Lack of reciprocity, narcissism, anger, and instigated workplace incivility: A moderated mediation model

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The goal of the present research was to examine antecedents of uncivil behaviour towards coworkers and supervisors. Based on Spector’s model (e.g., Spector & Fox, 2005a), we investigated the role of work characteristics (lack of reciprocity in the relationship with one’s organization), personality (narcissism), and work-related anger simultaneously. We predicted that anger mediates the relationship between lack of reciprocity and incivility, and that this mediation is particularly strong among narcissistic employees (moderated mediation). As predicted, in our sample of 197 employees, anger—at least partially—mediated the relationship between lack of reciprocity and incivility. Moreover, this indirect effect was stronger among narcissists. Results further showed that narcissism moderated the first part (lack of reciprocity → anger) but not the second part (anger → incivility) of the mediation chain. Examining both mediation and moderation in a unified framework shed light on the issue of where in the process moderation occurs, thus deepening our understanding of the interplay between work characteristics and personality. In addition to anger, our results suggest mediating processes that do not require strong affect may be characteristic especially for uncivil behaviour as compared to more intense forms of counterproductive behaviour.

Keywords: Counterproductive work behaviour; Lack of reciprocity; Mediation; Moderation; Narcissism; Workplace incivility.

Counterproductive Work Behaviour (CWB) causes enormous harm to organizations and employees and, therefore, has received much attention from both organizations and researchers. Various forms of CWB such as abuse, sabotage, and theft have been studied (e.g., Spector et al., 2006). The present study focuses on workplace incivility, a subform of CWB (see Andersson & Pearson, 1999; Cortina, Magley, Williams, & Langhout, 2001). Empirical research on incivility has primarily examined the impact of such behaviour, and only a few addressed its causes (e.g., Blau & Andersson, 2005). Given the negative impact of uncivil behaviour on well-being (e.g., Cortina et al., 2001) and performance (e.g., Porath & Erez, 2007), however, it is important to understand its antecedents, as remedies can best be found on the basis of such an understanding. The literature suggests that injustice, or lack of reciprocity, is a major antecedent of CWB as far as conditions at work are concerned. Therefore, examining antecedents of uncivil behaviour in terms of lack of reciprocity is the first goal of the present article.

Previous research shows that both work characteristics and personality factors play an important role in the origin of CWB (Hershcovis et al., 2007). Regarding work characteristics, we focused on lack of reciprocity; regarding personality, we focused on narcissism. For reasons elaborated later, narcissism is an especially promising candidate for our study. Some research has shown that narcissism is positively related to CWB (Judge, LePine, & Rich, 2006; Penney & Spector, 2002). Recently, Edwards and Greenberg (2010) suggested that narcissism may play a key role in insidious workplace behaviour including incivility. Beyond these few studies, however, surprisingly little research about narcissism has been...
conducted in the domain of industrial and organizational psychology (in contrast to numerous studies in the domain of personality and social psychology). Edwards and Greenberg therefore note that the existing research is only preliminary and that additional research is needed. Therefore, examining the role of narcissism as a predictor of uncivil behaviour constitutes the second goal of this article.

As workplace incivility represents a subset of CWB, the well-established stressor–emotion model of CWB (e.g., Spector & Fox, 2005a) is an excellent starting point for developing our hypotheses. The model postulates that CWB is the joint result of unfavourable work conditions and personality, and that negative affect play a key role in the origin of CWB. More precisely, it states that unfavourable work characteristics (e.g., lack of reciprocity) lead to negative affect, most notably anger, which, in turn, leads to CWB. This reasoning implies a mediation effect. Furthermore, the model assumes that work characteristics are linked more strongly to CWB for some employees than for others (e.g., narcissists), implying an interaction effect between work characteristics and personality. Previous studies examined the mediation effect (e.g., Bruk-Lee & Spector, 2006) or the interaction effect (e.g., Bowling & Eschlemann, 2010), but not both simultaneously. However, simultaneously examining mediating (anger) and moderating (narcissism) mechanisms allows a more detailed understanding of the interplay between work characteristics and personality in the development of negative behaviour at work. Therefore, our third goal is to extend previous research by using a unified framework to test the assumptions of Spector’s model.

THEORETICAL BACKGROUND

In the present study, we focused on lack of reciprocity as a stressor, narcissism as a personality characteristic, and incivility as a form of CWB. Our model suggests that experiencing lack of reciprocity causes anger, which leads to incivility against supervisors and coworkers (mediation effect). Moreover, it specifies that lack of reciprocity is linked particularly strongly to incivility among narcissists (moderation effect) for two reasons. First, narcissists are assumed to be particularly angry when experiencing lack of reciprocity. Second, narcissists are assumed to have problems controlling their emotions. Therefore, anger should lead to antisocial behaviour such as incivility more easily among narcissists. In other words, we assume that the strength of the mediating effect of anger depends on the person’s level of narcissism. The integrated moderated mediation model is shown in Figure 1. Its theoretical foundations are outlined in more detail in the following sections.

Workplace incivility as the result of an experienced lack of reciprocity

Workplace incivility has been defined by Andersson and Pearson (1999) as “low-intensity deviant behaviour with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (p. 457). This definition is not without problems for two reasons, both of which were emphasized strongly by an anonymous reviewer. First, studies on CWB, including incivility, typically do not measure intent to harm. Although it may be plausible to assume that outright aggression is based on an intent to harm, other behaviours that are part of CWB scales (e.g., “avoided returning a phone call to someone you should at work”) may be driven by other motives (e.g., avoid an embarrassing conversation) than the intent to harm the other person. Second, the distinction between “intense” and “less intense” behaviours is not as clear cut as that definition suggests. Specifically, most measures of CWB contain both “strong” (e.g., aggression) and “mild” (e.g., avoiding the phone call) forms of counterproductive behaviour. Thus, one cannot classify CWB as “strong” and incivility as “mild”. Nevertheless, incivility scales (including the one used in the present study) tend to focus on behaviours that can arguably be classified as rather mild. Thus, we focus on incivility in the sense of “mild forms of CWB” without, however, implying that all behaviours not included in incivility are automatically “strong” forms of CWB.

