Workgroup Climates and Employees’ Counterproductive Work Behaviors: A Social-Cognitive Perspective

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Abstract

This research examines employees’ anticipation of social and self-sanctions as a self-regulatory mechanism linking workgroup climates and counterproductive work behaviors (CWBs) and personality as a limit to these effects. A cross-level study with 158 employees from 26 workgroups demonstrated that in groups with a high compliance climate—a climate emphasizing the importance of complying with organizational rules—employees anticipate more social and self-sanctions, leading those low in conscientiousness and low in agreeableness to engage less frequently in CWBs. In contrast, a high relational climate—a climate emphasizing the importance of positive social relations over self-interest—indirectly unbridles the CWBs of these employees by alleviating the social and self-sanctions they anticipate for CWBs. Climates did not have indirect effects for employees high in agreeableness and high in conscientiousness. These findings elucidate why workgroup climates do not affect the CWBs of all members in the same way.

Keywords: Agreeableness, Conscientiousness, Counterproductive Work Behaviors, Social and Self-Sanctions, Workgroup Climates
INTRODUCTION

Counterproductive work behaviors (CWBs), that is, purposeful and potentially harmful acts targeting the organization (organizational CWBs), or people in the organization, (interpersonal CWBs; Spector et al., 2006), have various negative consequences for individuals and teams (Detert et al., 2007; Hershcovis and Barling, 2010). Hence, understanding what contributes to CWBs is crucial. This research focuses on workgroup climates, that is, group members’ shared understandings of events, practices, and procedures, examining how they influence individual acts of CWBs and which individuals they affect in particular.

Workgroups are ubiquitous in organizations today. Their impact on individuals is vast and goes beyond that of leaders (Chiaburu and Harrison, 2008). Workgroups determine at least partially the valence people assign to CWBs (Bennett and Robinson, 2003; Griffin and Lopez, 2005). As Barker (1993) tellingly described it, workgroups can for example agree upon certain values and develop norms that constitute a powerful social control, a "tighter iron cage" than organizational surveillance systems. At the same time, workgroups sometimes facilitate the CWBs of individual members through behavioral norms, aggressive culture and norms of tolerance toward CWBs (e.g., Glomb and Liao, 2003; Restubog et al., 2012; for a review, Robinson et al., 2014), turning CWBs into a unit-level phenomenon, under some circumstances (Brown and Trevino, 2006; Mayer et al., 2009a).

Workgroup climates are one way through which workgroups influence the behaviors of their members. Climates reigning within groups might however not always function in the same way as individuals’ perceptions of them (i.e., psychological climates; Kozlowski and Klein, 2000). For example, individuals who perceive the climate as fostering team spirit or friendliness manifest less CWBs and less unethical behaviors (i.e., climates of a benevolent type; for reviews, Kish-Gephart et al., 2010; Mayer, 2014). Consequently, such climates have
been suggested as one way to prevent the occurrence of CWBs (e.g., Devonish, 2013). Yet, people perceiving support from their colleagues—a characteristic of workgroup climates of the same type—actually manifest more CWBs (Liao et al., 2004). More research is therefore necessary to understand whether and why some climates reigning within groups could function differently and have unintended negative consequences. An important avenue in this regard lies in the mechanisms linking workgroup climates to individual behaviors; yet, there is a dearth of such research (Mayer, 2014).

In addition, workgroup climates might not affect all members in the same way (Chang et al., 2012; Christian et al., 2009), casting doubt on climate as a blanket mode to curb individual behaviors. Most theoretical frameworks adopted by research on workgroup antecedents of CWBs cannot fully explain why climates would have different impacts on CWBs of individual members within the same group (e.g., Glomb and Liao, 2003; Robinson and O'Leary-Kelly, 1998). Yet, this is a crucial question, not only considering the deleterious effects one single negative member might have on the functioning of an entire group (Felps et al., 2006) but also to design effective interventions to improve climates and their related outcomes (Naveh and Katz-Navon, 2015; Zohar and Polacheck, 2014).

In this paper, we draw from core arguments of Bandura's (1991a, 1991b, 1999) socio-cognitive theory of moral agency to examine how different workgroup climates constrain or unbridle CWBs, that is, what explanatory mechanism links workgroup climates to individual acts of CWB, and whom, that is, which individuals in particular, climates influence by means of these mechanisms. We propose that individual CWBs are indirectly related to different dimensions of climate through self-regulation. Namely, people anticipate more or less social and self-sanctions for CWBs depending on the dimensions and level of climate reigning within the group. These anticipated sanctions, in turn, influence to what extent individuals actually engage in CWBs. Yet, self-regulatory mechanisms also operate in relation to
personal standards that incline people toward or, inversely, keep them from engaging in wrongdoing. Thus, we expect personality traits closely related to moral character and self-regulation to moderate the indirect relations between workgroup climates and individual CWBs.

Overall, this study makes the following contributions to research on CWBs. Firstly, it demonstrates the boundary conditions of the cross-level effects of climates on individual CWBs, unraveling a mechanism that underlies these effects. More specifically, drawing on the socio-cognitive theory of moral agency, it demonstrates that indirect effects of climate on CWBs pass through anticipated sanctions, and are thus moderated by personality traits related to self-regulation and moral character. This highlights that people are moral agents that actively regulate their behaviors not only as a function of the environment but also as a function of their own personal standards, and that this is one reason why the same climate affects group members differently. Stated otherwise, this study provides an explanation for within-group differences in the effects of group climates on individual CWBs. This is an important extension, given the typically mixed findings about the influence of unit climates on dark behaviors (Arnaud and Schminke, 2012; Dietz et al., 2003). Secondly, this study calls for caution in promoting certain types of workgroup climates as a global remedy to curb undesirable employee behaviors such as CWBs. Climates characterized by interpersonal harmony, team spirit, and friendliness, also called benevolent climates, have been suggested as one way to prevent the occurrence of CWBs (e.g., Devonish, 2013). Adopting a socio-cognitive perspective, this research shows that fostering climates of a benevolent type (in our study, relational climate; Kish-Gephart et al., 2010) can have unintended effects; it induces some members, that is, those with limited self-regulatory capabilities, to anticipate less sanctions for wrongdoing. Thus, relational or other forms of benevolent climates may—
ironically—unbridle CWBs in some employees. Our research helps understand why such unintended effects occur.

To develop our hypotheses, we first define and describe the climate dimensions that are relevant for understanding individual CWBs. We then present the core arguments of socio-cognitive theory, to outline how employees self-regulate their CWBs through the anticipation of sanctions, on the basis of workgroup climates. Finally, we outline how personality traits that are related to self-regulation and moral character moderate the indirect relations between climates and individual CWBs.

