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Leader Narcissism Predicts Malicious Envy and Supervisor-Targeted Counterproductive Work Behavior: Evidence from Field and Experimental Research

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Abstract Building on the emotion-centered model of voluntary work behavior, this research tests the relations between leader narcissism, followers' malicious and benign envy, and supervisor-targeted counterproductive work behavior (CWB). Results across five studies (i.e., one pilot study ($N = 50$), two experimental studies ($N = 74$ and 50), and two field surveys ($N = 365$ and 100) indicate that leader narcissism relates positively to followers' negative emotions (i.e., malicious envy), which in turn mediates the positive relation between leader narcissism and supervisor-targeted CWB. Proposed negative relations between leader narcissism and positive emotions (i.e., benign envy) were only partly supported. Our findings advance the understanding of envy and the detrimental impact of leader narcissism on organizational functioning.

Keywords Benign envy · Counterproductive work behavior · Leadership · Malicious envy · Narcissism

Employee counterproductivity causes large shares of organizational losses. For example, retail business in the United States have inventory losses of about $42 billion per year with employee theft accounting for 43 % of lost revenue (Global Retail Theft Barometer 2014). From a scholarly perspective, counterproductive work behavior (CWB) represents "voluntary, potentially destructive or detrimental acts that hurt colleagues or organizations" (Spector and Fox 2002, p. 270). Meta-analytical results indicate that poor leadership predicts inclinations toward supervisor-targeted counterproductivity (Hershcovis et al. 2007) and impairs organizational functioning (Schyns and Schilling 2013).

Scholars in the field of business ethics have been particularly concerned with unethical behavior that arises when "destructive narcissists attain positions of power" (Godkin and Allcorn 2011, p. 559) such as at the executive level (Craig and Amernic 2011). While narcissistic leaders may help organizations to thrive, they lack empathy for others, promote "questionable behavior" (Giampetro-Meyer et al. 1998, p. 1730), are prone to engage in unjustified credit-taking (Graham and Cooper 2013), and contribute to the emergence of corporate scandals (Zona et al. 2013). In a disposition-based fraud model, Raval (2016) ascertained that narcissistic leaders harm organizations because they are "ostentatious, focused on self-glory and final outcomes, and vulnerable to breakdowns in their moral resolve" (p. 13).

Narcissistic individuals, characterized by "an exaggerated sense of self-importance, fantasies of unlimited success or power" (Blair et al. 2008, p. 255), often aspire to and emerge in leadership positions (Brunell et al. 2008; Nevicka et al. 2011). They see themselves as capable leaders (Judge et al. 2006). Uncertain contexts increase followers' preferences for narcissistic leaders (Nevicka et al. 2013). At the same time, narcissistic leaders are driven by self-centeredness (Van Dijk and De Cremer 2006) as well as feelings of grandiosity and entitlement, which lead them to exploit others (Brunell et al. 2008; Campbell et al. 2011; Rauthmann 2012).

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Building on the emotion-centered model of voluntary work behavior (Spector and Fox 2002), we examine how leader narcissism spurs employees' inclinations toward supervisor-targeted CWB. In line with frustration–aggression hypothesis (Dollard et al. 1939), we assume that narcissistic leaders frustrate fundamental needs of goal attainment and recognition (Spector 1978). Furthermore, Berkowitz's (1989) reformulation of frustration–aggression hypothesis suggests that "aversive events, evoke negative affect […], and it is this negative feeling that generates the aggressive inclinations" (p. 68). While narcissists' emotions have been analyzed (Twenge and Campbell 2003; Penney and Spector 2002), empirical insights into others' emotions in response to narcissism are missing. We analyze followers' envy as a mediator between leader narcissism and supervisor-targeted CWB.

Duffy et al. (2012) highlight that "work environments include a surfeit of potential envy-inducing situations" (p. 643f.). Envy has detrimental consequences for interpersonal relations and organizational functioning (Duffy et al. 2012; Cohen-Charash and Mueller 2007). Hierarchical differences are thought to spur invidious reactions (Stein 1997). We argue that narcissistic leaders' blend of 'shine' (i.e., charisma; Khoo and Burch 2008; Nevicka et al. 2011) and exploitation (i.e., bragging, taking credit, shifting blame; Campbell et al. 2011) causes followers' malicious envy (i.e., resentment of the envied person, desire to hurt the other) rather than benign envy (i.e., admiration for the envied person, desire to improve oneself; van de Ven et al. 2009). In turn, we infer how maliciously envious followers will engage in supervisor-targeted CWB.

To summarize, we set out to advance literature in the fields of business ethics, leadership, and emotions in organizations. First, linking leader narcissism and CWB is an important undertaking because of organizational losses caused by CWB. We analyze leader narcissism and supervisor-targeted CWB as one form of aggression at work (Hershcovis et al. 2007). Second, research is needed to explore the specific emotions that result from aversive events at work and generate inclinations toward aggressive acts (Spector and Fox 2002; Berkowitz 1989). Drawing from the emotion-centered model of voluntary work behavior (Spector and Fox 2002), we propose malicious envy to link leader narcissism and supervisor-targeted CWB. Third, we apply experimental and field research designs with self- and other-report measures to strengthen validity (Highhouse 2009).

Leader Narcissism

Narcissism has been described as a relatively stable individual difference factor characterized by a blend of "grandiosity, self-love and inflated self-views" (Campbell et al. 2011, p. 269). Narcissistic leadership occurs "when leaders' actions are principally motivated by their own egomaniacal needs and beliefs, superseding the needs and interests of the constituents and institutions they lead" (Rosenthal and Pittinsky 2006, p. 629). Hogan and Kaiser (2005) describe a dualism of leader narcissism. Its bright side reflects spontaneous impression formation of social performance, while the dark side reflects the actual person in job-relevant situations. Accordingly, the chocolate cake model of narcissism (Campbell 2005; cited from Campbell et al. 2011) compares deteriorating relationships between narcissistic leaders and their followers to the experience of eating chocolate cake, "appealing and exciting" (p. 271) at first, but making one feel "sluggish, depressed" (p. 271) later on.

Narcissistic individuals hold advantages over others with regard to leadership emergence. First, narcissists see themselves more positively than others do. Narcissism is related to an enhanced self-view of leadership, deviance, and performance (Judge et al. 2006). Second, narcissists are more likely to emerge as leaders and have a stronger desire to lead (Brunell et al. 2008). Third, narcissism is positively related to popularity at first sight (Back et al. 2010), but others' perceptions of narcissists' leadership qualities decrease over time (Ong et al. 2016).

