



**ABUSIVE SUPERVISION CLIMATE: A MULTIPLE-MEDIATION  
MODEL OF ITS IMPACT ON GROUP OUTCOMES**

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Abstract:	In this paper we introduce the construct of abusive supervision climate, the collective perceptions employees hold regarding abusive supervision in their work unit. We thereby extend research on abusive supervision to the team level, which allows us to explore its relationship with outcomes not addressed by individual-level theories of abuse. First, we explain the emergence of abusive supervision climate through the lens of social information processing theory. Then, drawing on team process and effectiveness models, we develop a multiple mediation model that identifies two distinct mechanisms by which abusive supervision climate impacts group-level outcomes: social identity and collective efficacy. Results demonstrate that abusive supervision climate influences social- and task-related group outcomes through these two mediation processes.

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## Abusive Supervision Climate: A Multiple-mediation Model of its Impact on Group Outcomes

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**Manuela Priesemuth**

Wilfrid Laurier University  
75 University Avenue West  
Waterloo, ON N2L 3C5  
Tel: 519.884.0710 ext.4428  
Fax: 519.884.0201  
e-mail: mpriesemuth@wlu.ca

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**Marshall Schminke**

University of Central Florida  
PO Box 161400  
Orlando, FL 32816-1400  
Tel: 407.823.2932  
Fax: 407.823.3725  
e-mail: mschminke@ucf.edu

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**Maureen L. Ambrose**

University of Central Florida  
PO Box 161400  
Orlando, FL 32816-1400  
Tel: 407.823.5684  
Fax: 407.823.3725  
e-mail: mambrose@ucf.edu

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**Robert Folger**

University of Central Florida  
PO Box 161400  
Orlando, FL 32816-1400  
Tel: 407.823.1722  
Fax: 407.823.3725  
e-mail: rfolger@ucf.edu

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4 **ABUSIVE SUPERVISION CLIMATE: A MULTIPLE-MEDIATION MODEL**  
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11 **ABSTRACT**  
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13 In this paper we introduce the construct of abusive supervision climate, the collective  
14 perceptions employees hold regarding abusive supervision in their work unit. We thereby extend  
15 research on abusive supervision to the team level, which allows us to explore its relationship  
16 with outcomes not addressed by individual-level theories of abuse. First, we explain the emer-  
17 gence of abusive supervision climate through the lens of social information processing theory.  
18 Then, drawing on team process and effectiveness models, we develop a multiple mediation mod-  
19 el that identifies two distinct mechanisms by which abusive supervision climate impacts group-  
20 level outcomes: social identity and collective efficacy. Results demonstrate that abusive supervi-  
21 sion climate influences social- and task-related group outcomes through these two mediation  
22 processes.  
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4 Abusive supervision, defined as “subordinates’ perceptions of the extent to which their  
5 supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding  
6 physical contact” (Tepper, 2000: 178), is among the most widely studied types of negative  
7 supervisor behavior. Research demonstrates abusive supervision has detrimental consequences  
8 for individuals in organizations, spanning attitudinal (Tepper, 2000; Tepper, Hoobler, Duffy, &  
9 Ensley, 2004), behavioral (Lian, Ferris, & Brown, 2012; Mitchell & Ambrose, 2007, 2012;  
10 Zellars, Tepper, & Duffy, 2002), and health-related outcomes (Bamberger & Bacharach, 2006;  
11 Tepper, 2000). Notable about current research on abusive supervision is its focus on abuse as an  
12 individual-level phenomenon. However, both theoretical and empirical evidence from the work  
13 climate and deviance literatures (Duffy, Ganster, Shaw, Johnson, & Pagon, 2006; Roberson,  
14 2006), suggest that abusive supervision can also occur at the group level in the form of abusive  
15 supervision climate. We investigate this construct and its consequences in this paper.  
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29 Examining abusive supervision at the climate level is important for two reasons. First, if  
30 abusive supervision climate exists, current theory and research likely understate the full impact  
31 of abusive supervision because it not only affects targeted individuals but can also become  
32 embedded in the climate of workgroups, thereby affecting the group at large. Second,  
33 conceptualizing abusive supervision as a characteristic of the workgroup’s climate allows us to  
34 extend abusive supervision research to the team level and opens the door to examining outcomes  
35 that existing individual-level theorizing has not addressed.  
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43 With this research, we contribute to the literature in at least three ways. First, we extend  
44 thinking on abusive supervision by conceptualizing it at the group level and describing the  
45 theoretical foundation for the emergence of abusive supervision climate. Specifically, we  
46 theorize that abusive supervision climate emerges through processes of sensemaking and social  
47 information processing (Salancik & Pfeffer, 1978), as work unit members share information and  
48 stories regarding abusive supervision experiences. Second, we craft a theoretical framework for  
49 understanding the mechanisms by which abusive supervision climate influences outcomes. We  
50 draw on theories of group processes and effectiveness (Cropanzano, Li, & Benson, 2011;  
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4 Gladstein, 1984) to develop a multiple-mediation model that links abusive supervision climate to  
5 group-level outcomes through two distinct processes: social identity and group efficacy. Third,  
6 we examine the influence of abusive supervision climate in predicting group-level outcomes.  
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8 This group-level theoretical framework provides insights about the breadth of influence of  
9 abusive supervision that is distinct from those derived from existing individual-level approaches.  
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14 Below, we begin with a discussion of abusive supervision climate. We then build on  
15 research related to sensemaking, work climate, and group processes to develop our theory of how  
16 abusive supervision climate emerges and how it impacts group-level outcomes. Our conceptual  
17 model—presented in Figure 1—illustrates the multiple mediation paths by which abusive  
18 supervision climate impacts group-level outcomes. In particular, we propose that abusive  
19 supervision climate influences interpersonally relevant outcomes (viz., group cooperation and  
20 group citizenship behavior) through its impact on group identity, and influences task-relevant  
21 outcomes (i.e., group performance) through its impact on collective efficacy.  
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### 37 **ABUSIVE SUPERVISION CLIMATE**