**Workgroup Climates**

Workgroup climates represent one way in which workgroups influence individual CWBs. They are "shared meaning[s unit] members attach to the events, policies, practices, and procedures they experience and the behaviors they see being rewarded, supported, and expected" in organizations (Ehrhart et al., 2014, p. 69, emphasis added). Workgroup climates can be distinguished from behavioral norms, which represent another factor along which workgroups influence member behaviors. They have a more formal focus than behavioral norms (Ehrhart and Naumann, 2004; Ehrhart and Raver, 2014), because they develop based on management policies, practices and procedures (Lindell and Brandt, 2000; Zohar and Luria, 2004), and thus focus on strategic organizational outcomes (strategic climates, e.g., climate for safety) and internal processes supporting these outcomes (e.g., procedural justice; Ehrhart et al., 2014; Ostroff et al., 2012). In contrast, behavioral norms focus on specific behaviors (e.g., norm for absence), informing group members about what other group members do and, implicitly, what they approve of (Ehrhart and Naumann, 2004). Because of the less narrow focus of process climates compared to behavioral norms, climates can affect a broader range of behaviors. Consider the example of absenteeism. The lower the group norm for absence, the less frequently individuals are absent (Gellatly, 1995; Gellatly and Allen,
Likewise, the higher the compliance climate (i.e., climate emphasizing the importance of following company rules, see further below), the less frequently individuals should be absent, and—due to compliance climate’s broader focus—the less frequently they should engage in other undesirable behaviors like fraud, theft or violent behaviors. This characteristic makes workgroup climates particularly relevant not only for theory but also for practice, because climates have the potential to influence a relatively wide range of behaviors.

In this research, we concentrate on two dimensions of workgroup climates that are relevant for understanding CWBs and whose bandwidth corresponds to the bandwidth of CWBs (Schneider, 1975; Schneider et al., 2013). Based on the literature on the nature of control in organizations (Fortado, 1994; O’Reilly and Chatman, 1996), we distinguish between concern for organizational rules and concern for social relations. Indeed, a concern for compliance with organizational rules is crucial in light of organizational efforts to manage and prevent CWBs (O’Leary-Kelly et al., 1996). Likewise, because social interactions among colleagues are an inherent aspect of virtually any type of work, the relationships that group members maintain, such as the degree to which they support each other, influence a variety of individuals’ attitudes and behaviors, including CWBs (Chiaburu and Harrison, 2008).

Compliance climate and relational climate

The first dimension of workgroup climate—compliance climate—focuses on the policies, procedures and formal standards that organizations put in place to increase performance, such as codes of conduct, surveillance or disciplinary measures in case of violations (O’Reilly and Chatman, 1996). It emerges from formal interactions such as managerial efforts to implement procedures, and from group members’ informal discussions about them (Schneider and Reichers, 1983; Zohar and Tennze-Gazit, 2008). Compliance climate represents group members’ collective understanding of procedures and standards and
thus reflects the degree to which a group expresses respect for the standards that the organization promotes through its hierarchy and procedures. In other words, compliance climate signals to group members the extent to which other group members value adherence to formal policies, procedures and professional standards.

The second dimension of workgroup climate—relational climate—focuses on the quality of the social relations within the group and the extent to which members care about other members versus defend their self-interests. Relational climate emerges from group members’ discussions about the extent to which more formal aspects of work (e.g., incentive structures, participation systems) or symbolic acts of management are characterized by consideration for others (O'Reilly and Chatman, 1996). Relational climates thus reflect the degree to which group members care about and are considerate of each other. As such, it signals to individual group members the extent to which other group members cherish achieving and maintaining high levels of well-being of the group and its members.

How are compliance and relational climates related to individual CWBs? As pointed out above, we suggest that their relations with CWBs are indirect, passing through individual self-regulatory mechanisms. More specifically, we propose that climates influence the extent to which individual members anticipate sanctions for wrong-doing (Bandura 1991b), which in turn attenuates or heightens the probability that they engage in CWBs.

**Anticipated Sanctions and Individual CWBs**

"Most human behavior, being purposive, is regulated by forethought” (Bandura, 1991b, p.248). The same is true for CWBs. According to social cognitive theory, anticipated consequences are at the heart of the self-regulatory mechanisms that determine transgressive actions. That is, before individuals engage in a behavior, they anticipate to what extent the envisaged behavior would violate the moral standards of significant others (anticipated social sanctions) and their own moral standards (self-sanctions ; Bandura, 1991a). Motivated by
Motivated by self-sanctions, people will refrain from behaviors that they expect to violate their own internalized, moral standards, through the anticipation of decreased self-respect and increased self-reproach. Social and personal standards are mostly aligned, and hence anticipated social- and self-sanctions are often compatible (Bandura, 1991a, 1991b). However, personal standards are not merely a copy of social standards, because they are the result of a complex individual construction process integrating influences from various sources and environments (Bandura, 1991b). In the context of organizations, anticipated social and self-sanctions are crucial for the regulation of transgressive behaviors because they also regulate behaviors that are not detected and hence not sanctioned by formal systems put in place by organizations.

Social cognitive theory hence suggests that anticipated social and self-sanctions are central determinants of CWBs. Anticipating social disapproval from team members (social sanctions) and feelings of guilt or embarrassment (self-sanctions) should reduce the likelihood of engaging in CWBs (Warren and Smith-Crowe, 2008; Zimmerman, 2008).

**Indirect effects of compliance climate on CWBs via anticipations of social and self-sanctions**

Formal control mechanisms like workplace surveillance or organizational sanctions have only a limited impact on CWBs (e.g., Dupre and Barling, 2006; Greenberg and Barling, 1999). This is partly due to the fact that CWBs are often covert so that the effectiveness of an organizational sanction system is contingent upon processes such as consistent applications of punishment (Podsakoff et al., 2006). This also suggests that formal control mechanisms depend on or exert their influence through other, additional mechanisms, like social control or internalization of standards (Hollinger and Clark, 1982; O'Reilly and Chatman, 1996). Indeed, when employees perceive both formal and informal means as enforcing organizational norms, they engage less frequently in CWBs (Fine et al., 2010).
Workgroup compliance climate may be an effective means to reduce CWBs occurrence (Barker, 1993), because it affects the extent to which individuals anticipate sanctions for CWBs. In workgroups with a high compliance climate, members endorse compliance with organizational procedures and rules. Because CWBs generally violate organizational rules, engaging in CWBs would run counter the group’s values. As such, in groups with a high compliance climate, individual members are likely to anticipate social and self-sanctions for CWBs and, in turn, less likely to engage in CWBs. Indeed, social disapproval from colleagues has a more proximate effect on individuals than formal control mechanisms (Falkenberg and Herremans, 1995; Hollinger and Clark, 1982). Because social and personal standards are mostly aligned (Bandura, 1991a, 1991b), a similar effect can be expected for self-disapproval, following violations of personal standards. Moreover, effects should be similar for both organizational and interpersonal CWBs because organizational rules concern both organizational (e.g., work time) and interpersonal (e.g., conflicts) aspects of work. Accordingly, we expect an indirect negative relation between compliance climate and CWBs, through anticipations of social and self-sanctions:

**Hypothesis 1.** Workgroup compliance climate is indirectly and negatively related to individual organizational (H1a) and interpersonal (H1b) CWBs, through anticipated social and self-sanctions.