Narcissism also bolsters leaders' benefits. In a study of 32 U.S.-based technology firms, CEOs' narcissism and tenure predicted compensation (salary, bonus, and stock options) such that narcissistic CEOs with long tenure received more compensation than their less narcissistic colleagues (O'Reilly et al. 2014). Yet, followers are likely to suffer from the downsides of leader narcissism. Narcissistic individuals primarily strive for leadership to fulfill their own needs for power and superiority rather than for purposes of developing and supporting others. This tendency is exemplified by a number of empirical findings. Narcissists ascribe action-oriented characteristics (i.e., dominant, gregarious, open, conscientious, and intelligent) to themselves, but not to others (Rauthmann 2012). They engage in unethical decision making for self-serving purposes. In a historical analysis of 42 U.S. presidents, grandiose narcissism was positively related to unethical behaviors (e.g., power abuse, stealing, bending/breaking rules, cheating on taxes, extramarital affairs; Watts et al. 2013). Business ethics research linked narcissism in CEOs of Standard & Poor's 500 companies to indicators of managerial fraud (Rijsenbilt and Commandeur 2013). Narcissists feel entitled to profit from their followers' performance. For example, in baseball organizations, CEOs' narcissism was negatively related to contingent reward leadership and unrelated to transformational leadership (Resick et al., 2009).

Overall, the above-described findings indicate that narcissism is likely to hold negative consequences for leader–

follower relationships. Campbell et al. (2011) concluded that "narcissism predicts outcomes that are good for the narcissist […] but bad for those who are close to the narcissist" (p. 272). We argue that as leaders' narcissism puts their relations with followers at risk, followers will develop negative emotions (i.e., malicious envy).

Workplace Envy

The consequences of envy for organizational functioning are detrimental (Smith and Kim 2007), including moral disengagement and social undermining (Duffy et al. 2012) as well as victimization of high-performing peers (Kim and Glomb 2014). Accordingly, scholars of business ethics termed envy an amoral emotion (Lindebaum et al. 2016).

Due to limited organizational resources (Bedeian 1995; Cohen-Charash and Mueller 2007) and frequent opportunities for social comparison (Patient et al. 2003), envy develops almost naturally in organizational settings. Experiences of envy are spurred by unfavorable upward social comparisons (Fischer et al. 2009) with others who are in possession of something that one desires, and triggered by a subjective sense of injustice (Cohen-Charash and Mueller 2007; Smith et al. 1994). We argue that leaders elicit followers' envy as they represent a relevant group for social comparison and profit from advantages in organizations due to their higher status (e.g., access to resources).

Envy in Leader–Follower Relations

Research to date has primarily taken into account envy among peers at lower hierarchical levels (Schaubroeck and Lam 2004), and the influence that leaders may have on it. Envy among peers is more likely to develop when leaders are inconsiderate rather than considerate (Vecchio 2000), and when followers feel they have lower quality relationships with their leaders (Vecchio 2005). Only theoretically it has been argued that leaders elicit followers' envy directed *toward them*. According to Stein (1997), "skill, power, authority, and prestige that are associated with leadership may evoke the envy of followers and colleagues" (p. 453). We concur with the view that in order to successfully cope with envy, organizations need to take leaders into account (Smith and Kim 2007). Furthermore, empirical evidence of causes and consequences of envy at work is of particular interest since recent conceptualizations of envy differentiate between destructive (i.e., malicious) and constructive (i.e., benign) types (van de Ven et al. 2009).

Malicious and Benign Envy

Theory and research initially focused on the dark side of envy as an unpleasant and painful blend of negative feelings (e.g., inferiority, hostility, and resentment; Smith and Kim 2007). Recent literature notes that envy may lead to different consequences if invidious individuals attempt to improve their situation and increase performance (Duffy et al. 2012). This view implies two qualitatively different types of envy: Malicious envy means that invidious individuals experience hostility and wishes to posses what the other person has as well as for the other to not posses it. They long to destroy the other's desired advantage, if they cannot have it, or compromise their own outcomes to make the other suffer (Zizzo and Oswald 2001). It is best described as "pulling the other down to one's own position" (i.e., leveling down; van de Ven et al. 2009, p. 419). Benign envy reflects admiration for the envied person and determination to improve oneself (Bedeian 1995). It comprises feelings of inferiority, and is best described as "moving oneself up to the level of the other" (i.e., leveling up; van de Ven et al. 2009, p. 419).

In van de Ven et al.'s (2009) studies, participants referred to experiences of malicious envy as negative and to experiences of benign envy as positive in terms of feelings (e.g., frustration vs. admiration), thoughts (e.g., injustice being done to oneself vs. positive thoughts about the other), action tendencies (e.g., wish to degrade vs. wish to be near), and actions (e.g., talking negatively vs. complementing sincerely) as well as goals (e.g., hope for the other to fail vs. hope to remain/become friends). Research distinguished experiences of envy from resentment (van de Ven et al. 2009) and admiration (van de Ven et al. 2011).

We examine malicious envy as an emotion-centered process of frustration and aggression (Fox and Spector 1999; Berkowitz 1989), and argue that malicious envy destroys productive leader–follower relations and harms organizational functioning through aggressive inclinations.

Emotion-Centered Model of Voluntary Work Behavior

Referring back to the original frustration–aggression hypothesis (Dollard et al. 1939), Spector and colleagues analyzed relations between frustration and aggression in organizational contexts (Fox and Spector 1999; Spector 1975, 1978). Frustration includes "both the interference with goal attainment or goal oriented activity and the interference with goal maintenance" involving goals such as "physical objects, or symbolic, social entities such as status or praise" (Spector 1978, p. 816). It relates to many

negative reactions (i.e., aggression, sabotage, wasting of time and materials, interpersonal hostility, complaining, interpersonal aggression, apathy; Spector 1975).

Emotions that result from frustration and trigger an inclination toward aggressive acts are of aversive nature and cause physiological arousal (Spector 1978). Berkowitz (1989) reformulated the original frustration–aggression hypothesis with a focus on negative affect implying that frustration leads to aggression only to the extent to which the frustration is interpreted as an aversive event and negative affect is generated. In this process, negative emotions will be "enriched, differentiated, intensified, or suppressed" (Berkowitz 1989, p. 69).

Fox and Spector (1999) found that constraints in organizations were positively related to feelings of frustration and CWB, including minor and serious organizational deviance as well as minor and serious personal deviance (e.g., starting arguments, verbally abusing others). Spector and Fox (2002) included constraints on performance, job stressors, injustice, and psychological contract violations as predictors of frustration in their emotion-centered model of voluntary work behavior. The model argues that negative emotions increase the likelihood of CWB, while positive emotions increase the likelihood of organizational citizenship behavior (OCB). The subjective appraisal of one's environment determines emotional reactions along with individual differences and momentary emotional states. Environmental variables include organizational constraints which keep individuals from successful work performance, role ambiguity and conflict, interpersonal conflict and abusive treatment by co-workers and supervisors, injustice and perceived psychological contract violation. The model proposes that negative emotions elicited by frustration-inducing variables relate to aggressive inclinations in the form of counterproductivity (i.e., CWB).

Counterproductive Work Behavior

Counterproductive work behavior (CWB) comprises "any intentional behavior on the part of an organization member viewed by the organization as contrary to its legitimate interests" (Sackett 2002, p. 5). Organizational constraints, interpersonal conflict, and perceived injustice were established as job stressors, which related positively to CWB as a behavioral strain response mediated via negative emotions (Fox et al. 2001). Bruk-Lee and Spector (2006) found empirical evidence for differential relationships between sources of conflict and targets of CWB: only conflict with co-workers significantly predicted interpersonal CWB, while conflict with co-workers and partly also with supervisors significantly predicted organizational CWB.