Incivility manifests itself in the form of rude and disrespectful verbal as well as nonverbal behaviour that displays a lack of esteem for others. It is quite prevalent (e.g., Caza & Cortina, 2007; Cortina et al., 2001), and although it is less intense than aggression, it is harmful for employees and organizations. For

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1 Fox, Spector, and Miles (2001) investigated both effects within the same study, but they conducted separate analyses to test mediation and moderation. New analytic techniques (moderated mediation framework; Edwards & Lambert, 2006), however, allow testing the two effects simultaneously.

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Figure 1. Proposed model.
example, experienced incivility is negatively related to work satisfaction and physical health, and positively related to job withdrawal, turnover intention, and psychological distress (e.g., Caza & Cortina, 2007; Cortina et al., 2001; Lim & Cortina, 2005; Lim, Cortina, & Magley, 2008; Martin & Hine, 2005; Pearson, Andersson, & Porath, 2000; Pearson, Andersson, & Wegner, 2001; Porath & Erez, 2007). Moreover, incivility is assumed to be a precursor of severe forms of CWB, such as aggression (i.e., spiral of incivility; Andersson & Pearson, 1999). However, as mentioned before, little empirical research has examined antecedents of uncivil behaviour.

In the present study, we focused on lack of reciprocity as a predictor for uncivil behaviour. Individuals pursue a balance between what they invest in their work and what they receive in return. This general assumption is postulated in several theories and models such as social exchange theory (Homans, 1961), equity theory (Adams, 1965), and the effort–reward imbalance model (e.g., Siegrist, 2002). Perceived imbalance has been labelled as distributive injustice (cf. Colquitt, Greenberg, & Zapata-Phelan, 2005), effort–reward imbalance (Siegrist, e.g., 2002), or lack of reciprocity (e.g., Schaufeli, 2006). Employees expect that their investments in the relationships with their supervisors, their colleagues, and their organization should be reciprocated (see Schaufeli, van Dierendonck, & van Gorp, 2006). The present study focused on a lack of reciprocity in the relationship with the organization. According to Siegrist (2002), investments represent job stressors to be dealt with, duties imposed on the employee, and individual effort put into work, whereas rewards consist of salary, esteem, job security/career opportunities, and the like.

### Mediating effect of anger

Reciprocity implies a moral norm (Gouldner, 1960); breaking this norm is likely to arouse negative affect, as stated by appraisal theories of emotion (e.g., Ellsworth & Scherer, 2003). According to equity theory, people feel unfairly treated if they perceive that their efforts are not reciprocated accordingly with rewards (Adams, 1965); thus, a lack of reciprocity is experienced as unfair. Previous research has indicated that the perception of unfairness is related to negative emotions (see Cohen-Charash & Byrne, 2008), with feelings of anger being especially prominent (e.g., Mikula, Scherer, & Athenstaedt, 1998).

As noted earlier, according to the stressor–emotion model of CWB, negative emotions in general, and anger in particular, play an important role in the origin of negative behaviour (e.g., Spector, 1997; Spector & Fox, 2005a). In line with most models of aggression (e.g., Berkowitz, 1993), the model proposes that anger and frustration can lead to aggression or other antisocial behaviour such as CWB. Supporting these assumptions, negative affect mediated (at least partially) the relationship between job stressors and CWB in previous research (Bruk-Lee & Spector, 2006; Fox et al., 2001).

CWB covers a wide range of behaviour and often it is divided into two categories, namely behaviours targeting the organization and behaviours targeting individuals (see Neuman & Baron, 1998; Robinson & Bennett, 1995). It is useful to distinguish between these two broad categories of behaviour, because work characteristics are differentially related to organizational and interpersonal CWB (Hershcovis et al., 2007; Spector et al., 2006). In general, employees are likely to retaliate primarily against the agent causing the employee to experience negative affect (Greenberg & Barling, 1999; Spector & Fox, 2002). With regard to lack of reciprocity, it is reasonable to assume that the organization is perceived as the main cause of imbalance, as such components as income and career opportunities are decided by the organization. In line with this, lack of reciprocity and related constructs, such as distributive injustice, have been linked to organization-targeted CWB such as withdrawal as a means to restore the disturbed balance between effort and rewards (e.g., Schaufeli, 2006; Spector et al., 2006).

However, not only an organization but also individuals may be seen as the cause of an imbalance. Supervisors are perceived as agents of the organization and are responsible for imposing demands and giving rewards. Therefore, lack of reciprocity should be related to incivility towards supervisors. We assume that lack of reciprocity also is likely to cause incivility against coworkers for two reasons. First, individuals may also hold coworkers responsible for lack of reciprocity, as coworkers may contribute to the creation of high effort (e.g., by working slowly or inefficiently) and low reward (e.g., by taking advantage of the focal person). Second, aggression can be displaced from the agent causing frustration and anger (i.e., organization or supervisor) to other targets (i.e., coworkers), particularly when the original transgressor is not available, or more powerful and likely to be feared (Dollard, Doob, Miller, Mowrer, & Sears, 1939; Marcus-Newhall, Pedersen, Carlson, & Miller, 2000; for the work context, see also Mitchell & Ambrose, 2007). Thus, displaced aggression may allow individuals to act out negative emotions such as anger against coworkers in a more...
convenient and safe manner than against supervisors. Therefore, we assume that lack of reciprocity is related to incivility against both supervisors and coworkers. Thus, we propose the following hypotheses:

**Hypothesis 1:** Lack of reciprocity is related positively to uncivil behaviour against (a) coworkers and (b) supervisors.

**Hypothesis 2:** Anger mediates the relationship between lack of reciprocity and uncivil behaviour against (a) coworkers and (b) supervisors.