**Indirect effects of relational climate on CWBs via anticipations of social and self-sanctions**

According to social cognitive theory, some environments have the potential to weaken self-regulatory mechanisms that otherwise deter transgressive behaviors (Bandura, 1991a). These environments allow people to distort the morality of their intended behavior, its consequences and/or the responsibilities of other protagonists involved in the situation. As a consequence, individuals in such environments anticipate less social and self-sanctions for wrongdoing. We propose that workgroups with a high relational climate constitute an
environment with the potential to attenuate moral self-regulation and as a consequence, to increase CWBs. From an outsider perspective, one may expect a group with a high relational climate to sanction CWBs of its members because CWBs seem to run against the climate (O’Reilly and Chatman, 1996). Yet, when adopting the perspective of a perpetrator, it becomes plausible that perpetrators may anticipate only few social and self-sanctions for CWBs in such groups. Perpetrators of CWBs, like any other person, generally want to see themselves in a positive light, so they are unlikely to see the negative consequences of their intended CWBs. Instead, they are more likely to appeal selectively to desirable aspects of their behavior, that is, aspects in line with a relational climate (Bandura, 1991a), thereby limiting self-regulatory processes that would otherwise prevent CWBs.

In fact, individuals in groups with a high relational climate may even reason that their CWBs serve other group members, hence attenuating the anticipation of sanctions. People are more likely to behave unethically when they can point to moral aspects of their behavior such as the presumable benefits that the behavior provides to others (Wiltermuth, 2011). Opportunistic unethical behaviors increase as the number of their beneficiaries increase, because people see their conduct as more acceptable and feel less guilty about it (Gino et al., 2013). Moreover, people may actually enforce group interests like cooperation through CWBs (for meta-analytic evidence, Balliet et al., 2011). Individuals might even (correctly) expect approval from other group members for CWBs that aim at punishing non-contributors to the group’s goals such as aggression (Horne, 2001). Thus, if people in workgroups with a high relational climate perceive CWBs as benefiting the group, they are unlikely to anticipate social or self-sanctions as a consequence.

Finally, groups with a high relational climate may prefer to let go instead of punishing certain transgressive behaviors of a member, to show support for the member and avoid conflict. Thus, instead of confronting and punishing a member engaging in CWBs, groups

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with a high relational climate may let the member get away with it, ultimately providing more latitude for its members. Indeed, in communal groups, people refrain from reporting theft or from confronting thieves, and thieves are confident that, if caught, formal punishment can be mitigated by their peers (Latham, 2001). And perceived support from colleagues—a characteristic of a relational climate—encourages people to infer that other group members will “cover up” for their organizational and interpersonal CWBs (Liao et al., 2004). As a consequence, members of groups with a high relational climate may (correctly) anticipate less social and self-disapproval when engaging in CWBs. Similar arguments have been made for cohesive groups. Cohesive groups are—similar to groups with a high relational climate—primarily concerned with solidarity and feelings of group unity. Narayanan and colleagues (2006) argued that individuals in cohesive groups, compared to those in less cohesive groups, engage more easily in unethical behavior because they feel that other members give them more latitude for their behavior, provide them with more social support, and/or assume part of the responsibility. In a socio-cognitive framework, this implies that individuals in strongly cohesive groups anticipate only little social and self-sanctions for certain unethical behaviors. And empirical evidence shows that group cohesion strengthens the relation between witnesses’ direct exposure to deviant behaviors and their own subsequent deviant behaviors (Ferguson and Barry, 2011).

Overall, the arguments above suggest that individuals in groups with high levels of a relational climate anticipate fewer social and self-sanctions following both organizational and interpersonal CWBs, compared to individuals in groups with low levels of a relational climate. We thus expect a positive and indirect relationship between relational climate and CWBs, through anticipations of social and self-sanctions:
Hypothesis 2. Workgroup relational climate is indirectly and positively related to individual organizational (H2a) and interpersonal (H2b) CWBs, through anticipated social and self-sanctions.

The social-cognitive perspective suggests that self-regulation and personality are closely intertwined (Cervone et al., 2006). Thus, certain individual differences are likely to moderate the effects of anticipated social and self-sanctions on CWBs, as we outline in what follows. Acknowledging the moderating role of individual differences makes the indirect relation between climates and CWBs conditional on personality factors. As such, this constitutes a possible boundary condition of the effects of climate, namely, why group climates have a stronger impact on some group members’ behaviors than on others.

Boundary Conditions: The Moderating Role of Personality

In a social-cognitive perspective of moral action, people act based on relatively stable personal standards that they use to guide and monitor their behaviors (Bandura, 1991b). Bandura (1991b, p. 253) noted that “[some individuals] are strongly oriented toward fulfilling their personal standards display[ing] a high level of self-directedness. [Others] adopt a pragmatic orientation, tailoring their behavior to fit whatever the situation seems to call for.”

Personality traits reflect such personal standards. In this research, we focus on conscientiousness and agreeableness as the two dimensions associated with a moral character (Cohen T. R. et al., 2014) and that are thus highly relevant for self-regulation of transgressive behaviors such as CWBs. Highly conscientious persons are dutiful, responsible, and self-controlled; highly agreeable persons are trusting, tender-minded, and forgiving. Ample empirical evidence shows that CWBs are most closely related to low levels of conscientiousness, especially for organizational CWBs, and low levels of agreeableness, especially for interpersonal CWBs (for meta-analytical evidence, Berry et al., 2007). In what follows, we propose that conscientiousness and agreeableness interact with anticipated social
and self-sanctions such that the indirect effects of workgroup climates on organizational CWBs depend on individuals' conscientiousness and the indirect effects on interpersonal CWBs depend on individuals' agreeableness.

Both conscientiousness and agreeableness are positively related to effortful control processes associated with self-regulation (Jensen-Campbell et al., 2002) and to proneness to guilt (Einstein and Lanning, 1998; Strelan, 2007), the propensity to feel remorse over social-evaluative events or transgressions of social standards (Leary, 2007). Thus, people high in conscientiousness and high in agreeableness have a strong internal “emotional moral barometer” that signals to them what is wrong and what is right (Tangney et al., 2007, p. 347). They depend less on the external environment (e.g., workgroup climates) to receive such signals and regulate their behaviors than individuals low in conscientiousness and low in agreeableness. Indeed, individuals low in conscientiousness and low in agreeableness have more limited self-regulatory capacities in situations requiring self-control and thus react more strongly to the external environment (e.g., they react more aggressively toward the author of a negative vs. positive feedback; Jensen-Campbell et al., 2007). Taken together, this implies that independently of their workgroup climates, people high in conscientiousness and high in agreeableness anticipate more social and self-sanctions for transgressive behaviors and thus are less likely to engage in CWBs, compared to people low in conscientiousness and agreeableness. For employees low in conscientiousness and agreeableness, the extent to which they anticipate sanctions on the basis of the climate reigning in their workgroup plays a more important role for behavioral self-regulation, such that this has a stronger impact on their CWBs.