According to Kessler et al. (2013), passive–avoidant leadership is one stressor that elicits CWB. In their study, followers of passive–avoidant leaders were more likely to develop negative emotions and to engage in CWB. This research implies that supervisors play a critical role for negative emotions that induce CWB. Narcissists in leadership positions are charismatic figures (Nevicka et al. 2013), driven by their self-centeredness (Van Dijk and De Cremer 2006) as well as feelings of grandiosity and entitlement, which lead them to exploit others (Brunell et al. 2008; Campbell et al. 2011; Rauthmann 2012). Since individuals who experience malicious envy feel inferior and strive for equalizing positions by leveling down the other (rather than leveling themselves up, i.e., benign envy), they are likely to engage in CWB. Duffy et al. (2012) showed that co-worker envy positively predicted social undermining behaviors, and that the relation was mediated by moral disengagement. In research by Cohen-Charash and Mueller (2007), higher levels of perceived unfairness and envy toward peers resulted in peer-targeted CWB. Envy is a negative emotion that represents a "call to action" (Smith and Kim 2007, p. 53) for CWB.

Hypotheses

Narcissistic leaders are successful and charismatic figures (Back et al. 2010; Nevicka et al. 2011), which followers may look up to, until they experience their dark side. Narcissists appear to be predisposed to exhibiting exploitative behaviors for their own good (i.e., behaviors directed at promoting themselves while ignoring the needs of others) because of their implicit views of leadership and followership (Hansbrough and Jones 2014). They are prone to endorse leadership characteristics such as manipulation and selfishness (Foti et al. 2012), use their power for personal aggrandizement and engage in unethical behavior for egocentric purposes (Rijsenbilt and Commandeur 2013; Rosenthal and Pittinsky 2006; Watts et al. 2013).

With regard to malicious envy, due to their self-centeredness and feelings of grandiosity as well as entitlement, narcissistic leaders abuse followers for their own, egoistic purposes. If followers feel mistreated, hostility and the wish to destroy narcissistic leaders' successes are likely to develop. Importantly, this reasoning does not imply that followers want to *be like* their leaders. Rather, narcissistic leaders frustrate followers' fundamental needs of goal attainment and recognition (Spector 1978) because they strive to secure their own status and thereby spur inclinations toward supervisor-targeted CWB. That is, with regard to benign envy, while followers will experience pain or frustration caused by narcissists' superiority, they will not experience admiration or the wish to become like their leaders.

Hypothesis 1 Leader narcissism positively predicts followers' malicious envy.

Hypothesis 2 Leader narcissism negatively predicts followers' benign envy.

Moreover, we assume that followers confronted with narcissistic leaders will engage in supervisor-targeted CWB because they develop feelings of malicious envy, and, as a consequence, seek to harm their successful leaders (i.e., level them down; Cohen-Charash and Mueller 2007; Duffy et al. 2012; van de Ven et al. 2009). That is, in the face of narcissistic leaders, who exploit others for their own good, followers will feel inclined to retaliate and harm their leaders' successes. This may include interpersonally abusive behaviors (e.g., talking badly behind leaders' back, fraternizing) or directly interfering with leaders' performance.

Hypothesis 3 Followers' malicious envy mediates the positive relationship between leader narcissism and supervisor-targeted CWB.

In the following, we outline one pilot study ($N = 50$), two experimental studies ($N = 74$ and 50), and two field surveys ($N = 365$ and 100) conducted to test the proposed relations between leader narcissism, malicious and benign envy, and supervisor-targeted CWB.

Pilot Study

We first developed and validated an experimental manipulation of leader narcissism in the form of a written scenario.

Method

Participants and Design

Thirty-one women and nineteen men (age: $M = 23.9$, SD = 3.1 years) were recruited at a German university and randomly assigned to one of two study conditions (leader narcissism: high vs. low) in an experimental between-subjects design. None of the control variables (i.e., age, sex, semester of study, work experience) correlated significantly with the dependent measures. Therefore, they were not included in subsequent analyses.

Materials and Procedure

Participants were approached at various locations on the university campus and invited to take part in the study. Those who agreed to participate received a paper–pencil questionnaire. On the first page, they read a short introduction to the study. According to the introduction, the study was concerned with subordinate evaluations of their supervisors. Participants imagined being employees in a corporate business setting. The following two pages described their supervisor and the work relationship with this person.

The first page displayed a personnel form and additional information about the supervisor. The person was described as supervising a team of five subordinates in the marketing department. On the second page, participants read a scenario describing the supervisor's typical behavior. The supervisor was said to attend monthly meetings with the board of management, and to usually report about these meetings to the team. Since a new product launch had been scheduled, over the last months, the "Marketing/Product Communications" team had worked under high pressure to convince the company's management board of the implementation of a communication strategy for the product launch. Participants were asked to imagine having worked closely with their supervisor and devoted most of their working time to this project.

In the following paragraph, the scenario manipulated high and low leader narcissism as follows: Participants in the high leader narcissism condition read that when presenting the new communication strategy, their supervisor played down the team's efforts and contributions, implying that the strategy was his own work. The supervisor also did not introduce them in a subsequent conversation with a board member. In contrast, participants in the low leader narcissism condition read that when presenting the new communication strategy, their supervisor mentioned the team's efforts and contributions, implying that the strategy was joint work. The supervisor also introduced them in a subsequent conversation with a board member.

The length of scenarios was held constant over both conditions (high: 210 words, low: 205 words). After reading the scenario, participants were asked to complete a questionnaire containing the manipulation check. The experimenter was present to answer questions if necessary. At the end of the study, participants were debriefed about the study purpose and thanked for their participation. Participation in the study took about five minutes.

Manipulation Check

To test the manipulation of leader narcissism, participants indicated how well a number of adjectives described the supervisor presented in the scenario. Eight adjectives characterizing narcissistic leaders were taken from O'Reilly et al. (2014): Arrogant, assertive, boastful, conceited, egoistical, self-centered, show-off, temperamental. Participants indicated their ratings on 7-point Likert scales

from 1 "not at all" to 7 "very much." The average of the eight items was taken to form an overall scale ($\alpha = .95$).

Results

As expected, participants in the high leader narcissism condition perceived the leader as more narcissistic ($M = 5.34$, SD = .96) than participants in the low leader narcissism condition ($M = 2.70$, SD = .96), $t(48) = 9.72$, $p < .01$, $d = 2.75$. Thus, the manipulation of leader narcissism was successful, and the written scenarios were used in Studies 1 and 2.

Study 1

In Study 1, we tested the causal relations between leader narcissism and malicious and benign envy in a controlled experimental setup.

Method

Participants and Design

Forty-three women and 31 men (age: $M = 23.6$, SD = 1.9 years) were recruited at a German university and randomly assigned to one of the two study conditions (narcissism: high vs. low) in an experimental between-subjects design. None of the control variables (i.e., age, sex, semester of study, work experience) correlated significantly with any of the dependent measures. Therefore, they were not included in subsequent analyses. Participants received a reimbursement of three Euros.