**Main and moderating effects of narcissism**

A stream of research shows that personality plays an important role for CWB. Different personality factors, like trait anger (e.g., Douglas & Martinko, 2001) have been linked to CWB (see also Hershcovis et al., 2007; Spector, 2011). These results indicate that some individuals show more negative behaviour than others, irrespective of the stressfulness of their work situation. The present study focused on narcissism. Narcissism is characterized by a vulnerable and inflated sense of self that is reflected by arrogance, preoccupation with fantasies of success and power, and a need for continuous attention and admiration. Moreover, narcissists do not only have an excessively positive self-view, but in addition also a sense of entitlement—they exploit others and lack empathy for them, and they think that they are special and unique (see American Psychiatric Association, 2000 [DSM-IV-TR]; Morf & Rhodewalt, 2001). Furthermore, research has shown that narcissists are prone to be impulsive (Vazire & Funder, 2006), and aggressive (e.g., Locke, 2009; see also Baumeister, Smart, & Boden, 1996). Each of these characteristics may increase the tendency to show CWB; together, they imply a constellation that should be more predictive than individual characteristics such as trait anger, which has often been investigated in the context of CWB. Not surprisingly, then, narcissism is associated with disagreeable behaviour such as swearing (McCullough, Emmons, Kilpatrick, & Mooney, 2003) and arguing (Holtzmann, Vazire, & Mehl, 2010). Such behaviours are at the core of behaviours that are characterized as incivility.

We therefore propose the following main effect:

**Hypothesis 3:** Narcissism is related positively to uncivil behaviour against (a) coworkers and (b) supervisors.

Individuals differ, however, also in how they interpret, and react to, stressful work situations (see Semmer & Meier, 2009). We expect narcissists to react more strongly to a lack of reciprocity, because (1) lack of reciprocity signals a threat to the self (ego-threat), (2) ego-threat tends to elicit antisocial behaviour, and (3) narcissists are prone to react especially strongly to ego-threat.

First, Siegrist (2002) noted that an imbalance between effort and rewards (i.e., lack of reciprocity) can be ego-threatening as it may signal a lack of esteem, and de Cremer (2002) showed that a perceived inequity may threaten one’s self-esteem. Second, according to Baumeister et al. (1996), a “major cause of antisocial behavior is threatened egotism, that is, a favorable self-appraisal that encounters an external, unfavorable evaluation” (p. 12). Third, Baumeister et al. proposed that individuals with an inflated self-view react more strongly to ego-threats. As noted earlier, narcissists are characterized by an inflated self-view, feelings of grandiosity, a sense of entitlement, and the expectation of special privileges. At the same time, however, their high self-esteem tends to be insecure and unstable (Rhodewalt, Madrian, & Cheney, 1998); they constantly crave approval to support their inflated self-view. One can, therefore, assume that narcissists will show especially strong antisocial behaviour if they believe that they do not receive the rewards and esteem they deserve.

In line with this argument, several experimental studies showed that narcissists reacted particularly aggressive to ego-threatening conditions (e.g., Bushman & Baumeister, 1998; Twenge & Campbell, 2003). In addition, one field study showed that the relationship between ego-threat and antisocial behaviour at work was particularly strong among narcissists (Penney & Spector, 2002). However, this moderating effect could not be replicated in a follow-up study (Penney & Spector, 2003). Thus, evidence from field studies showing that narcissists may be more reactive to ego-threatening work conditions is rather weak and inconsistent. Therefore, this issue requires further examination.

Based on the work by Baumeister and colleagues, we assume that lack of reciprocity is related more strongly to workplace incivility among individuals who are high versus low in narcissism. Furthermore, as outlined previously, we suggest that anger plays a mediating role in this process, based on the stressor-emotion model. In other words, we assume a chain from lack of reciprocity to incivility via anger, and we assume that narcissism influences this chain. Two mechanisms are possible, namely that the relationship between lack of reciprocity and anger (Path a in Figure 1) is particularly strong for narcissists and/or that the relationship between anger and uncivil behaviour (Path b in Figure 1) is particularly strong for narcissists. The framework of a moderated mediation model enables us to examine both effects simultaneously.
Narcissism and the relationship between lack of reciprocity and anger. As mentioned before, Baumeister et al. (1996) proposed that events that threaten one's positive self-view lead to negative emotions, mainly to high-arousal emotions such as anger. Research has shown that people high on narcissism respond to ego-threatening events with strong anger (e.g., Rhodewalt & Morf, 1998; Twenge & Campbell, 2003). As we assume that a lack of reciprocity threatens a narcissist's inflated self-view, we propose the following hypothesis:

Hypothesis 4: The relationship between lack of reciprocity and anger is stronger for employees high on narcissism as compared to employees low on narcissism.

Narcissism and the relationship between anger and incivility. There is reason to assume that narcissists not only experience particularly strong anger when experiencing a lack of reciprocity (Hypothesis 4), but that they also will “act out” their anger more strongly, showing more incivility when angered. The reason for this assumption lies in the tendency of narcissists to be impulsive.

Experiencing negative affect such as anger does not lead to antisocial behaviour automatically. Self-control enables individuals to refrain from acting on their impulses (Baumeister, Heatherton, & Tice, 1994). It follows that lack of self-control impairs the capability to restrain aggressive action; in line with this, poor self-control has been linked to aggression and CWB (e.g., Marcus & Schuler, 2004). Narcissism is associated with impulsivity, as shown in a meta-analysis by Vazire and Funder (2006). If individuals high on narcissism are impulsive, they should have difficulties to control their aggressive impulses stemming from experiencing anger. Therefore, we propose the following hypotheses:

Hypothesis 5: The relationship between anger and uncivil behaviour against (a) coworkers and (b) supervisors is stronger for employees high on narcissism as compared to employees low on narcissism.

If our assumptions about the moderating role of narcissism are correct, it follows that the total indirect association between lack of reciprocity and incivility (i.e., the association that is mediated by anger) will depend on employees' level of narcissism. More precisely, our reasoning implies the following hypotheses:

Hypothesis 6: The indirect effect of lack of reciprocity on uncivil behaviour against (a) coworkers and (b) supervisors is stronger for employees high on narcissism as compared to employees low on narcissism.