Interactionist models of CWBs posit that personality factors interact with situational elements: Individual propensities to engage in CWBs are constrained by situational elements and/or situational elements facilitate CWBs for people with low internal control capabilities.
Conformity or compliance pressures (e.g., sanctions) limit the behavioral choices of an individual and thus reduce the impact of personality on behavior. Whenever such pressures are absent, the individual's range of behaviors is less restricted and hence personality has a greater impact on behavior. As a consequence, if, for example, based on the workgroup climate, only weak as opposed to strong social and self-sanctions for CWBs are anticipated, personality should have a greater impact on CWBs. That is, under these conditions, people low in conscientiousness and low in agreeableness should be more likely to show CWBs. However, these moderating effects should further depend on the target of the CWBs. Conscientiousness is mostly concerned with rules and standards and thus more closely relates to impersonal aspects of work, including organizational CWBs. Agreeableness is mostly concerned with interpersonal relationships and thus, is more closely related to interpersonal aspects of work, such as interpersonal CWBs (Barrick et al., 2001; Mount et al., 2006). Indeed, as mentioned above, conscientiousness correlates most strongly with organizational CWBs, whereas agreeableness correlates most strongly with interpersonal CWBs (Berry et al., 2007). We hence expect conscientiousness to moderate the indirect effects of workgroup climates on organizational CWBs and agreeableness to moderate the indirect effects of climates on interpersonal CWBs.

Hypothesis 3. The indirect effect of workgroup compliance (H3a) and relational climate (H3b) on organizational CWBs is weaker for people high in conscientiousness than for those low in conscientiousness.

Hypothesis 4. The indirect effect of workgroup compliance (H4a) and relational climate (H4b) on interpersonal CWBs is weaker for people high in agreeableness than for those low in agreeableness.

Figure 1 provides an overview of the full model and the hypotheses.
METHOD

Procedure and Participants

The study took place in a mid-size service organization in the French-speaking part of Switzerland. All employees received an invitation by email to participate in the online survey, accompanied by a letter of support from management, guaranteeing confidentiality and anonymity of the responses. Participation was voluntary.

Of 301 invited employees, 210 participated in the survey. The responses of 52 participants were dropped from the analyses because participants either did not fill out one or several of the focal scales (n = 38), were members of groups with fewer than three participants (n = 13), or both (n = 1). We kept only groups with at least three members, to ensure reliable means of workgroup climates. The final sample consisted of 158 participants (53.8% women, 19% supervisors), working in 26 workgroups consisting of three to 13 members (SD = 2.82), with a mean of seven members. Age was assessed with four categories: Twenty-one percent of respondents were between 16 and 25 years old, 23% between 26 and 35 years old, 27% between 36 and 45 years old, 25% between 46 and 55 years old, and the remaining 4% were between 56 and 65 years old. Average organizational tenure was 9 years (SD = 10.22). Workgroups had a wide range of responsibilities. Some were in charge of financial services or real estate management, others worked in customer care or law and litigation management, and still others were in charge of support activities like accounting.

Measures

Reliabilities of all measures are reported in Table 1.

Workgroup climate. To measure compliance and relational climates, we used 13 items of the revised Ethical Climate Questionnaire (ECQ, Schminke et al., 2005) and adapted them...
to refer to participants’ perceptions of their workgroup. We chose items from the ECQ because empirically, individual ECQ scores have been shown to be related to individuals’ CWBs (Martin and Cullen, 2006). However, the construct validity of ethical climate and its sub-dimensions has been subject to critics, leading to a call for a moratorium on the use of the theoretical concept in its present state (Arnaud and Schminke, 2007; Mayer et al., 2009b).

Because relational climate refers to the quality of social relations among group members, we chose the five items that tap into this domain (e.g., “The most important concern in the workgroup is the good of all the people as a whole”). For compliance climate, we chose the eight items that refer to organizational rules and professional standards (e.g., “In this workgroup, people are expected to strictly follow legal or professional standards”; see Appendix I for all items). Participants rated the extent to which items corresponded to their workgroup on a six-point scale (0 = completely false to 5 = completely true). Scores were obtained by averaging group members’ responses.

Anticipated social and self-sanctions. To our knowledge, no validated measure of anticipated social and self-sanctions in a work-group setting exists in the literature. We therefore created a measure, based on previous research on informal sanctions in the form of social disapproval and internal aversive reactions (Marcus and Schuler, 2004; Warren and Smith-Crowe, 2008; Zimmerman, 2008). The items describe the participant’s anticipated personal reactions (e.g., “After having done something like this, I would feel guilty.”) and anticipated reactions of their team colleagues (e.g., “If I violated rules or procedures, my colleagues would get angry at me”) if he or she would engage in rule-breaking behavior (see Appendix I for all items). For each item, participants indicated on a five-point scale the degree to which the statement corresponded to them (1 = false to 5 = true).

We assessed the discriminant validity of the climate dimensions and of the measure assessing anticipated social and self-sanctions with a confirmatory factor analysis using
Mplus 5.2. Results showed that the three-factor measurement model with one factor for compliance climate, one factor for relational climate and one factor for anticipated social and self-sanctions had a good fit with the data: $\chi^2(145, N = 158) = 210.22, p < .001$, comparative fit index (CFI) = .95, root-mean-square error of approximation (RMSEA) = .053 (90% confidence interval = .037, .069). It described the data significantly better than less constrained alternatives, namely with two factors (the two climate dimensions representing one factor and anticipated social and self-sanctions the other), $\chi^2(147, N = 158) = 252.58, p < .001$, CFI = .91, RMSEA = .067 (90% CI, .053, .081), $\Delta \chi^2(2) = 30.69, p < .001$, or with one factor, $\chi^2(149, N = 158) = 814.36, p < .001$, CFI = .44, RMSEA = .168 (90% CI, .157, .180), $\Delta \chi^2(4) = 312.83, p < .001$. In addition, a more constrained alternative with four factors, with two climate dimensions and two dimensions differentiating between anticipated social and self-sanctions did not fit the data better than the three-factor solution, $\chi^2(142, N = 158) = 208.06, p < .001$, CFI = .95, RMSEA = .054 (90% CI, .037, .070), $\Delta \chi^2(3) = 2.39, p = .496$.

Counterproductive work behaviors. CWBs were measured with a shortened version of Spector and colleagues’ (2006) self-report measure. The human resources department of the organization helped in selecting items that corresponded to the organization’s reality and that represented each dimension of Spector’s instrument (e.g., sabotage, theft). The final list consisted of six items to measure interpersonal CWBs (e.g., “Threatened someone at work, but not physically.”) and eight items to measure organizational CWBs (e.g., “Purposefully wasted your employer’s materials/supplies.”). Participants indicated on a five-point scale how often they had engaged in the behavior during the past twelve months (1 = never, 2 = once or twice, 3 = once or twice monthly, 4 = once or twice weekly, 5 = everyday). Assessing CWBs with self-reports is a viable approach; studies using self-reports yield results that are very similar to those obtained with other-reports of CWBs (Berry et al., 2012).
Personality. Agreeableness and conscientiousness were each measured with six items from a short version of a 45-item bipolar adjective rating scale developed by Ostendorf (1990), validated by Schallberger and Venetz (1999) and used in previous research (Krings and Facchin, 2009). Participants indicated how they would describe themselves in general, on a 6-point scale (1, 6 = very; 2, 5 = quite; 3, 4 = rather). Sample items are “disciplined” - “undisciplined” (i.e., conscientiousness) and “aggressive” - “peaceful” (i.e., agreeableness).