Materials and Procedure

Participants were approached at various locations on the university campus and invited to take part in the study. Those who agreed to participate received a paper–pencil questionnaire. They first read the scenario that had been developed and pretested in the pilot study. After reading the scenario, participants completed a questionnaire containing the dependent measures. The experimenter was present to answer questions if necessary. At the end of the study, participants were debriefed about the study purpose, thanked for their participation, and received the reimbursement. Participation in the study took about 10 minutes.

Dependent Measures

We measured malicious envy ($\alpha = .87$) and benign envy ($\alpha = .85$) with five items each (adapted from van de Ven et al. 2009).[1] Participants indicated their ratings on 7-point Likert scales from 1 "strongly disagree" to 7 "strongly agree." Sample items of the malicious envy scale include "I thought of the injustice being done to me" and "I wanted to degrade the supervisor." Sample items of the benign envy scale include "I thought positively about the supervisor" and "I wanted to be near the supervisor".

Results

Multivariate analysis of variance (MANOVA) was conducted to account for the empirical relatedness of our dependent variables, malicious and benign envy, and revealed significant effects, $F(2,85) = 32.37$, $p < .01$, $\eta_p^2 = .43$. As expected, a significant effect of leader narcissism on malicious envy occurred. Participants in the high-narcissism condition reported higher levels of malicious envy ($M = 4.38$, SD = 1.25) than participants in the low-narcissism condition ($M = 2.37$, SD = 1.31), $F(1,86) = 54.31$, $p < .01$, $\eta^2 = .39$. Thus, Hypothesis 1 was supported. Moreover, as predicted, leader narcissism negatively affected benign envy. Participants in the high-narcissism condition reported lower levels of benign envy ($M = 2.28$, SD = 1.08) than participants in the low-narcissism condition ($M = 3.77$, SD = 1.24), $F(1,86) = 35.88$, $p < .01$, $\eta^2 = .29$. Thus, Hypothesis 2 was supported.

Discussion

This is the first study to shed light on the question how perceptions of leader narcissism relate to two qualitatively different types of envy in followers, malicious and benign envy. As hypothesized, we found that followers confronted with narcissistic leaders showed higher levels of malicious envy in response. In contrast, followers' experiences of benign envy were lower in response to narcissistic leadership. Given that malicious rather than benign envy arises in reaction to narcissistic leaders, we next turned to consider the impact of malicious as opposed to benign envy on supervisor-targeted CWB.

Study 2

Study 2 served to replicate the effects of leader narcissism on followers' malicious envy and benign envy, and to analyze malicious envy as a mediator of the relationship between leader narcissism and supervisor-targeted CWB.

[1] As expected, malicious and benign envy were negatively correlated ($r = -.60$, $p < .01$).

Method

Participants and Design

Twenty-four women and 26 men (age: $M = 23.7$, SD = 2.7 years) were recruited at a German university and randomly assigned to one of the two study conditions (narcissism: high vs. low) in an experimental between-subjects design. Out of four control variables (i.e., age, sex, semester of study, work experience), only participants' sex correlated significantly with one of the dependent measures (malicious envy). Therefore, we included sex as a covariate in subsequent analyses.[2] Participants received a reimbursement of three Euros.

Materials and Procedure

Participants were approached at various locations on the university campus and invited to take part in the study. Those who agreed to participate received a paper–pencil questionnaire. After reading the same scenario as in Study 1, participants completed a questionnaire containing the dependent measures. The experimenter was present to answer questions if necessary. At the end of the study, participants were thoroughly debriefed about the study purpose, thanked for their participation, and received the reimbursement. Participation in the study took about 10 minutes.

Dependent Measures

The same measures as in Study 1 were used for malicious envy (5 items, $\alpha = .88$) and benign envy (5 items, $\alpha = .88$).[3] Participants' behavioral intentions to show supervisor-targeted CWB were assessed with four items ($\alpha = .83$) adapted from Fox and Spector (1999). Participants indicated their ratings on 7-point Likert scales from 1 "strongly disagree" to 7 "strongly agree." Sample items include "I would interfere with the supervisor's performance" and "I would not talk badly behind the supervisor's back" (reverse coded).

Results

Malicious and Benign Envy

Multivariate analysis of variance (MANOVA) accounted for the empirical relatedness of our dependent variables, malicious and benign envy as well as supervisor-targeted CWB, and revealed significant effects, $F(3,45) = 27.94$, $p < .01$, $\eta_p^2 = .65$.

Fully replicating the results of Study 1, leader narcissism positively affected malicious envy. Participants in the high-narcissism condition reported higher levels of malicious envy ($M = 4.41$, SD = 1.21) than participants in the low-narcissism condition ($M = 2.17$, SD = 1.24), $F(1,47) = 51.09$, $p < .01$, $\eta_p^2 = .52$. Thus, Hypothesis 1 was supported. A negative effect of leader narcissism on benign envy occurred. Participants in the high-narcissism condition reported lower levels of benign envy ($M = 1.91$, SD = .88) than participants in the low-narcissism condition ($M = 3.96$, SD = 1.07), $F(1,47) = 52.43$, $p < .01$, $\eta_p^2 = .54$. Thus, Hypothesis 2 was supported.

Supervisor-Targeted CWB

Extending the hitherto presented findings, we found a positive effect of leader narcissism on supervisor-targeted CWB. Participants in the high-narcissism condition reported higher intentions to engage in supervisor-targeted CWB ($M = 3.57$, SD = 1.25) than participants in the low-narcissism condition ($M = 2.01$, SD = .96), $F(1,47) = 24.24$, $p < .01$, $\eta_p^2 = .34$. Thus, we set out to test Hypothesis 3 through mediation analysis.

Mediation Analysis

We tested the hypothesized mediation model with the PROCESS macro in SPSS (Hayes 2013), and used high and low leader narcissism as a dichotomous predictor, wherein the high-narcissism condition was coded 1 and low-narcissism condition was coded 0. As predicted in Hypothesis 3, an indirect effect between leader narcissism and supervisor-targeted CWB through followers' malicious envy occurred ($b = 1.33$, SE = .30, CI [.808, 1.957]).[4] Thus, Hypothesis 3 was supported.

Table 1 displays the estimates of the path coefficients and indirect effects along with bias-corrected 95 % confidence intervals.

Discussion

This study demonstrated that followers confronted with leader narcissism felt inclined to exhibit supervisor-targeted CWB through the experience of malicious envy. These results hint at the detrimental consequences of leader narcissism that elicits malicious envy as opposed to benign envy in leader–follower relations. To strengthen the

[2] Note that analyses of Study 2 yielded the same results also if participant sex was not included as a control variable.

[3] As expected, malicious and benign envy were negatively correlated ($r = -.65$, $p < .01$).

[4] Note that there was no significant indirect relationship between leader narcissism, benign envy and supervisor-targeted CWB.