In summary, the aim of the present study was to test antecedents of uncivil behaviour at work. Our model is based on the stressor-emotion model of CWB (e.g., Spector & Fox, 2005a), and we focused on lack of reciprocity and narcissism. The model is shown in Figure 1. We assume that lack of reciprocity is related positively to incivility (Path c). Furthermore, we expect lack of reciprocity to elicit anger (Path a), which, in turn, leads to workplace incivility (Path b). Thus, the relationship between lack of reciprocity and incivility is mediated by anger. As a result, the direct effect of lack of reciprocity on incivility is reduced (Path c'). We further expect narcissism to have an impact on the strength of the mediating effect. More precisely, we assume that narcissism moderates the relationships between lack of reciprocity and anger (Path az), as well as between anger and uncivil behaviour (Path bz). Both associations, and therefore also the total indirect path, should be stronger among employees high, as compared to those low, in narcissism. Furthermore, we assume that narcissism is related positively to incivility (Path z). Previous studies on the stressor-emotion model of CWB tested mediation and moderation effects separately (e.g., Fox et al., 2001). In contrast, the current study simultaneously examined the mediating mechanism of anger and the moderating impact of narcissism, using a moderated mediation framework, which allows a more detailed understanding of personality in the development of negative behaviour at work.

METHOD

Sample

Research assistants approached employees of different organizations and asked them whether they were willing to fill out a questionnaire assessing organizational well-being. A total of 450 questionnaires were distributed, together with a stamped envelope addressed to the university research team. Of these, 197 were returned without missing relevant data, corresponding to a response rate of 44%. The sample included white-collar workers (e.g., secretary, 72%) as well as blue-collar workers (e.g., butcher, 26%); six persons provided no job information. Age ranged from 17 to 64 years, with an average of 38.78 years (SD = 12.65). A slight majority (56%) was female. Fifty-one per cent had completed 9 years of school or an apprenticeship, 34% had completed college, and 16% had a university degree.
Measures

Lack of reciprocity. Lack of reciprocity was assessed using a measure by VanYperen (1996). It consisted of six statements (e.g., “I invest more in my job than I receive in return”) with a 7-point scale ranging from “completely disagree” (1) to “completely agree” (7). Internal consistency was $\alpha = .89$.

Narcissism. Narcissism was measured using a short version of the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979; Schütz, Marcus, & Sellin, 2004). The original NPI contains true/false statements (Morf & Rhodewalt, 1993). As in previous research (e.g., Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003; Penney & Spector, 2002), we used a Likert format instead. Participants indicated their level of agreement with 15 statements such as “I think that I am someone special” with a 7-point answering format from “not at all” (1) to “very much” (7). Internal consistency was $\alpha = .90$.

Anger. Anger is hypothesized to mediate between lack of reciprocity and incivility, both of which are work related. It follows that anger also should be assessed with regard to work. We therefore assessed work-related anger, using three items from a scale by Geurts, Buunk, and Schaufeli (1994). Participants indicated how strongly they felt about three emotions from the anger group (anger, indignation, rancour) because of their work. The responses ranged from “not at all” (1) to “very much” (7). Internal consistency was $\alpha = .78$.

Inciivility against coworkers and supervisors. Instigated workplace incivility was measured with an adapted 7-item scale by Blau and Andersson (2005). Participants had to indicate how often they had exhibited behaviours such as “interrupted him/her while he/she was talking” in the past year, separately with regard to coworkers and supervisors. The responses ranged from “never” (1) to “several times/day” (7). Internal consistency was $\alpha = .78$ for both scales.

Control variables. Previous research has shown that sex (Hershcovis et al., 2007), age (Bruk-Lee & Spector, 2006), and education (Frone, 2008) were related to CWB; therefore, we controlled for these variables. Moreover, as previous research linked trait anger with CWB (e.g., Douglas & Martinko, 2001; Fox & Spector, 1999) and narcissism (Penney & Spector, 2002), we controlled for trait anger by the trait anger scale from the State-Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999), in order to ensure that the association between lack of reciprocity and work-related anger is not simply due to trait anger influencing both. The trait anger measure consisted of 10 statements (e.g., “I am quick-tempered”) with a 4-point answering format ranging from “almost never” (1) to “almost always” (4). Internal consistency was $\alpha = .81$.

Data analysis strategy

To examine the main effects of lack of reciprocity (Hypothesis 1) and narcissism (Hypothesis 3), we conducted regression analyses. To test the moderated mediation effects, we used the framework outlined by Edwards and Lambert (2007; for a detailed presentation see also Tepper, Duffy, Henle, & Lambert, 2006, or Tepper, Henle, Lambert, Giacaleone, & Duffy, 2008). Edwards and Lambert’s framework builds on the recommendations for testing mediation in a path analytic framework (see MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Shrout & Bolger, 2002) by combining these procedures with moderated regression analysis. This framework allows for testing moderation effects at different stages of mediation. In the current study, the first stage of mediation corresponded to the relationship between lack of reciprocity and anger (Path a in Figure 1), the second stage corresponded to the relationship between anger and uncivil behaviour (Path b in Figure 1). Our hypotheses assumed that narcissism moderates both the first (H4) and the second (H5) stage of the process and thus, that the indirect path (Path $a \times Path b$) is stronger for employees high on narcissism as compared to employees low on narcissism (H6).

In a first step we compared our model to alternative, nested models. All models assumed that anger mediates the relationship between lack of reciprocity and incivility, and that narcissism has a main effect (Path z) on incivility. The models differed in that they assumed (A) no moderation of narcissism, (B) moderation of narcissism in the first stage only (Path a), (C) moderation of narcissism in the second stage only (Path b), and (D) moderation in both stages (Paths a and b), plus a moderated direct effect of lack of reciprocity on incivility (Path c). The aim of these comparisons was to identify the model that explained most variance in the mediator (anger) and in the criterion variable (incivility) while being most parsimonious (i.e. including no nonsignificant moderating effects). Separate model comparisons were conducted for the two criterion variables.

