would mediate the positive effect of leader's narcissism on perceived effectiveness. More important, however, we predicted that narcissistic leaders would inhibit information sharing among group members and thereby hinder, rather than advance, group performance. In this research, we aimed to provide the first evidence regarding whether there is a discord between the perceptions of narcissists' leadership effectiveness and their actual effectiveness as reflected by group performance.

Method

Participants

One hundred fifty students (mean age = 21.9 years; 47 men and 103 women) participated for course credit or payment.

Participants were randomly assigned to one of 50 three-person groups; one member of each group was randomly assigned to be the leader (22 men and 28 women).

Procedure

Each participant was seated behind his or her own computer. All 3 people assigned to a group read that they were about to engage in a group decision-making task and that 1 group member would be randomly selected as leader. Next, 1 group member was randomly chosen by the computer to lead the group. The group leader read that although the other 2 group members could be consulted and offer advice, the leader would be responsible for making a final decision for the group. The other 2 group members read that 1 group member had been randomly chosen as the group leader, and that it was the leader's responsibility to make a decision, but that they could be consulted and offer advice. After reading their instructions, all 3 group members went to a room to work on the group task. After the group made a decision, participants completed questionnaires individually.

Group task

We adapted a hidden-profile task used in prior research (e.g., Greitemeyer et al., 2006; Scholten, van Knippenberg, Nijstad, & De Dreu, 2007). The task involved two stages. In the first stage, participants read descriptions of three candidates for a position of secret agent. In the second stage, participants met in 3-person groups to discuss the information and choose the best candidate.

Each candidate had 15 traits (items) that were selected from a pool of items researched in a pilot study (see Greitemeyer et al., 2006). In the pilot study, 18 participants rated 65 items according to their desirability and importance for the job of secret agent. Using these ratings, we chose 45 attributes and created a 15-item profile for each of the three candidates. The items chosen for the descriptions were those that had been rated unambiguously positive (i.e., desirable and important; e.g., "The candidate can fly an F-16"), neutral (i.e., neither desirable nor undesirable and not important; e.g., "The candidate's shoe size is 41"), or negative (i.e., undesirable and important; e.g., "The candidate had anxiety disorder in the past").

Although each candidate had 15 traits, the descriptions provided to participants included only 9 items per candidate. For each candidate, the 3 group members received different sets of information; some of the items that a given participant received were available to all 3 participants (shared items), and others were available to only that participant (unique items). Thus, each group member received only partial information about each candidate. We counterbalanced across groups which information was given to the group leader and which was given to the other group members.

The purpose of using a hidden profile was to create a best alternative—in this case, Candidate A—whose superiority would not be seen unless the group members exchanged

information (cf. Greitemeyer et al., 2006; Scholten et al., 2007). If group leaders had access to only the shared information, a suboptimal decision alternative (Candidate B) would appear to be the best. However, if group leaders pooled shared and unshared information, an alternative option (Candidate A, with nine positive, three neutral, and three negative attributes) would emerge as a superior decision alternative. In fact, Candidate B was the worst choice, with six positive, three neutral, and six negative attributes (Table 1).

Independent measure: leader's narcissism

Group leaders' narcissism was assessed using the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which measures nonclinical narcissism using 40 true-or-false items (e.g., "I want to amount to something in the eyes of the world"; true = 1, false = 0; scores are summed across all items; $M = 18.00$, $SD = 8.06$; $\alpha = .89$; e.g., Brunell et al., 2008; Wallace & Baumeister, 2002).

Dependent measures

Perceptions of leader's authority. Group members completed a four-item measure assessing their leader's display of authority (e.g., "The leader had authority in my group"). The response scale ranged from 1 (*completely disagree*) to 7 (*completely agree*; $M = 3.98$, $SD = 0.98$; $\alpha = .86$; intraclass correlation 1, $ICC1 = .31$; within-groups r , $r_{wg} = .78$).

Perceived leadership effectiveness. Group members also completed a four-item measure assessing their leader's effectiveness

(e.g., "I think that the leader was an effective leader"; De Hoogh, Den Hartog, & Koopman, 2005). The response scale ranged from 1 (*completely disagree*) to 7 (*completely agree*; $M = 4.62$, $SD = 0.80$; $\alpha = .92$; $ICC1 = .22$, $r_{wg} = .70$).