Table 1 Path coefficients and indirect effects for the mediation model (Study 2)

	Path coefficients			Indirect effects	
	To CWB-S	To malicious envy	To benign envy	Estimate	Bias-corrected bootstrap 95 % confidence interval
Leader narcissism	.33 (.44)	2.24 (.13)	−2.05 (.27)		
Malicious envy	.60 (.13)				
Benign envy	.05 (.15)				
Total				1.23 (.35)	.554, 1.923
LN → ME → CWB-S				1.33 (.30)	.808, 1.957
LN → BE → CWB-S				−.10 (.29)	−.702, .457

$N = 50$. *LN* leader narcissism, *ME* malicious envy, *BE* benign envy, *CWB-S* supervisor-targeted counterproductive work behavior. 10,000 bootstrap samples. Unstandardized coefficients. Standard errors are displayed in parentheses. Statistical control: gender. Total effect model: $R^2 = .35$

external validity of results, we next set out to complement experimental data with two field studies, including an employee sample (Study 3) and a sample of leader–follower dyads (Study 4).

Study 3

Study 3 served to validate our previous results in real-world organizational settings. Moreover, in this study, we controlled for the impact of dispositional factors (i.e., trait envy).

Method

Participants and Procedure

Data were collected in a field survey of 365 employees from different organizations in Germany. The sample consisted of 212 men and 150 women (3 missing) who were between 17 and 64 years ($M = 37.00$, SD = 10.79, Med = 35.00). Participants in the sample had work experience between 1 and 48 years ($M = 15.22$, SD = 11.33, Med = 13.00). They had been working with their current supervisors between 1 and 35 years ($M = 5.51$, SD = 6.02, Med = 3.00). Participants worked in different sectors: manufacturing (45.8 %), retail (14.8 %), public administration (12.9 %), services (9.3 %), social, education, and health (6.3 %), research and science (2.2 %), other sectors (8.2 %), and .5 % missing.

Participants were invited to take part in an online survey through mailings and postings in professional networks (e.g., Xing). Participants provided ratings of perceived leader narcissism, their own feelings of malicious and benign envy, and supervisor-targeted CWB. Completion of the survey took approximately 10–15 min. Participation in the study was voluntary. We incentivized participation (raffle of five vouchers for Amazon with a value of 30 Euros each).

Dependent Measures

Perceived leader narcissism was measured with eight adjectives ($\alpha = .91$) taken from O'Reilly et al. (2014): Arrogant, assertive, boastful, conceited, egoistical, self-centered, show-off, and temperamental. Participants rated the extent to which these adjectives described their supervisors on 7-point Likert scales from 1 "not at all" to 7 "very much".

We measured malicious envy ($\alpha = .84$) and benign envy ($\alpha = .85$) with four items each. The items were adapted from Crusius and Lange (2014), which had been developed based on the items by van de Ven et al. (2009). Participants indicated their ratings on 7-point Likert scales from 1 "strongly disagree" to 7 "strongly agree." Items of the malicious envy scale included "I would like to damage my supervisor in his/her position," "I wish that my supervisor would fail at something," "I would like to take something away from my supervisor," and "I wish that my supervisor would no longer be successful." Items of the benign envy scale included "I feel inspired by my supervisor to also be successful," "I want to try harder to be as successful as my supervisor," "I admire my supervisor," and "I wish to be as successful as my supervisor".

Participants rated the frequency with which they showed different types of supervisor-targeted CWB with four items ($\alpha = .69$) adapted from Fox and Spector (1999). Participants indicated their ratings on 5-point Likert scales from 1 "never" to 5 "very often." Items included "I start an argument with my supervisor," "I purposely interfere with my supervisor's performance," "I talk badly behind my supervisor's back," and "I fraternize with my colleagues against my supervisor".

We assessed trait envy with three items ($\alpha = .72$) from the Dispositional Envy Scale (Smith et al. 1999). Participants indicated their ratings on 5-point Likert scales from 1 "strongly disagree" to 5 "strongly agree." Items included "Feelings of envy constantly torment me," "The bitter truth is that I generally feel inferior to others," and "It is so frustrating to see some people succeed so easily".

Results

First, we conducted descriptive and correlational analyses of the data. Second, we analyzed the model structure with confirmatory factor analysis implemented in the lavaan package (Rosseel 2012) in the open-source environment R. Third, we tested the hypothesized relationships in a mediation model based on a bias-corrected bootstrapping procedure with the PROCESS macro in SPSS (Hayes 2013).

Descriptive and Correlational Analyses

Data pertaining to our hypotheses at a correlational level indicated that perceived leader narcissism was significantly positively related to malicious envy and significantly negatively related to benign envy. Furthermore, significant positive correlations were obtained between perceived leader narcissism, malicious envy, and supervisor-targeted CWB. The correlations provided initial support for our hypotheses.

Means, standard deviations, and correlations are displayed in Table 2.

Confirmatory Factor Analysis

As recommended by Podsakoff et al. (2012), we applied statistical remedies to control method biases. Specifically, when direct measures of the source of bias are not available, it is advised to apply the common method factor technique. We compared three a priori models: a one-factor model, in which all items loaded on a common factor, was tested against a full measurement five-factor model, in which the items loaded on their respective factor (i.e., perceived leader narcissism, malicious envy, benign envy, supervisor-targeted CWB, and trait envy). Further, in line with the common method factor technique, we tested the five-factor model against a model that included a sixth latent factor (i.e., one factor, which all 44 items loaded on). We report the χ^2 value, degrees of freedom, and probability value, as well as one index to describe incremental fit (i.e., the Comparative Fit Index, CFI) and one residual-based fit index (i.e., the Root-Mean Square Error of Approximation, RMSEA), and the Standardized Root-Mean-Square Residual (SRMR). Fit indices should not be treated as golden rules (Nye and Drasgow 2011), but for "evaluative comparisons of competing a priori models" (Goffin 2007, p. 833). CFI should be greater than .90, RMSEA equal to or lower than .06, and SRMR equal to or lower than .08 (Nye and Drasgow 2011; Hu and Bentler 1999). Sample size-adjusted Bayesian Information Criterion (BIC) for model fit comparison indicates better fit with lower values (Preacher and Merkle 2012).

CFA with maximum-likelihood estimation yielded the following results. Comparing the one-factor model ($\chi^2(230, 365) = 2058.865$, $p < .001$, RMSEA = 0.148, SRMR = .125, CFI = .613, BIC = 26207.371) to the five-factor model ($\chi^2(220, 365) = 728.608$, $p < .001$, RMSEA = .080, SRMR = .079, CFI = .892, BIC = 24904.387) indicators point to the fact that overall, the five-factor model fits the data better. Comparing the five-factor model and the model with a common method factor ($\chi^2(192, 365) = 469.191$, $p < .001$, RMSEA = .063, SRMR = .051, CFI = .941, BIC = 24721.334), however, indicators point to the fact that overall, the latter model fits the data better. To determine the variance explained by the common method factor, we calculated the sum of the squared factor loadings, which was only 5.56 %. Since the common method factor accounted for much less variance than has been observed in other cases (e.g., 25 % in Williams et al. (1989), and 8 % in Carlson et al. (2012)), we conclude that while the impact of common method variance is present in our data, the method factor accounts for little variation in the data and the theoretically derived five-factor model is more substantive.