In a second step, we estimated the paths for the best fitting model at low, average, and high levels of narcissism ($\pm 1 SD$ around the mean of narcissism). To confirm our hypotheses, the following results should be obtained: To confirm the mediating effect

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3As noted earlier, main effects of lack of reciprocity (Hypothesis 1) and narcissism (Hypothesis 3) on incivility were tested with additional regression analyses (see Table 2).
of anger (Hypothesis 2), the indirect path from lack of reciprocity to incivility via anger would have to be significant. To confirm the moderating effect of narcissism at Stage 1 (Hypothesis 4), the path from lack of reciprocity to anger would have to be stronger for individuals with high, as compared to low, levels of narcissism. To confirm the moderating effect of narcissism at Stage 2 (Hypothesis 5), the path from anger to incivility would have to be stronger for individuals with high, as compared to low, levels of narcissism. To confirm the moderated mediation effect (Hypothesis 6), the indirect path of lack of reciprocity to incivility via anger would have to be stronger for individuals with high, as compared to low, levels of narcissism.

**RESULTS**

Table 1 displays means, standard deviations, intercorrelations, and internal consistency (coefficient alpha) for the study variables. Lack of reciprocity correlated positively with anger, \( r = .49, p < .001 \), incivility against coworkers, \( r = .19, p = .004 \), and incivility against supervisors, \( r = .34, p < .001 \). Narcissism was related positively to incivility against supervisors, \( r = .16, p = .014 \), but not to incivility against coworkers, \( r = .08, p = .148 \). Both forms of incivility correlated with each other, \( r = .53, p < .001 \).

### Main effects of lack of reciprocity and narcissism

To test the proposed main effects of lack of reciprocity (Hypothesis 1) and narcissism (Hypothesis 3), we conducted regression analyses. The control variables were entered in the first step, lack of reciprocity and narcissism were entered in the second step. As is appropriate for directional hypotheses, we used one-tailed tests. Table 2 displays the results.

Supporting Hypothesis 1, lack of reciprocity was (at least marginally) positively related to incivility against coworkers, \( \beta = 0.10, p = .079 \), and incivility against supervisors, \( \beta = 0.29, p < .001 \). Regarding Hypothesis 3, narcissism was related to incivility against supervisors, \( \beta = 0.12, p = .041 \), but unrelated to incivility against coworkers, \( \beta = 0.03, p = .338 \). Thus, Hypothesis 3 was supported for supervisors (3b) but not for coworkers (3a).

### Moderated mediation effects

**Model comparisons.** To test the moderated mediation effect (Hypotheses 2, 4, 5, and 6), we followed the steps outlined in data analysis strategy section. First, we compared the hypothesized model to alternative models (see Table 3). For both outcomes, comparison among the various models suggested that the generalized variance explained by the hypothesized model was different from Models A (basic mediation model) and C (second stage moderation model); these differences are indicated by higher fit indices (e.g., \( R^2 \) for coworkers = .47 in the hypothesized model but .44 in Models A and C) and by significant values of W, which indicate that Models A and C are significantly different from the hypothesized model. The hypothesized model was, however, not different from Model D, the total effect model, and Model B, the first stage moderation model, which had nonsignificant values of W for both criterion variables. Thus, the hypothesized model does not explain more variance than the model that only assumes a moderating effect of narcissism at the first stage of mediation. Therefore, we examined the path estimates associated with the more restricted first stage moderation model. The results are presented in Table 4 and Figure 2.

**Table 1.** Descriptive statistics and correlations among the study variables.

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<th>Controls</th>
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<th>9</th>
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<tbody>
<tr>
<td>1. Age</td>
<td>38.78</td>
<td>12.65</td>
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<td>2. Sex (^\text{a})</td>
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<td>3. Education (^\text{b})</td>
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<td>.12</td>
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<td>4. Trait anger</td>
<td>1.68</td>
<td>0.41</td>
<td>–.09</td>
<td>–.15*</td>
<td>–.12</td>
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**Predictors**

| 5. Lack of reciprocity | 2.57 | 1.06 | –.10 | .02  | –.15*| .30* | (.89) |
| 6. Narcissism          | 3.43 | 1.06 | –.19*| .11  | .25* | .08  | .04  | (.90) |
| 7. Anger               | 2.77 | 1.25 | –.23*| –.07 | –.08 | .37* | .49* | .02  | (.81) |

**Outcomes**

| 8. Incivility against coworkers | 1.63 | 0.52 | –.13 | .06  | –.06 | .29* | .19* | .08  | .34* | (.78) |
| 9. Incivility against supervisors | 1.49 | 0.50 | –.07 | .08  | .03  | .29* | .34* | .16* | .34* | .53* | (.78) |

\( N = 197 \). Cronbach’s alphas are indicated in parentheses. \(^\text{a}\)Female, 1 = male. \(^\text{b}\)Education is a categorical variable, therefore, Spearman rho correlations have been computed. In the regressions analyses, we used a dummy coding for education. \(^* p < .05 \).
TABLE 2
Summary of hierarchical regression analysis predicting incivility against coworkers and supervisors.

<table>
<thead>
<tr>
<th></th>
<th>Incivility against coworkers</th>
<th>Incivility against supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>B</td>
<td>SE of B</td>
<td>β</td>
</tr>
<tr>
<td>Sex</td>
<td>0.12</td>
<td>0.07</td>
</tr>
<tr>
<td>Age</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Education dummy 1</td>
<td>-0.04</td>
<td>0.08</td>
</tr>
<tr>
<td>Education dummy 2</td>
<td>0.01</td>
<td>0.10</td>
</tr>
<tr>
<td>Trait anger</td>
<td>0.37</td>
<td>0.09</td>
</tr>
<tr>
<td>Lack of reciprocity</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Narcissism</td>
<td>0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Inciency against coworkers: $R^2 = .11$ for Step 1; $\Delta R^2 = .01$ for Step 2; incivility against supervisors: $R^2 = .11$ for Step 1; $\Delta R^2 = .08$ for Step 2. *0 = female, 1 = male. **p < .05, *p < .10 (one-tailed).

TABLE 3
Comparison of the different models.