Information exchange. After the group task, we asked individual group members which of the 15 traits they knew for each candidate. The information in a given item was classified as exchanged if all 3 group members knew the trait. Because unshared information was known to only 1 group member prior to group discussion, our measure adequately captured information exchange between group members (e.g., Scholten et al., 2007). The discussion of unshared information is more crucial to decision quality than is the discussion of shared information (Stasser & Titus, 1985); therefore, we calculated information exchange as the number of unshared items exchanged divided by the total number of unshared items ($M = .43$, $SD = .24$).

In addition, we assessed group members' perceptions of information exchange using six items (e.g., "The quality of information exchange in our group was good"). The rating scale for these items ranged from 1 (*completely disagree*) to 7 (*completely agree*; $M = 5.26$, $SD = 0.62$; $\alpha = .74$; $ICC1 = .21$, $r_{wg} = .88$). This measure was positively correlated with the direct measure of information exchange ($r = .34$, $p = .015$).

Group performance. The quality of the groups' decisions was assessed as a dichotomous variable: A group received 1 point for a correct choice (Candidate A) and no points for an incorrect choice (Candidates B or C).

Table 1. Distribution of Information About Each Candidate Before Group Discussion

Information type and valence	Candidate		
	A	B	C
Shared information			
Positive	0	6	3
Neutral	3	0	0
Negative	3	0	3
Unshared information			
Positive	9	0	3
Neutral	0	3	6
Negative	0	6	0
Information available to each individual			
Positive	3	6	4
Neutral	3	1	2
Negative	3	2	3
Information available to the group			
Positive	9	6	6
Neutral	3	3	6
Negative	3	6	3

Results

The gender composition of the groups and the gender of the leaders had no significant main or interaction effects, and the analyses yielded the same pattern of results when these factors were not included. Therefore, these variables are not discussed further.

Perceptions of leader's authority and leadership effectiveness

Results revealed that leader's narcissism positively affected group members' perceptions of leader's authority, $\beta = 0.54$, $t(48) = 4.48$, $p < .01$, $R^2 = .29$, and effectiveness, $\beta = 0.39$, $t(48) = 2.94$, $p < .01$, $R^2 = .15$. Furthermore, the relationship between perceptions of leader's authority and perceived leadership effectiveness was significant, $\beta = 0.61$, $t(48) = 5.34$, $p < .01$, $R^2 = .37$. The 95% confidence interval of the effect of perceived leader's authority as a mediator of the effect of narcissism on perceived effectiveness ranged from 0.52 to 2.36 (1,000 bootstrap resamples); thus, the mediation effect was significantly different from zero (Hayes, 2009; Preacher & Hayes, 2004). Therefore, our results confirmed our hypothesis: Leader's authority mediated the positive effect of leader's narcissism on perceived leadership effectiveness (Fig. 1).

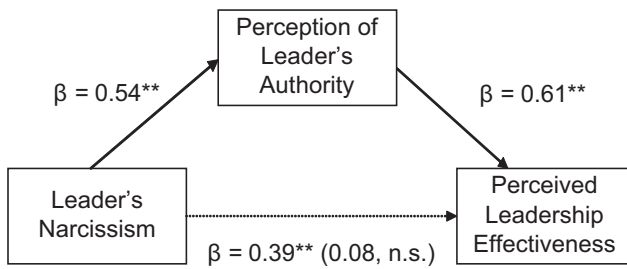


Fig. 1. Path diagram showing perceived leader's authority as a mediator of the effect of leader's narcissism on perceived leadership effectiveness ($**p < .01$). The value in parentheses is the effect of leader's narcissism on perceived leadership effectiveness after taking into account the mediating effect of leader's authority.

Information exchange

Results revealed a negative effect of leader's narcissism on the exchange of unshared information, $\beta = -0.32$, $t(48) = -2.30$, $p = .026$, $R^2 = .09$, and on the self-report measure of information exchange, $\beta = -0.39$, $t(48) = -2.96$, $p < .01$, $R^2 = .15$. These results again demonstrate that our direct measure of information exchange was consistent with the overall perception of information exchange by group members.

Group performance

We investigated whether the effect of leader's narcissism on group performance was mediated by information exchange. First, logistic regression analysis revealed a negative effect of leader's narcissism on group performance, $b = -3.33$, $SE = 1.63$, $\text{Wald } \chi^2(1, N = 50) = 4.15$, $p = .042$. Next, we found a positive effect of information exchange on group performance, $b = 6.48$, $SE = 1.95$, $\text{Wald } \chi^2(1, N = 50) = 10.97$, $p < .01$. Finally, the 95% confidence interval of information exchange's mediation of the effect of leader's narcissism on group performance ranged from 0.20 to 5.96 (1,000 bootstrap resamples); thus, the mediation effect was significantly different from zero (Hayes, 2009; Preacher & Hayes, 2004). Therefore, our results confirmed our hypothesis: Leader's narcissism negatively affected group performance through reduced exchange of unshared information (Fig. 2).