Finally, in response to the partly unsatisfactory results for the five-factor model, we followed recommendations (Barrett 2007) to examine whether the data conformed to multivariate normality as an assumption for applying maximum-likelihood estimation, employed Satorra-Bentler scaled test statistic (Satorra and Bentler 1994) to estimate the five-factor model, which provides an effective correction of the maximum-likelihood based χ^2 test statistic with non-normal data even in small to moderate samples.

Three tests of multivariate normality were calculated in the MVN package in R (Korkmaz et al. 2014): Mardia's test statistic based on multivariate skew and kurtosis, Henze-Zirkler's test based on Mahalanobis distances, and Royston's test based on the Shapiro–Wilk and Shapiro-Francia statistic. All results indicated violations of the distributional assumption of multivariate normality: Both skew ($\Upsilon_{1,p} = 113.1917$, $p = 0.0000$) and kurtosis ($\Upsilon_{1,p} = 734.3716$, $p = 0.0000$), Henze–Zirkler's statistic (HZ = 1.064571, $p = 0.0000$) as well as Royston's test ($H = 1626.601$, $p = 0.0000$).

According to the above stated results, the assumption of multivariate normality must be rejected. We thus re-analyzed the five-factor model with a Satorra-Bentler scaled

Table 2 Means, standard deviations, and correlations of all study variables (Study 3)

Variable	*M*	SD	1.	2.	3.	4.	5.
1. Leader narcissism	3.70	1.36	(.91)				
2. Malicious envy	1.76	1.12	.51**	(.84)			
3. Benign envy	3.30	1.47	−.43**	−.32**	(.85)		
4. CWB-S	1.63	.63	.57**	.66**	−.37**	(.69)	
5. Envy (trait)	2.04	.86	.16**	.35**	.10*	.32**	(.72)

$N = 365$. Leader narcissism, malicious envy, and benign envy measured on 7-point Likert scales. Supervisor-targeted counterproductive work behavior (CWB-S) and envy (trait) measured on 5-point Likert scales. Reliabilities (Cronbach's alpha) are displayed in parentheses on the diagonal

** $p < .01$, * $p < .05$, two-tailed test

test statistic and robust standard errors. The adjusted AFIs improved ($\chi^2(220, 365) = 554.025$, $p < .001$, RMSEA = .064, SRMR = .076, CFI = .901, BIC = 24967.115). Therefore, the theoretically derived five-factor model was applied to the following hypothesis tests.

Hypothesis Testing

As predicted in Hypothesis 1, perceived leader narcissism was significantly positively related to followers' malicious envy ($b = .70$, $SE = .04$, CI [.613, .778]). As predicted in Hypothesis 2, perceived leader narcissism was significantly negatively related to followers' benign envy ($b = -.54$, $SE = .05$, CI [−.633, −.456]). As predicted in Hypothesis 3, followers' malicious envy mediated the relationship between perceived leader narcissism and supervisor-targeted CWB ($b = .15$, $SE = .02$, CI [.108, 201]).[5] Thus, all hypotheses were supported.

Table 3 displays the estimates of the path coefficients and indirect effects along with bias-corrected 95 % confidence intervals.

Discussion

Extending findings from the first two studies, Study 3 transferred the relations between perceived leader narcissism and followers' malicious envy as well as supervisor-targeted CWB into real-world organizational settings. Employees who perceived their leaders to be narcissists indicated higher levels of malicious envy and lower levels of benign envy. Malicious envy, in turn, related to more frequent inclinations toward supervisor-targeted CWB. That is, through the experience of malicious envy, followers who felt that they were confronted with narcissistic leaders appeared to be more likely to exhibit supervisor-targeted CWB.

While this study transferred the proposed relations from an experimental research setting to the organizational field, it included data from followers only. In the final study, we therefore aimed to further extend the validity of results by assessing leaders' and followers' perspectives simultaneously.

Study 4

Study 4 assessed malicious envy as a mediator between leader narcissism and supervisor-targeted CWB in leader–follower dyads. We introduced advanced measures of the focal variables (i.e., leader narcissism, malicious envy, and benign envy), included leader ratings of narcissism and supervisor-targeted CWB, and measured additional control variables (i.e., followers' trait envy, self-esteem, neuroticism, and hostility) to test the robustness of findings.

Method

Participants and Procedure

We collected data in a field survey of 50 leaders (20 women, 30 men) and 50 followers (26 women, 24 men) in different organizations in Germany. Leaders were between 32 and 63 years ($M = 48.72$, SD = 7.44, Med = 48.00), and had between 3 and 35 years of management experience. Followers were between 25 and 59 years ($M = 37.78$, SD = 8.62, Med = 38.00), and had between 4 and 32 years of work experience ($M = 15.76$, SD = 7.96, Med = 14.00). Leaders and followers had been working together between 2 and 20 years ($M = 5.40$, SD = 3.26, Med = 5.00). Participants worked in different sectors: services (30.6 %), retail (26.5 %), manufacturing (24.5 %), social, education, and health (8.2 %), public administration (6.1 %), research and science (2.0 %), and other sectors (2.0 %).

Participants were recruited through a field service institute and invited to take part in a paper–pencil survey. Leaders rated their own narcissism and supervisor-targeted CWB. Followers indicated their own feelings of malicious and benign envy, trait envy, self-esteem, neuroticism, and

[5] Note that there was no significant indirect relationship between leader narcissism, benign envy, and supervisor-targeted CWB.

Table 3 Path coefficients and indirect effects for mediation model (Study 3)

	Path coefficients			Indirect effects	
	To CWB-S	To malicious envy	To benign envy	Estimate	Bias-corrected bootstrap 95 % confidence interval
Leader narcissism	.07 (.02)	.70 (.05)	−.54 (.05)		
Malicious envy	.22 (.02)				
Benign envy	−.04 (.02)				
Total				.17 (.02)	.133, .204
LN → ME → CWB-S				.15 (.02)	.108, .201
LN → BE → CWB-S				.02 (.02)	−.017, .053

$N = 365$. *LN* leader narcissism, *ME* malicious envy, *BE* benign envy, *CWB-S* supervisor-targeted counterproductive work behavior. 10,000 bootstrap samples. Unstandardized coefficients. Standard errors are displayed in parentheses. Statistical control: trait envy. Total effect model: $R^2 = .38$

hostility. Completion of the survey took approximately 5–10 min. Participation in the study was voluntary.

Dependent Measures

We measured leader narcissism with a 15-item ($\alpha = .80$) German version (Schütz et al. 2004) of the Narcissistic Personality Inventory (NPI) with a dichotomous forced-choice format (1 "narcissistic," 0 "non-narcissistic"). From 15 pairs of statements, leaders selected one statement each that best described themselves. Sample items include "I have a natural talent for influencing people; I am not very good at influencing people." We calculated a sum score of the selected statements.

We measured malicious envy ($\alpha = .98$) and benign envy ($\alpha = .78$) with eight items each. The items were adapted from Lange and Crusius (2015). We asked participants to recall a situation, in which they wanted to be successful, but instead their supervisor had achieved higher success than they did. Participants completed subsequent ratings in response to this situation. They indicated their ratings on 7-point Likert scales from 1 "strongly disagree" to 7 "strongly agree." Sample items of the malicious envy scale included "I wished that my supervisor would fail at something" and "I wished that my supervisor would no longer be successful." Sample items of the benign envy scale included "I tried harder to also be successful" and "I wanted to be like my supervisor".