<table>
<thead>
<tr>
<th>Estimated models</th>
<th>Incivility against coworkers</th>
<th>Incivility against supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2_M$</td>
<td>$R^2_D$</td>
</tr>
<tr>
<td>Hypothesized model (first and second stage moderation model)</td>
<td>.36</td>
<td>.16</td>
</tr>
<tr>
<td>A. Basic mediation model</td>
<td>.33</td>
<td>.16</td>
</tr>
<tr>
<td>B. First stage moderation model</td>
<td>.36</td>
<td>.16</td>
</tr>
<tr>
<td>C. Second stage moderation model</td>
<td>.33</td>
<td>.16</td>
</tr>
<tr>
<td>D. Total effect model</td>
<td>.36</td>
<td>.17</td>
</tr>
</tbody>
</table>

The alternative models are (A) basic mediation model without moderating effects of narcissism, (B) first stage moderation model in which narcissism moderates only the relationship between lack of reciprocity and anger, (C) second stage moderation model in which narcissism moderates only the relationship between anger and incivility, and (D) total effect model in which narcissism moderates the first and the second stage and also the direct effect of lack of reciprocity on incivility. $R^2_M$ = variance explained in the mediator, $R^2_D$ = variance explained in the dependent variable, $R^2_G$ = generalized $R^2$ (1 – (1 – $R^2_M$) × (1 – $R^2_D$); see Pedhauzer, 1982). Q = Fit index, higher numbers indicating better fit, upper bound of 1. W is chi-square distributed. **p < .05.

Mediation effects. According to Hypothesis 2, anger mediates the relationship between lack of reciprocity and incivility. Consistent with Hypothesis 2, lack of reciprocity was positively related to anger, $b = .51$, $p < .001$ (first stage) and anger was positively related to incivility: coworkers, $b = .11$, $p < .001$; supervisors, $b = .07$, $p = .011$ (second stage). More importantly, the indirect (mediated) effects of lack of reciprocity on incivility were significant in both cases: coworkers, $b = .06$, 90% confidence interval (CI): .03 to .09; supervisors, $b = .04$, 90% CI: .01 to .07. For supervisors, mediation was only partial, as the direct effect was significant, $b = .10$, $p = .009$. For coworkers, the direct effect was nonsignificant, $b = .01$, $p = .901$.

Moderation effects. With regard to our Hypotheses 4 and 5, which relate to the moderating role of narcissism, we examined the paths for individuals high and low on narcissism ($\pm 1$ $SD$, see Table 4). In line with Hypothesis 4, lack of reciprocity was related to anger more strongly for individuals high and low on narcissism ($\pm 1$ $SD$). However, in contrast to Hypothesis 5 (and as indicated by the fit values for Model B), anger was not related to incivility more strongly among individuals high, as compared to low, in narcissism: cowskters, $b_{high narcissism} = .74$, $p < .001$; $b_{low narcissism} = .28$, $p = .003$; interaction term, $b = .22$, $p = .003$. However, in contrast to Hypothesis 5 (and as indicated by the fit values for Model B), anger was not related to incivility more strongly among those high, as compared to low, in narcissism: coworkers, $b_{low narcissism} = b_{high narcissism} = .11$, $p < .001$; supervisors, $b_{low narcissism} = b_{high narcissism} = .07$, $p = .111$.

As indirect effects involve product terms and because product terms are not normally distributed, the significance tests of product terms have a high Type I error rate. Therefore, we followed current recommendations by bootstrapping 5000 samples and using the bootstrapped estimates to construct bias-corrected confidence intervals for the tests of the indirect effects, the total effects, and the differences in these effects (see Edwards & Lambert, 2007; Shrout & Bolger, 2002). For directional hypotheses, 90% confidence intervals are appropriate.
Moderated mediation effects. For coworkers as target, the indirect (i.e., mediated) effect of lack of reciprocity on incivility was stronger for individuals high, as compared to low, in narcissism, $b_{\text{high narcissism}} = 0.08$ (90% CI: .04 to .14); $b_{\text{low narcissism}} = 0.03$ (90% CI: .01 to .06); difference, $b = 0.05$ (90% CI: .02 to .10) (see Figure 3, left side). Thus, Hypothesis 6a was confirmed. Overall, lack of reciprocity was only related to uncivil behaviour against coworkers among individuals high in narcissism, but not among individuals low in narcissism: total effect, $b_{\text{high narcissism}} = 0.08$ (90% CI: .02 to .14); $b_{\text{low narcissism}} = 0.03$ (90% CI: -.04 to .09); difference, 0.05 (90% CI: .02 to .10).

For supervisors as target, the results were similar. The indirect (i.e., mediated) effect of lack of reciprocity on incivility was stronger for individuals high, as compared to low, in narcissism, $b_{\text{high narcissism}} = 0.06$ (90% CI: .02 to .10); $b_{\text{low narcissism}} = 0.02$ (90% CI: .01 to .05); difference, $b = 0.03$ (90% CI: .01 to .07) (see Figure 3, right side). Thus, Hypothesis 6b was confirmed. Overall, lack of reciprocity was related more strongly to uncivil behaviour against supervisors among individuals high in narcissism than among individuals low in narcissism: total effect, $b_{\text{high narcissism}} = 0.15$ (90% CI: .09 to .20); $b_{\text{low narcissism}} = 0.12$ (90% CI: .06 to .17); difference, $b = 0.03$ (90% CI: .01 to .07).

To summarize, our results showed that lack of reciprocity was positively related to anger, which was positively related to incivility against coworkers and incivility against supervisors. Thus, the relationship...
between lack of reciprocity and incivility was—at least partially—mediated by anger. Concerning the relationship between lack of reciprocity and incivility against supervisors, the direct path remained significant. Concerning the relationship between the lack of reciprocity and incivility against coworkers, the direct path was nonsignificant. More importantly, the strength of the mediation (i.e., indirect) effects depended on the level of narcissism. In line with our hypothesis, the indirect effect was stronger for individuals with high level of narcissism. The reason for this is that lack of reciprocity is strongly linked to anger for narcissists in particular. Anger, however, is related to incivility independently of the level of narcissism. Additionally, and thus independently of the experience of lack of reciprocity, narcissism was related positively to incivility against supervisors, but not against coworkers.