Discussion

Narcissists' extreme displays of confidence, dominance, and authority match the profile of a prototypical leader, which leads other people to choose narcissists as leaders in group settings (Brunell et al., 2008; Nevicka et al., 2011). The study reported here provides the first evidence that people's positive perceptions of narcissists as leaders are not an accurate reflection of narcissists' actual leadership effectiveness, as indicated by objective group performance. Although group members perceived leaders with higher narcissism as more effective

because of their greater displays of authority, narcissistic leaders actually inhibited the exchange of unshared information within the group and thereby diminished group performance (i.e., arrived at suboptimal decisions).

Prior research has hinted at a potentially negative effect of narcissistic individuals on group and organizational performance. For example, in one study, individuals with high levels of narcissism allocated more resources to themselves than did individuals with low levels of narcissism—at a long-term cost to other group members (Campbell, Bush, Brunell, & Shelton, 2005). However, prior research did not provide a clear link between leader's narcissism and group or organizational performance. In this study, we aimed to breach this gap and extend research on group dynamics and decision making by addressing a focal component of group performance: the quality of group decision making. Generally, leaders have been found to enhance information sharing by asking questions and repeating information more than other group members (Larson et al., 1998). However, the research reported here shows that narcissistic leaders have the opposite effect, which is contrary to group members' positive perceptions of narcissistic leaders' effectiveness.

We expect that our finding that narcissistic leaders impair group performance can be generalized beyond hidden-profile tasks. For example, because narcissists are generally low in empathy (Watson, Grisham, Trotter, & Biderman, 1984), narcissistic leaders may also inhibit group performance in tasks that require social sensitivity from the leader (cf. Woolley, Chabris, Pentland, Hashmi, & Malone, 2010). Alternatively, because individuals with high levels of narcissism perform better under pressure than do individuals with low levels of narcissism (Wallace & Baumeister, 2002), it is possible that narcissistic leaders facilitate group performance under conditions of high urgency or time pressure.

The work reported here extends prior research on perceptions of competence that are based on explicit cues and personality traits (e.g., Anderson & Kilduff, 2009). We showed that a high level of narcissism in an individual leads other people to make attributions of leadership competence that are in stark contrast to the individual's actual effectiveness as a leader. These findings fit the idea that through their extreme overconfidence, narcissists radiate an image of authority and

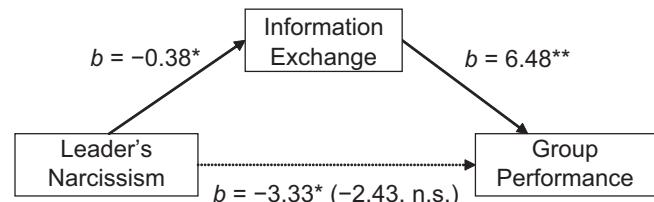


Fig. 2. Path diagram showing the exchange of unshared information as a mediator of the effect of leader's narcissism on group performance ($*p < .05$; $**p < .01$). The value in parentheses is the effect of leader's narcissism on group performance after taking into account the effect of information exchange.

competence that persuades other people to adopt this image. Indeed, past work showed that people perceived narcissists as highly creative, even though their ideas were objectively not any more creative than those of other people (Goncalo et al., 2010).

We posited that people's implicit schemas or categorizations based on the implicit prototype of what constitutes an effective leader cause them to perceive narcissistic leaders as effective. People have limited cognitive capacity, and they can simplify information processing by making inferences about leadership potential through comparing a person with a pre-defined leader prototype (Lord & Maher, 1991). However, our findings show that such simplification leads to inaccurate inferences regarding an individual's capabilities, and such inaccuracy can be disastrous for organizations. For example, inaccurate inferences are particularly relevant during interviews of job applicants, a context in which narcissists would likely elicit erroneous impressions of competence because of their positive self-presentation.

In this study, group members were unfamiliar with each other. It is possible that over time, group members' positive impressions of narcissistic leaders decrease. Indeed, previous research has shown that although people's impressions of narcissists are positive at first, they decline over time (Paulhus, 1998). Future research could explore whether our findings generalize to situations in which group members work together for a prolonged period of time.

To conclude, we have shown that narcissists convey positive perceptions of their leadership effectiveness. However, these perceptions are not aligned with reality. Narcissistic leaders in fact hinder the processes essential for reaching high-quality decisions, and therefore diminish group performance.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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