Control variables. We included several control variables that are related to CWBs. We included gender because women are less likely to engage in CWBs than men (Hershcovis et al., 2007). Because the likelihood of CWBs decreases with age (Aquino and Douglas, 2003), employee tenure (Robinson and O'Leary-Kelly, 1998), and supervisor status (Aquino et al., 1999), we also included these three variables. Finally, we included neuroticism because it is, together with conscientiousness and agreeableness, an important dimension of the Big Five for explaining CWBs. Higher levels of neuroticism are related to higher frequencies of CWBs (Berry et al., 2007). Neuroticism was measured with the six-item bipolar adjective scale by Ostendorf (1999; sample item: “stable” - “unstable”).

Data Aggregation and Analysis

To justify aggregation of the workgroup climate data, we computed \( r_{wg(j)} \), ICC(1) and ICC(2) as indicators of within-group agreement, interrater reliability and group means reliability (Bliese, 2000): Relational climate: Mean \( r_{wg(j)} = .95 \); ICC(1) = .29, \( F(25, 157) = 3.41, p < .001; \) ICC(2) = .71; compliance climate: Mean \( r_{wg(j)} = .87 \); ICC(1) = .15, \( F(25, 157) = 2.05, p = .005; \) ICC(2) = .51. All aggregation indices revealed acceptable values, with the exception of the ICC(2) for compliance climate. However, the ICC(2) strongly depends on the size of the groups (Bliese, 1998) which, in this study, was relatively small. Also, the other two indicators for compliance climate yielded satisfactory results. We thus aggregated the compliance and relational climate data to the group level.
For anticipated social and self-sanctions, aggregation indices were well below cut-off values, mean $r_{wg(j)} = .60$; ICC(2) = .41, even though there were significant between group differences, ICC(1) = .10, $F(25, 157) = 1.69, p = .031$. These results confirm that participants' anticipation of social and self-sanctions for CWBs is an individual-level variable, with some between-group variance, as hypothesized in our model. There were no differences between workgroups and no reliable group means for the outcome variables: interpersonal CWBs (Mean $r_{wg(j)}=.93$; ICC(1) = .00, $F(25, 157) = 0.90, ns$; ICC(2) = .00), organizational CWBs (Mean $r_{wg(j)}=.92$; ICC(1) = .00, $F(25, 157) = 0.84, ns$; ICC(2) = .00). Again, the absence of between-group variance confirmed that CWBs were best analyzed at the individual-level of analysis. Overall, the pattern of aggregation indices justified our data analytic strategy to predict the first stage of our model, i.e., anticipated social and self-sanctions, with a hierarchical linear model and the second stage, i.e., CWBs, at the individual level.

For the first stage of the analysis, an often overlooked problem of random-effects models is that they assume that individual-level variables are uncorrelated to group-level errors (Antonakis et al., 2010). Yet, when this assumption is violated, the coefficients that are obtained with random effects are not consistent (i.e., they can be biased). This assumption can be tested with an overidentification test, which is a test comparing coefficients obtained with a random effects model to those obtained with a fixed effects model, taking the group clustering into account (Schaffer and Stillman, 2006). In our case, the test yielded a significant result, $\chi^2(7) = 16.39, p = .021$, indicating that fixed-effects had to be taken into account. We thus subtracted group-level means from all individual-level means, which makes it possible to control for fixed-effects and still test higher-level variables (i.e., a group-mean centering; Antonakis et al., 2010; Mundlak, 1978). This procedure takes out that part of individual-level variance which is correlated with group-level errors (i.e., bias) and therefore
responsible for the violation of the independence assumption, thus yielding unbiased coefficients.

To allow for a simultaneous estimation of the first and second stage of our model, we estimated the hypothesized indirect effects with robust maximum likelihood estimation in a simultaneous equations model with Stata 9 (Roodman, 2011). All analyses were cluster-adjusted yielding robust standard errors, to further account for non-independence of the observations (employees working in the same group) and of other possible violations of assumptions like skewed distributions of the dependent measures.

RESULTS

Descriptive statistics and correlations are displayed in Table I.

-------------------------------------------
| INSERT TABLE I ABOUT HERE |
-------------------------------------------

Indirect Effects

Hypotheses 1 and 2 predicted indirect relationships between compliance and relational climates and CWBs. For organizational CWBs (H1a, H2a) and interpersonal CWBs (H1b, H2b), the first stage of the analysis revealed a positive relationship between compliance climate and anticipated social and self-sanctions (Table II, second column). The higher the compliance climate in a workgroup, the more likely individual employees were to anticipate social and self-sanctions for CWBs. Moreover, relational climate was negatively related to social and self-sanctions, showing that the higher the relational climate within the workgroup, the less likely individuals were to expect social and self-sanctions for CWBs. For the second stage of the analysis, control variables explained 18% of the variance in organizational CWBs and 12% of the variance in interpersonal CWBs. Anticipated social and self-sanctions were negatively related to organizational CWBs and interpersonal CWBs (see third and fifth columns of Table II). Thus, the more an individual anticipated social and self-
sanctions for CWBs, the less frequently she or he engaged in organizational and interpersonal CWBs.

Indirect effects were estimated with a bootstrap procedure repeated 5000 times. The bootstrap estimates were then tested on the basis of 95% bias-corrected confidence intervals (MacKinnon et al., 2004; Shrout and Bolger, 2002). The indirect effect of compliance climate was negative for organizational, $b = -0.28; 95\%$ CI (-0.57, -0.09), and for interpersonal CWBs, $b = -0.13; 95\%$ CI (-0.38, -0.01). The indirect effect of relational climate was positive for organizational, $b = 0.12; 95\%$ CI (0.01, 0.27), and for interpersonal CWBs, $b = 0.05; 95\%$ CI (0.003, 0.14). In sum, results supported H1a and H1b as well as H2a and H2b, even though the confidence intervals for the indirect effect of relational climate on interpersonal CWBs nearly included zero.

Robustness Checks

To check the robustness of the results reported above, we conducted a series of additional analyses. First, results could be biased by the fact that all data were collected from a single source, i.e., the participants. We therefore re-calculated the same models but excluded the score of the focal individual from the score of workgroup climate (Podsakoff et al., 2012; for a similar treatment, see Robinson and O'Leary-Kelly, 1998). The results obtained with this procedure were very consistent with the less conservative tests described above. Thus, it is unlikely that the effects reported above suffer from common source bias.