Leaders rated the frequency with which followers showed supervisor-targeted CWB (8 items; $\alpha = .95$). The items were adapted from Fox and Spector (1999). Participants indicated their ratings on 7-point Likert scales from 1 "never" to 7 "always." Sample items include "I start an argument with my supervisor" and "I purposely interfere with my supervisor's performance".

We assessed the following control variables, which have been shown to affect feelings of envy (Smith et al. 1999), with three items each: followers' trait envy ($\alpha = .88$), self-esteem ($\alpha = .79$) (Collani and Herzberg 2003), neuroticism ($\alpha = .84$) (Rammstedt and John 2005), and hostility ($\alpha = .87$) (Herzberg 2003). Participants indicated their ratings on 7-point Likert scales from 1 "strongly disagree" to 7 "strongly agree".

Results

We first conducted descriptive and correlational analyses of the data, and then tested the hypothesized relationships in a mediation model based on a bias-corrected bootstrapping procedure with the PROCESS macro in SPSS (Hayes 2013).

Descriptive and Correlational Analyses

Data pertaining to our hypotheses at a correlational level indicated that the hypothesized predictor leader narcissism was significantly positively related to malicious envy. Furthermore, malicious envy correlated positively with supervisor-targeted CWB. Malicious envy related significantly to all control variables (i.e., positively to trait envy, neuroticism, hostility, and negatively to self-esteem). Benign envy related positively to trait envy and neuroticism, but not to self-esteem and hostility. These differential relationships support the distinction of malicious and benign types of envy. Unlike the relationships obtained in the previous studies, leader ratings of narcissism were not significantly correlated with benign envy or leader ratings of supervisor-targeted CWB. These initial analyses support the idea that leader narcissism plays a greater role in strengthening malicious envy than it does in mitigating benign envy, and that these feelings of malicious envy in turn elicit supervisor-targeted CWB. Next, we tested the hypothesized relationships.

Means, standard deviations, and correlations are displayed in Table 4.

Hypothesis Testing

As predicted in Hypothesis 1, leader narcissism was significantly positively related to followers' malicious envy ($b = .13$, SE = .06, CI [.020, .246]). Not supporting our prediction in Hypothesis 2, leader narcissism was unrelated to followers' benign envy [$b = -.01$, SE = .05, CI (−.112, .095)]. As predicted in Hypothesis 3, followers' malicious envy mediated the positive relationship between leader narcissism and supervisor-targeted CWB [$b = .04$, SE = .02, CI (.011, .101)].[6] Thus, data supported Hypotheses 1 and 3, but not Hypothesis 2.

Table 5 displays the estimates of the path coefficients and indirect effects along with bias-corrected 95 % confidence intervals.

Discussion

Based on an advanced design, this final study provides additional insights into the negative dynamics in leader–follower relationships that enfold through malicious envy. Assessing leader narcissism with self-ratings via the Narcissistic Personality Inventory allows the conclusion that not only followers' perceptions of leader narcissism, but also leaders' narcissistic personality fuels the proposed relations. Narcissistic leaders are likely to elicit feelings of malicious envy in their followers, which in turn lead to leaders' experience of supervisor-targeted CWB. The study attenuates previous concerns of common source bias. Different from the previously presented results, however, in this final study leader narcissism did not relate to benign envy. We next discuss overall contributions of this research as well as implications for theory and practice.

General Discussion

From the theoretical perspective of the emotion-centered model of voluntary work behavior (Spector and Fox 2002), the current research set out to investigate how leader narcissism impacts envy in leader–follower relations as well as the subsequent consequences for followers' negative actions against their leaders. We presented results from one pilot study, two experimental studies, and two field surveys indicating that leader narcissism related positively to malicious envy, and that malicious envy in turn resulted in supervisor-targeted CWB. That is, leader narcissism prompted higher levels of malicious envy, characterized by hostility and desire to destroy the other's advantage (i.e., leveling down; van de Ven et al. 2009), and had serious consequences, as it was causally related to inclinations toward supervisor-targeted CWB.

Contributions

To our best knowledge, this research is the first to allow the conclusion that leader narcissism fuels supervisor-targeted CWB through malicious envy. It thereby extends existing theoretical models of narcissism in organizations and supports the emotion-centered model of voluntary work behavior (Spector and Fox 2002). Theory suggests that narcissistic leaders' self-centeredness, grandiose belief systems as well as feelings of entitlement severely harm interactions with others in organizations (Rosenthal and Pittinsky 2006). We provide empirical support for these assumptions. Furthermore, we extend the current understanding of the predictors of supervisor-targeted CWB (Kessler et al. 2013). In essence, in line with work frustration–aggression literature (Spector 1978, 1975), narcissistic leaders appear to frustrate followers because they ignore their needs to be successful and to be recognized for successes. Therefore, followers' inclination toward aggression increases, which ultimately spurs supervisor-targeted CWB. This differentiates leader narcissism from other forms of negative leadership (e.g., abusive supervision), in response to which followers may be more inclined to show displaced deviance rather than to directly retaliate. According to Schyns and Schilling (2013), "followers might shy away from direct resistance to avoid further destructive leadership behavior and a spiral of abuse" (p. 149). Narcissistic leaders, however, are not necessarily abusive, and thus followers may fear their reactions less and feel more leeway to engage in supervisor-targeted CWB. Complementing earlier research on upward revenge (Kim et al. 1998), we thus provide initial evidence that supervisor-targeted CWB occurs in spite of hierarchical differences and imbalanced power relations.

Whether leader narcissism affects followers' benign envy, however, is only partly clear from our research and requires further testing. Studies 1–3 suggested a negative relationship between leader narcissism and benign envy. In Study 4, which applied a more balanced measure of leader narcissism, including facets with positive (e.g., authority/leadership) as well as negative (e.g., exploitation/ entitlement) connotations, leader narcissism and benign envy were unrelated. This preliminary finding warrants further consideration in studies that derive hypotheses pertaining to the facets of leader narcissism in relation to followers' malicious and benign envy, and test these relations based on extended multidimensional measures (Pincus et al. 2009).

[6] Note that there was no significant indirect relationship between leader narcissism, benign envy and supervisor-targeted CWB.