**DISCUSSION**

Our aim in this study was to test how lack of reciprocity, narcissism, and anger are related to uncivil behaviour in the workplace. This refers to a type of CWB behaviour that is of low intensity, but high frequency. We proposed that lack of reciprocity causes anger, which, in turn, leads to uncivil behaviour. Furthermore, we assumed that people high on narcissism show more incivility in general, and show a particularly strong indirect effect of lack of reciprocity on uncivil behaviour via anger. The proposed model was supported to a large extent.

Our results contain two processes: First, there was an indirect path from lack of reciprocity to incivility, which was stronger for higher levels of narcissism (moderated mediation effect). This was the main focus of the present study. Second, there was also a direct path from lack of reciprocity to incivility, which, was significant only for incivility against supervisors once the mediating effect of anger and the moderating effect of narcissism were taken into account. Both effects will be discussed in more detail.

**Indirect effects: The mediating role of anger and the moderating role of narcissism**

We postulated that anger would mediate the association between lack of reciprocity and incivility; this mediation was confirmed, as there was an indirect effect of lack of reciprocity on incivility. The mediation, however, was only partial for incivility against supervisors, whereas for coworkers there was full mediation. Nevertheless, these results support the assumptions of the model by Spector and colleagues (e.g., Spector, 1997) that stressors such as lack of reciprocity cause negative affect (and especially anger) which, in turn, leads to negative behaviour.

We further postulated that the mediation process would be moderated by narcissism at both stages, that is, for the path between lack of reciprocity and anger, and for the path from anger to incivility. We did find moderation for the association between lack of reciprocity and anger (the first stage), but not for the association between anger and incivility (the
second stage). Thus, participants high in narcissism reacted to lack of reciprocity more strongly than individuals low in narcissism. These findings are in line with previous research (e.g., Twenge & Campbell, 2003), which mainly used experimental designs in the laboratory. Thus, our study extends previous research by showing that narcissists react particularly strongly to ego-threatening situations in a real-world context. Note that narcissism did not correlate with lack of reciprocity. Narcissists do not seem to perceive more lack of reciprocity; rather, they react more strongly once they do perceive it.

We also expected that anger would be related more strongly to incivility among individuals high, as compared to low, in narcissism because narcissism has been linked to impulsive behaviour and deficits in self-control. However, narcissism did not moderate the relationship between anger and incivility. One might assume that this due the fact that we controlled for trait anger. However, analyses without trait anger as a control variable showed the same pattern (i.e., moderation of the first, but not the second, path). Thus, the difference between people high versus low in narcissism does not seem to lie in the way they act once anger is aroused. Rather, lack of reciprocity is related more strongly to incivility among narcissists because they experience particularly strong anger after ego-threatening situations, and not because they vent their anger particularly strongly on others. Given the findings of high impulsivity of narcissists, we are somewhat surprised by this finding, and we see a need for further studies on this issue. In particular, future studies should examine situational factors that increase or decrease venting one’s anger out on others among people in general, and among narcissists in particular.

These processes were found for incivility against both coworkers and supervisors. Supervisors typically are more responsible for violating, or maintaining, reciprocity. Incivility often is motivated by a desire to reciprocate (Pearson et al., 2001), and thus often is directed against individuals perceived as provoking (Milam, Spitzmueller, & Penney, 2009) or, more generally, against the origin of frustration (Anderson & Bushman, 2002). Therefore, our results may indicate a case of displaced aggression when coworkers are the targets of incivility. Indeed, previous research has shown that aggression may be directed not only against the source of frustration, but also against uninvolved individuals (Marcus-Newhall et al., 2000). However, one may argue that individuals also hold their coworkers responsible for lack of reciprocity, as coworkers contribute to the creation of high effort (e.g., by working slowly or deficiently) and low reward (e.g., by not acknowledging one’s contribution). Thus, at least partly, incivility against coworkers may also be understood as direct behaviour against the source of frustration and not as displaced acts.

Direct effects: Incivility without strong effect?

In contrast to incivility against coworkers, a direct effect of lack of reciprocity on incivility against supervisors remained after controlling for work-related anger. This is not completely unexpected, as some previous research only found partial mediation effects of negative affect (e.g., Fox et al., 2001).

The type of negative affect we assessed refers to anger, which is a high arousal negative affect. Spector and Fox (2005a), however, noted that other forms of negative affect may be associated with CWB as well. Therefore, it is possible that low arousal negative affect such as depression may play a role in the origin of uncivil behaviour. However, this explanation does not seem very plausible, because it does not explain why the effect only occurs with regard to supervisors but not with regard to coworkers.

It seems more likely that there are ways of reciprocating against a perceived offender that do not require the arousal of strong affect. People may just employ a tit-for-tat strategy in a rather calculative way, based on a conviction that such a strategy is justified. Another way of conceiving such a process would be in terms of carelessness. Rather than actively directing behaviour against someone, one might simply be less willing to make an extra effort to maintain a good climate. Such processes may well occur regardless of the level of narcissism, as the main effect of narcissism seems to lie in a stronger arousal of anger. Furthermore, whereas anger seems to result in incivility against anyone, such low arousal processes are likely to be displayed towards specific people. The assumption that supervisors tend to be perceived as the main source of lack of reciprocity would explain why the direct effect is observed for supervisors only.

Note that an explanation in terms of carelessness is in line with the notion that incivility does not require a negative intention; it suffices that a positive intention (i.e., to be supportive, courteous, friendly, etc.) is lacking or weak.

Main effects of narcissism

We assumed that narcissism is linked to incivility irrespective of the level of experienced lack of reciprocity. In contrast to our assumptions, narcissism was not related to incivility against coworkers, and only marginally related to incivility against the supervisor. This is somewhat surprising, as narcissists show a lack of empathy and, in general, tend not to consider the interest of others (Morf & Rhodewalt, 2001). Future research should study whether narcissism is related to more severe negative interpersonal behaviour against coworkers, such as mobbing (see Stucke, 2002), but not to mild forms of CWB, which
constitute the core of incivility. Alternatively, narcissists may feel compelled to display uncivil behaviour as a demonstration of dominance or noncompliance vis-à-vis authority figures.