Second, to account for potential endogeneity in the data, we further tested these effects with two-stage least squares (2SLS) regressions (Antonakis et al., 2010; Judd and Kenny, 2010; Podsakoff et al., 2012). Endogeneity exists for example when reverse causality is also possible. For example, in our case employees may anticipate social and self-sanctions
for CWBs based on their own, past CWBs. The Hausman test indeed indicated that anticipated social and self-sanctions tended to be an endogeneous regressor of organizational CWBs, $\chi^2(1) = 3.59, p = .058$, and of interpersonal CWBs, $\chi^2(1) = 5.54, p = .018$. When instrumented with the compliance and relational climate as well as participants' age and gender, the coefficients of social and self-sanctions were negatively related to organizational CWBs, $b = -2.34, p = .008$, and to interpersonal CWBs, $b = -1.55, p = .018$, confirming the results reported above. The instruments were not correlated with the error term of the second stage (for organizational CWBs, $\chi^2(3) = 4.71, p = .194$; for interpersonal CWBs, $\chi^2(3) = 1.74, p = .628$), confirming the validity of the 2SLS regression. Moreover, again, excluding the score of the focal individual from the score of workgroup climates did not significantly affect the results. This is noteworthy because in the second stage of these last 2SLS regressions, CWBs are regressed on the predicted values obtained in the first stage with the instrumental variables and not on the observed scores. As the first stage of these regressions was tested with data excluding the focal individual, these analyses further demonstrated that it is unlikely that our results are a consequence of common-source variance. Thus, results of the 2SLS regressions corroborate the findings of our original analyses, providing even stronger support for H1a, H1b, H2a and H2b.

**Conditional Indirect Effects**

To test Hypotheses 3 and 4, we added the interaction terms between personality traits (conscientiousness and agreeableness) and social and self-sanctions to the simultaneous equation models. Interactions were significant in the prediction of both organizational and interpersonal CWBs (Table II, fourth and sixth columns). As indicated by a simple slope analysis after centering the predictors (Cohen J. et al., 2003), the relation between anticipated social and self-sanctions and organizational CWBs was negative for employees low in conscientiousness, $b = -1.89, t(146) = -2.73, p = .007$, and absent for employees high in
conscientiousness, $b = 0.07$, $t(146) = 0.21$, $p = .835$, (see Figure 2). Similarly, anticipated social and self-sanctions and interpersonal CWBs were negatively related for employees low in agreeableness, $b = -0.86$, $t(146) = -2.71$, $p = .008$, but unrelated for employees high in agreeableness, $b = 0.13$, $t(146) = 0.83$, $p = .410$ (see Figure 3).

We then computed conditional indirect effects of compliance and relational climate on individual CWBs with high and low levels of conscientiousness (see H3a, H3b) and agreeableness (see H4a, H4b). This corresponds to a second-stage moderated-mediation model based on Edwards and Lambert’s (2007) framework of conditional indirect effects. Results are displayed in Table III. For employees low in conscientiousness, results yielded a negative conditional indirect effect of compliance climate and a positive conditional indirect effect of relational climate on organizational CWBs, mediated by anticipated social and self-sanctions. For employees high in conscientiousness, these indirect effects were non-significant. Similarly, when predicting interpersonal CWBs, results revealed a negative conditional indirect effect of workgroup compliance climate and a positive conditional indirect effect of relational climate for employees low in agreeableness. For employees high in agreeableness, these effects were non-significant. In sum, results support H3a, H3b, H4a, and H4b: Workgroup compliance and relational climates affected CWBs of employees low in conscientiousness and of employees low in agreeableness, through the anticipation of social and self-sanctions. Workgroup climates had no impact on CWBs of employees high in conscientiousness and high in agreeableness.

DISCUSSION

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Drawing on socio-cognitive theory of moral agency, this study examined indirect effects of workgroup compliance and relational climates on individual group members’ CWBs, through anticipated sanctions, as well as the boundary conditions of these effects. Overall, results were supportive of our model. In groups with a high compliance climate, that is, in groups that attach a high value to formal policies, procedures and professional standards, employees low in conscientiousness and low in agreeableness anticipated social and self-sanctions for CWBs more readily and in turn engaged in less organizational and less interpersonal CWBs, respectively. In groups with a high relational climate, that is, in groups that attach a high value to positive relationships in the group, we found the opposite pattern: Employees low in conscientiousness and low in agreeableness expected less social and self-sanctions for their wrong-doing and in turn engaged in more organizational and more interpersonal CWBs, respectively. Climates had no effects on CWBs of employees high in agreeableness (for interpersonal CWBs) and high in conscientiousness (for organizational CWBs), presumably because these employees have their own internal "emotional moral barometer", telling them what is wrong and what is right, thus making self-regulation of transgressive behaviors less dependent on the influence of contextual factors such as climate (Tangney et al., 2007).

The negative indirect effects of compliance climate on CWBs, for employees low in conscientiousness and agreeableness, suggests that compliance climate can be a powerful means of reinforcing formal organizational measures designed to reduce CWBs (e.g., formal sanctions). Compliance climate may be best understood as the socially constructed understanding of a top-down influence of the organization, regulating individual CWBs through group members’ collective responsibility for organizational rules and this type of climate may be especially effective in controlling potentially transgressive behavior of those employees with weaker self-regulatory capacities.
The positive indirect effects of relational climate on individual CWBs are in line with recent streams of research on morality and cooperation (Balliet et al., 2011; Gino et al., 2013). Our results suggest that a high concern for maintaining positive relations within the group may come at the expense of giving too much leeway for transgressive actions; it leads some members, namely those low in conscientiousness and low in agreeableness, to anticipate less sanctions for CWBs. Thus, fostering positive interpersonal relationships and team spirit—a recommendation which has been made to curb transgressive behaviors (e.g., Devonish, 2013)—may have some unintended, even opposite effects, actually unbridling CWBs in certain employees.

Contributions and Future Research

This study makes several contributions to research on workgroup climates and CWBs. First, it unravels and explains the boundary conditions influencing the cross-level effects of climates on individual CWBs. In line with the socio-cognitive theory of moral agency, it suggests and demonstrates that personality traits related to self-regulation and moral character moderate the indirect effects of climates on CWBs, because these traits influence, in part, the extent to which an individual’s transgressive behaviors depend on anticipated sanctions inferred from the environment (i.e., from group climate). Thus, focusing on specific personality traits, this study is able to explain within-group differences in the effects of climate on individuals. Moderation by personality has previously been discussed (Chang et al., 2012; Christian et al., 2009) but is still not well understood (Kuenzi and Schminke, 2009). This study constitutes an important first step in this direction. Second, this research calls for caution when promoting benevolent climates that emphasize group harmony and team-spirit, as a blanket measure to reduce undesirable behavior in employees. In fact, our study shows that this type of climate can have unintended effects and increase CWBs, in some employees, by reducing the likelihood that employees anticipate sanctions for their wrong-doings. As a
consequence, a high relational climate actually fosters CWBs in employees with limited self-regulatory capabilities and a less salient internal “moral barometer” (Tangney et al., 2007).