Table 4 Means, standard deviations, and correlations of all study variables (Study 4)

Variable	*M*	*SD*	1.	2.	3.	4.	5.	6.	7.	8.
1. Leader narcissism	9.46	3.30	(.80)							
2. Malicious envy	2.68	1.95	.32*	(.98)						
3. Benign envy	4.26	1.27	.09	.27	(.78)					
4. CWB-S	1.99	1.21	.20	.77**	.22	(.95)				
5. Envy (trait)	2.93	1.55	.20	.70**	.45**	.64**	(.88)			
6. Self-esteem	5.84	1.20	−.09	−.66**	−.19	−.68**	−.70**	(.79)		
7. Neuroticism	2.75	1.39	.17	.47**	.37**	.69**	.73**	−.60**	(.84)	
8. Hostility	2.34	1.46	.12	.73**	.27	.78**	.83**	−.80**	.62**	(.87)

$N = 50$. Leader narcissism measured on dichotomous scale (1 = narcissistic, 0 = non-narcissistic; sum score). All other variables measured on 7-point Likert scales. Reliabilities (Cronbach's alpha) are displayed in parentheses on the diagonal

** $p < .01$, * $p < .05$, two-tailed test

Table 5 Path coefficients and indirect effects for mediation model (Study 4)

	Path coefficients			Indirect effects	
	To CWB-S	To malicious envy	To benign envy	Estimate	Bias-corrected bootstrap 95 % confidence interval
Leader narcissism	.00 (.03)	.13 (.06)	−.01 (.05)		
Malicious envy	.32 (.07)				
Benign envy	−.01 (.07)				
Total				.04 (.02)	.009, .100
LN → ME → CWB-S				.04 (.02)	.011, .101
LN → BE → CWB-S				.04 (.02)	−.011, .014

$N = 50$. *LN* leader narcissism, *ME* malicious envy, *BE* benign envy, *CWB-S* supervisor-targeted counterproductive work behavior. 10,000 bootstrap samples. Unstandardized coefficients. Standard errors are displayed in parentheses. Statistical controls: trait envy, self-esteem, neuroticism, hostility. Total effect model: $R^2 = .71$

Furthermore, our research supports the emotion-centered model of voluntary work behavior. In line with Berkowitz (1989) as well as above and beyond earlier research (e.g., Bruk-Lee and Spector 2006; Chen and Spector 1992; Fox et al. 2001; Kessler et al. 2013), we looked at one specific, negative emotion elicited by the CWB-target (i.e., the supervisor) as a mediator, and also controlled for related traits (i.e., followers' trait envy, neuroticism, hostility, and self-esteem). Therefore, we extended earlier research that analyzed negative emotions in general or anger as a mediator in the context of this model (Spector and Fox 2002).

Our findings further underline that malicious and benign envy must be differentiated (van de Ven et al. 2009, 2012; Crusius and Lange 2014). Even though successful leaders are likely to elicit invidious emotions in their followers (Stein 1997), according to our research, the type of envy will vary depending on leaders' characteristics and behaviors. It supports the notion that leader narcissism facilitates negative perceptions and emotions (Hansbrough and Jones 2014).

From a practical perspective, the findings extend previous research on leader narcissism and its detrimental consequences for organizational functioning. These relations are particularly relevant from a business ethics perspective because they can spread to organizational levels and create "collective narcissistic identities that will produce wrong (i.e., non-virtuous) behavior" (Duchon and Drake 2009, p. 301). Scholars of business ethics suggested that organizational structures enable resistance to narcissism (Godkin and Allcorn 2011). To inhibit downward spirals between narcissistic leadership, amoral emotions, and unethical behavior, we recommend that organizations adjust their hiring and promotion practices (Lubit 2002), hold leaders accountable to organizational fair-play rules (Ouimet 2010), foster self-awareness and humility in management (Argandona 2015), and monitor deviant behaviors (Grijalva and Harms 2014).

Moreover, since differences in power and resources between leaders and followers are naturally prevalent in organizations (Bedeian 1995), it is important for leaders to display caring and compassion (e.g., Peus 2011).

Organizations should include these qualities in selection or promotion processes as well as leadership development programs (Higgs 2009). In particular, selection and development of organizational leaders requires clearly defined, behavioral criteria, which take leaders' relational orientation into account (e.g., transformational leadership; Peus et al. 2013). We suspect it will be useful to elevate leaders who level up their followers.

Strengths, Limitations, and Directions for Future Research

There are several strengths and limitations that must be taken into account when interpreting our results and also provide avenues for future research. First, the methodological approach combining experimental and field research with working adult samples advances the study of CWB (Spector et al. 2010) as well as narcissism research, the latter of which is mainly based on student samples (e.g., Back et al. 2010; Nevicka et al. 2013). Our experimental approach included written scenarios of leader narcissism, which allowed for causal conclusions of the impact of leader narcissism on malicious and benign envy as well as supervisor-targeted CWB. Aguinis and Bradley (2014) discuss that experimental vignette methodology (EVM) "results in high levels of confidence regarding internal validity but is challenged by threats to external validity" (p. 351). We readily acknowledge that leadership in organizations is a complex phenomenon, and our vignettes mainly covered specific negative aspects of leader narcissism (i.e., exploitation and entitlement). However, we feel confident that the multi-method approach of this research comprising field studies with two different measures of leader narcissism and multiple rating sources strengthens the validity of results. Moreover, we suggest that future research should improve the vividness of EVM (e.g., audio- or video-based presentation).

A common criticism of voluntary work behavior studies involves the predominant reliance on single-source self-report measures. The mean differences between self-ratings and other-ratings of CWB are relatively small and show significant convergence (Fox et al. 2007; Carpenter et al. 2014). CWB measures are often limited to self-reports by necessity as these types of behaviors are "carefully hidden" (Spector and Fox 2002, p. 286). While our first studies were based on single-source measurement, we introduced leader ratings of narcissism and CWB in Study 4. We also applied statistical remedies (i.e., common method factor technique) to control method biases (Podsakoff et al. 2012) and compared a priori models with confirmatory factor analysis. Since less than 6 % of variance in our data was explained by a common method factor, we concluded that the theoretically derived model was substantive.

We acknowledge that the samples in our research are comparably small, and recommend collecting larger samples of more diverse populations in future research. Nevertheless, indirect effects of leader narcissism on follower CWB through malicious envy were consistently supported, highlighting the robustness of this finding.

For further theoretical refinement based on the emotion-centered model of voluntary work behavior (Spector and Fox 2002), malicious and benign envy might be studied not only as mediators between leader narcissism and CWB, but also as mediators between narcissism and positive voluntary work behavior, namely organizational citizenship behavior (OCB). If CWB and OCB are indeed opposite forms of active behavior (Spector and Fox 2010), they should be triggered by opposite emotion-centered processes.

In a similar vein, future studies of the relation between leader narcissism and employee counterproductivity would profit from taking further dimensions of CWB into account (Spector et al. 2006). For instance, malicious envy triggered by leader narcissism may not only spur supervisor-directed CWB, but also spillover to organization-directed CWB, with supervisors as organizational representatives (Bruk-Lee and Spector 2006).

Finally, time, as a largely ignored variable in leadership research (Shamir 2011), requires consideration in future studies of leader narcissism and employee counterproductivity. Narcissistic individuals may appear charming and charismatic at first sight, while their 'dark side' enfolds over time (Back et al. 2010), and other perceptions of their leadership qualities decrease (Ong et al. 2016). Thus, it would be interesting to study whether narcissistic leaders elicit benign envy and OCB in initial interactions, which transforms into malicious envy and subsequent CWB in the long run.

Conclusion

This research highlights how leader narcissism elicits negative emotions (i.e., malicious envy) and employee counterproductivity. We hope to encourage future conceptual and empirical work based on the emotion-centered model of voluntary work behavior to strengthen the current understanding of processes through which leader narcissism evokes negative consequences for organizations as well as avenues for organizations to inhibit downward emotional spirals.

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