**Strengths, limitations, and directions for further research**

The study reported here has several strengths. First, we examined both organizational and person factors as antecedents of negative behaviour at work. Most studies related to moderating effects of personality do not simultaneously examine mediation effects. By contrast, we tested the impact of a person factor within the mediation process, using a moderated mediation framework. Such studies allow gaining a deeper understanding of personality in the relationship between stressors and behaviour; in our case, this understanding relates to clarifying where in the process the moderation occurs (i.e., at the first stage, involving the prediction of anger by lack of reciprocity). Second, in contrast to most research with regard to narcissists’ behaviour at work (for an exception, see Penney & Spector, 2002), we focused not only on the main effect of narcissism, but also on its moderating role in the relationship between work characteristics and behaviour. Moreover, we controlled for trait anger and therefore, can rule out that the effects are mainly due to chronically heightened anger among narcissists. Third, we differentiated between supervisors and coworkers as targets, as advocated by Hershcovis et al. (2007). Our results underscore the importance of this distinction. Situational and individual factors differently were related to both kinds of behaviours, and anger mediated the relationship between stressor and behaviour with different strength.

A few limitations of the current study have to be acknowledged. First, and most importantly, given the cross-sectional nature of the research design, the causal path is uncertain. Future studies could use longitudinal designs (Maxwell & Cole, 2007). Second, the use of a convenience sample limits generalizability. However, the sampling procedure also allowed surveying employees from a wide range of organizational conditions, which enhanced generalizability. Nevertheless, in future studies, researchers should use random samples. Third, we assessed all variables by self-report. Although common method problems are likely to have been overstated in general (Spector, 2006), this may lead to inflated relationships. On the other hand, common method variance makes interaction effects more difficult to detect (Aiken & West, 1991). Moreover, previous research has shown that reports of CWB by incumbents and others (e.g., coworkers) show good convergence (Bruk-Lee & Spector, 2006). Similarly, the inclusion or exclusion of non-self-report data did not affect estimates in a recent meta-analysis on interpersonal and organizational deviance (Berry, Ones, & Sackett, 2007). Therefore, it is unlikely that assessing all variables by self-report can explain our results. Fourth, whereas our results suggest that lack of reciprocity and anger play an important role in the origin of incivility, we do not know the motives behind such behaviour. In line with recent findings (Bordia, Restubog, & Tang, 2008; Jones, 2009), future research could test how strongly incivility is driven by desire for revenge that is elicited by perceived lack of reciprocity. Since revenge represents an action in response to perceived harm by another party, research about attribution of causes and blame (Martinko, Gundlach, & Douglas, 2002), as well as motives (Griffin & Lopez, 2005) should help to illuminate the link between lack of reciprocity and CWB. At the same time, the direct effect between lack of reciprocity and incivility towards supervisors suggests additional processes that are less affect driven. These processes may refer to a calculative tit-for-tat strategy, but also to a characteristic that might be rather specific to incivility, as compared to stronger forms of CWB, which is a weakening of positive intentions in terms of being friendly, courteous, etc. In general, the role of intentions should be clarified in future research about CWB (see also Hershcovis, 2011). Specifically, it has been suggested that intention is an important variable distinguishing incivility from stronger forms of CWB, such as workplace aggression and violence (Anderson & Pearson, 1999; Cortina et al., 2001). However, as mentioned earlier, most questionnaires about CWB in general (e.g., Spector et al., 2006) as well as the questionnaire used in this study (Blau & Andersson, 2005) do not systematically capture whether the behaviour was conducted with an intent to harm or not. Therefore, future research would profit from measurements that include the factors (e.g., intent to harm) that are supposed to make the constructs different (see also Spector & Fox, 2005b; Tepper & Henle, 2011). A further implication for further research refers to the issue of intensity. There seems to be quite some consensus that incivility refers to mild forms of CWB, and this is reflected in the items used in the present study. Measures of CWB, however, typically contain a mixture of “mild” and “severe” behaviours. Systematic studies contrasting mild and severe forms of CWB, and investigating possible differences in antecedents and/or consequences, are therefore needed.

**CONCLUSIONS AND PRACTICAL IMPLICATIONS**

Workplace incivility is rather prevalent and has negative effects on the parties involved, and on the
organization as a whole. The present study suggests that lack of reciprocity leads to uncivil behaviour against supervisors and co-workers, and that anger plays a crucial role in the origin of incivility, as it mediated the relationship between lack of reciprocity and incivility. Moreover, lack of reciprocity was particularly strongly linked to uncivil behaviour among narcissistic employees. This is in line with the assumption that lack of reciprocity is a threat to narcissists’ inflated and fragile self-esteem, which predisposes them for anger and antisocial behaviour. The use of moderated mediation models helped to explain why the relationship between lack of reciprocity and incivility among narcissists is particularly strong. Lack of reciprocity was linked more strongly to incivility among narcissists because they experienced more anger in such an ego-threatening situation, and not because they imposed their anger on others more strongly.

With regard to practical implications, our results suggest that first and foremost, organizations should try to reciprocate employees’ efforts appropriately. Because reducing demands often is not a feasible strategy, supervisors can focus on rewards. Showing esteem would be especially important, as esteem seems to be the most important type of reward (van Veghel, de Jonge, Bakker, & Schaufeli, 2002). Second, given the important role of anger in the origin of incivility, organizations should strive to reduce the conversion of anger into uncivil behaviour. This might be achieved by granting employees the possibility to communicate dissatisfaction and negative affect to supportive supervisors or by increasing their emotion regulation competences through training (Richardson & Rothstein, 2008). Third, supervisors could try to restore fairness by explaining their own behaviour, and by apologizing where appropriate. Finally, organizations could try to screen out narcissists in hiring procedures, as narcissists are particularly prone to show uncivil behaviour. This, however, is impeded by the fact that narcissists often are found to be agreeable, entertaining, and competent initially, and viewed as arrogant and hostile only over time (Paulhus, 1998). One should not mistakenly take a self-assured self-presentation of a narcissist as an indicator of a secure self-esteem. Narcissists need more appreciation than one might assume. At the same time, it may be necessary to confront them with clear feedback about the impact of their behaviour and to request changes.

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