This research opens up several avenues for future research. Our results point to the undesirable effects of a high relational climate, for some members. However, because CWBs are often directed toward aversive stimuli that threaten other group members such as aversive working conditions, abusive supervision or social stressors (Penney and Spector, 2005; Tepper et al., 2008), these members may believe that their behavior benefits the group, at least partly. Indeed, social disapproval from colleagues does not occur if the behavior that should be sanctioned actually serves the group (Horne et al., 2009). Hence, in groups with a high relational climate, CWBs may even be considered as constructive (Warren, 2003), for example, to protect members from poor working conditions or to guarantee cooperation through punishing members who do not contribute to the common goal. Future research should differentiate between the different targets of interpersonal CWBs (e.g., a non-cooperative member; low-status or minority members, abusive supervisors, customers; Hershcovis and Reich, 2013) as well as the different underlying motivations of authors of CWBs (e.g., justice concerns, dominance orientation) to shed more light on these questions.

In addition, while the results of this study revealed unfavorable effects of a high relational climate and favorable effects of a high compliance climate, future research should also look at the desirable behaviors fostered by relational climates and at undesirable behaviors that compliance climates could foster. For example, a high relational climate may promote certain types of organizational citizenship behaviors, such as helping other group members, because these behaviors would probably be highly valued by the group. Similarly, a high compliance climate may facilitate pro-organizational but unethical behaviors such as withholding negative information about products to people outside of the organization (Umphress et al., 2010).
Limitations

The cross-sectional design of this study does not allow for making strict causal claims. We dealt with this limitation by checking the robustness of our findings with rigorous statistical methods. Importantly, results remained consistent when data from the focal individual was removed from the climate scores and when the first stage of the model was tested with data from different sources. In fact, these analyses revealed even stronger effects. Hence, we are confident that results were not biased by common-source variance or endogeneity. Still, the findings should be replicated with a longitudinal study or an experimental design to support causal claims. Another limitation is that the workgroups included in this study came from one organization only, which limits the possibility of drawing more general conclusions. Nevertheless, the workgroups had a wide array of responsibilities and tasks, suggesting that results apply to various groups. Finally, we focused on mild to moderately severe CWBs. Thus, the mechanisms between climates and CWBs outlined in this study are most likely to exist for this type of CWBs. This is particularly true for the effects of relational climate. Indeed, severe CWBs such as physical violence that are clearly injurious and that signal a clear intent to harm, are unlikely to occur in groups with a high relational climate. Severe CWBs would clearly run counter to the group’s values, and hence, members would probably (correctly) anticipate social as well as self-sanctions for engaging in such behaviors.

Practical Implications

This study should not be interpreted as a recommendation to workgroup leaders to “divide and rule”, by reducing the relational climate reigning within their group, and reinforcing a high compliance climate only. Rather, leaders should acknowledge that group members’ personality limits the impact of workgroup climates on individual CWBs, and thus selectively monitor less conscientious and less agreeable group members more closely, and,
at the same time unambiguously sanction CWBs. Moreover, if some members do indeed sometimes engage in CWBs to protect the group’s well-being, it is important for leaders and organizations to understand what group members consider as threatening the group’s well-being, and to offer other solutions than CWBs, in order to cope with such perceived threats. This study further suggests that a particularly promising approach to reducing CWBs is the fostering of a workgroup compliance climate, namely, a sense of collective responsibility for organizational rules in the group. When promoting a high compliance climate, team leaders could emphasize the benefits that this climate has for the workgroup as a whole and thus create an alignment between the compliance and relational dimensions of climate. Indeed, creating bridges between compliance and relational climates within the same group may prevent potential undesirable side-effects of both dimensions of climate. Moreover, by encouraging team members to participate in the promotion of rules and outlining the benefits for the group, leaders may be able to effectively deal with some of the problems related to the enforcement of formal organizational sanctions for CWBs.
NOTES

1 These results are available upon request from the first author. Additional robust analyses based on a Monte Carlo split-sample design with 1'000 randomizations (Antonakis and House, 2014) also yielded consistent results available from the first author. Split-sample designs are effective in reducing common-method variance in hierarchical linear models (Lai et al., 2013).
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Wiltermuth, S. S. (2011). 'Cheating more when the spoils are split'. *Organizational Behavior and Human Decision Processes, 115*, 157-68.


### Table I. Means, standard deviations, correlations and reliabilities of study variables

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<th>Level 1: Individual-level</th>
<th>N</th>
<th>M</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<td>0.50</td>
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</tr>
<tr>
<td>2. Age</td>
<td>158</td>
<td>2.67</td>
<td>1.17</td>
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<td></td>
<td></td>
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<tr>
<td>3. Tenure (Years)</td>
<td>158</td>
<td>9.00</td>
<td>10.22</td>
<td>-0.03</td>
<td>0.54***</td>
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<td>4. Supervisor</td>
<td>158</td>
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<td>5. Neuroticism</td>
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<td>0.07</td>
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<td>6. Agreeableness</td>
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<td>4.76</td>
<td>0.57</td>
<td>0.07</td>
<td>-0.17*</td>
<td>-0.18*</td>
<td>-0.00</td>
<td>-0.13</td>
<td>(0.67)</td>
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<td>7. Conscientiousness</td>
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<td>4.97</td>
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<td>0.07</td>
<td>0.07</td>
<td>0.08</td>
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<td>0.28***</td>
<td>(.72)</td>
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<td>8. Anticipated social and self-sanctions</td>
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<td>0.74</td>
<td>0.21**</td>
<td>0.07</td>
<td>0.00</td>
<td>0.15*</td>
<td>0.04</td>
<td>0.15*</td>
<td>0.21** (.74)</td>
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<td>9. Organizational CWBs</td>
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<td>-0.06</td>
<td>0.09</td>
<td>-0.13</td>
<td>0.10</td>
<td>-0.24**</td>
<td>-0.31***</td>
<td>-0.35***</td>
<td>(.67)</td>
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<td>10. Interpersonal CWBs</td>
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<td>-0.13</td>
<td>0.02</td>
<td>-0.08</td>
<td>-0.07</td>
<td>-0.30***</td>
<td>-0.08</td>
<td>-0.22**</td>
<td>0.54***</td>
<td>(.68)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Level 2: Group-level**

| 11. Compliance climate    | 26 | 3.49 | 0.35| 0.31***| 0.06 | 0.04| -0.01| 0.08 | 0.03 | 0.05 | 0.20*| -0.08| -0.12| (0.87)|      |
| 12. Relational climate     | 26 | 3.04 | 0.55| -0.21**| 0.12 | 0.01| 0.10| -0.21**| 0.05 | 0.05 | -0.17*| 0.16*| 0.09 | -0.05| (0.87)|      |

**Note:** * p < .10; * * p < .05; ** p < .01; *** p < .001. CWBs = counterproductive work behaviors.

- 0 = male, 1 = female.
- Age categories, see method section for coding.
- 0 = not supervisor, 1 = supervisor.

For correlations of compliance and relational climate with individual-level constructs, the effective N is 26 because an average score of compliance and relational climates was computed for each group and then assigned to all group members.
Table II. Moderated mediation effects of workgroup climates as a function of personality on counterproductive work behaviors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anticipated social and self-sanctions</th>
<th>Organizational CWBs</th>
<th>Interpersonal CWBs</th>
</tr>
</thead>
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<td></td>
<td>1st stage</td>
<td>2nd stage</td>
<td>2nd stage</td>
</tr>
<tr>
<td></td>
<td>Model 1 Model 2</td>
<td>Model 1 Model 2</td>
<td>Model 1 Model 2</td>
</tr>
<tr>
<td>Level 1: Control variables</td>
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<tr>
<td>Gender a</td>
<td>0.10 0.09</td>
<td>-0.99* -0.68*</td>
<td>-0.37 -0.41f</td>
</tr>
<tr>
<td>Age</td>
<td>0.08 0.08</td>
<td>-0.25 -0.25</td>
<td>-0.27 -0.28f</td>
</tr>
<tr>
<td>Tenure</td>
<td>-0.01 -0.01</td>
<td>0.02 0.03f</td>
<td>0.01 0.01</td>
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<td>Supervisor b</td>
<td>0.23f 0.24f</td>
<td>-0.82* -0.76f</td>
<td>-0.36 -0.31</td>
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<td>0.08 0.19</td>
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<td>-0.94** -0.92***</td>
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<tr>
<td>Conscientiousness</td>
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<td>-0.91* -0.88*</td>
<td>0.01 0.03</td>
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<tr>
<td>Main variables</td>
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<td>Anticipated social and self-sanctions</td>
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<td>-0.32* -0.36*</td>
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<td>Interaction term</td>
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<td>Anticipated social and self-sanctions × Conscientiousness</td>
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<td>Anticipated social and self-sanctions × Agreeableness</td>
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<td>Level 2: Main variables</td>
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<td>Compliance climate</td>
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<td>-0.41</td>
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<td>-0.00</td>
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<td>8.58*** 8.46***</td>
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<tr>
<td>Within-group variance</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between-group variance</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>$R^2_{within-group}$</td>
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<td></td>
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<tr>
<td>$R^2_{between-group}$</td>
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<td></td>
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<tr>
<td>$R^2_{total}$</td>
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<td>0.25 0.31</td>
<td>0.15 0.18</td>
</tr>
<tr>
<td>$\Delta R^2_{total}$</td>
<td>0.09 0.06</td>
<td>0.06 0.03</td>
<td></td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>29.09*** 46.04***</td>
<td>46.89*** 103.37***</td>
<td>41.78** 45.31***</td>
</tr>
<tr>
<td>df</td>
<td>7 9</td>
<td>10 11</td>
<td>10 11</td>
</tr>
</tbody>
</table>

Note: $N = 158$. $^f p < .10$; $^* p < .05$; $^{**} p < .01$; $^{***} p < .001$. Unstandardized coefficients are shown.

$a$ 0 = male, 1 = female; $^b$ 0 = not supervisor, 1 = supervisor.
Table III. Conditional indirect effects of workgroup climate on organizational and interpersonal CWBs

<table>
<thead>
<tr>
<th>Variable of interest</th>
<th>Organizational CWBs</th>
<th>Interpersonal CWBs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderator</td>
<td>Estimate</td>
</tr>
<tr>
<td>Compliance climate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low C</td>
<td>Low C</td>
<td>-0.74</td>
</tr>
<tr>
<td>High C</td>
<td>Low A</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>High C</td>
<td>-0.01</td>
</tr>
<tr>
<td>Relational climate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low C</td>
<td>Low A</td>
<td>0.33</td>
</tr>
<tr>
<td>High C</td>
<td>High A</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

*Note. CI = Bias-corrected confidence intervals obtained from bootstrap estimates (5000 reps). C = Conscientiousness. A = Agreeableness.*
FIGURES

Figure 1. The hypothesized model of workgroup climates on individuals' counterproductive work behaviors.
Figure 2. Interaction between anticipated social and self-sanctions and conscientiousness on organizational counterproductive work behaviors.
Figure 3. Interaction between anticipated social and self-sanctions and agreeableness on interpersonal counterproductive work behaviors.
APPENDIX

Appendix I. Items and factor loadings of Relational Climate, Compliance Climate and Anticipated Social and Self-Sanctions

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relational Climate</strong></td>
<td></td>
</tr>
<tr>
<td>In this workgroup, people protect their own self-interests above all else. (R)</td>
<td>-.57</td>
</tr>
<tr>
<td>In this workgroup, people are mostly out for themselves. (R)</td>
<td>-.64</td>
</tr>
<tr>
<td>What is best for everyone in the workgroup is the major consideration here.</td>
<td>.82</td>
</tr>
<tr>
<td>The most important concern in the workgroup is the good of all the people as a whole.</td>
<td>.89</td>
</tr>
<tr>
<td>Our major concern is always what is best for the other person.</td>
<td>.86</td>
</tr>
<tr>
<td><strong>Compliance Climate</strong></td>
<td></td>
</tr>
<tr>
<td>In this workgroup, it is very important to follow the company's rules and procedures.</td>
<td>.69</td>
</tr>
<tr>
<td>Everyone in this workgroup is expected to stick by company rules and procedures.</td>
<td>.65</td>
</tr>
<tr>
<td>Successful people in this workgroup go by the book.</td>
<td>.72</td>
</tr>
<tr>
<td>People in this workgroup strictly obey the company policies.</td>
<td>.68</td>
</tr>
<tr>
<td>People in this workgroup are expected to comply with the law and professional standards over and above other considerations.</td>
<td>.71</td>
</tr>
<tr>
<td>In this workgroup, the law or ethical code of the profession is the major consideration.</td>
<td>.80</td>
</tr>
<tr>
<td>In this workgroup, people are expected to strictly follow legal or professional standards.</td>
<td>.86</td>
</tr>
<tr>
<td>In this workgroup, the first consideration is whether a decision violates any law.</td>
<td>.78</td>
</tr>
<tr>
<td><strong>Anticipated social and self-sanctions</strong></td>
<td></td>
</tr>
<tr>
<td>Instructions. At work, employees sometimes behave in ways that are not really in line with the company’s existing rules and guidelines. If you would engage in this type of behavior, what would happen? How would you react? And how would your colleagues react?</td>
<td></td>
</tr>
<tr>
<td>After having done something like this, I would feel guilty.</td>
<td>.50</td>
</tr>
<tr>
<td>I would go against the rules if it helped me feel better. (R)</td>
<td>-.49</td>
</tr>
<tr>
<td>My colleagues and I would seize the opportunity to laugh about it. (R)</td>
<td>-.44</td>
</tr>
<tr>
<td>If I went against the company rules or regulations, my colleagues would not hold it against me. (R)</td>
<td>-.73</td>
</tr>
<tr>
<td>If I violated rules or procedures, my colleagues would get angry at me.</td>
<td>.87</td>
</tr>
<tr>
<td>My colleagues would not hesitate to denigrate me.</td>
<td>.50</td>
</tr>
</tbody>
</table>