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39 Existing research examines abusive supervision as an individual-level construct. That is,  
40 research has considered how a subordinate's perceptions of supervisor abusiveness influences  
41 that subordinate's behavior and outcomes (for a review, see Tepper, 2007). Abusive supervision,  
42 however, can manifest itself in broader ways as well. For example, supervisors can direct abuse  
43 toward the work unit as a whole (Duffy et al., 2006). Similarly, employees who witness the  
44 abuse of others (e.g., coworkers) may be affected by such actions, even though they are not  
45 personally abused themselves (Greenbaum, Mawritz, Mayer, & Priesemuth, 2013; Mitchell,  
46 Vogel, & Folger, 2012). As a result, in addition to any individual-level perceptions that may  
47 exist, collective perceptions of supervisory abuse are also likely to emerge within a work unit.  
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57 Research demonstrates that when confronted with negative behaviors in the workplace,  
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4 employees engage in sensemaking processes that result in shared, collective perceptions of the  
5 actions (Robinson & O’Leary-Kelly, 1998). Abusive supervision represents a negative  
6 workplace behavior, and thus these shared perceptions provide the foundation for thinking about  
7 abusive supervision at the climate level.  
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### 10 11 12 **Organizational Work Climates**

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14 Schneider and Reichers (1983) defined organizational work climate as a set of shared  
15 perceptions regarding the policies, practices, and procedures that are present in the workplace.  
16 Recent climate research focuses primarily on what are known as facet-specific climates, those  
17 related to a particular aspect of the organizational situation, such as justice climate, ethical  
18 climate, safety climate, service climate, or innovation climate. This research demonstrates that  
19 work climates exert consistently strong effects on behavior and attitudes in the workplace  
20 (Kuenzi & Schminke, 2009). We suggest abusive supervision climate plays an important role in  
21 understanding employee responses to abuse as well.  
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31 Extending abusive supervision research to the collective level requires that we address  
32 two important issues regarding abusive supervision climate: (1) the process by which  
33 individuals’ perceptions come to be shared, thus providing the foundation for the emergence of a  
34 climate, and (2) the composition model that specifies the relationship between the individual-  
35 level and the group-level constructs.  
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### 41 **The Climate-formation Process**

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43 Social information processing theory (Salancik & Pfeffer, 1978) observes that individuals  
44 do not operate in a vacuum in their organizational lives. Rather, they function in complex and  
45 often ambiguous social settings. Thus, individuals seek to understand their work environments  
46 by looking to social cues that exist in the events that surround them. Drawing on social  
47 information processing theory, the work climate literature points to this sensemaking process as  
48 central to the formation of climates.  
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56 Climate researchers suggest that in the process of sensemaking, frequent interactions and  
57 communication with other group members about work events foster shared meaning, resulting in  
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4 the creation of collective judgments about the work environment (Ehrhart, 2004; Naumann &  
5 Bennett, 2000; Roberson, 2006). Because most social and work-related interactions occur at the  
6 level of the work unit (Ashforth, 1985), peers provide the primary source of sensemaking  
7 information (Roberson, 2006). Members of a work unit experience a similar set of cues, and  
8 through a series of collective experiences, interactions, and communications, these members then  
9 share interpretations of organizational events, resulting in shared norms and beliefs about the  
10 typical group member experience and the organizational system (Roberson, 2006). Members  
11 react to these shared perceptions and organizational cues in similar ways (Liao & Rupp, 2005;  
12 Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Naumann & Bennett, 2000), and these  
13 repeated interactions and reactions on the part of work unit members lead to a convergence of  
14 individual perceptions regarding the organization (Hardin & Higgins, 1995). This convergence  
15 of individual perceptions provides the foundation for work climates.  
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29 Social information processing theory provides a conceptual framework for understanding  
30 the emergence of a variety of climate types (Liao & Rupp, 2005; Mayer et al., 2009). Abusive  
31 supervision creates an especially compelling setting for employees to engage in these  
32 sensemaking activities for three reasons. First, abusive supervision represents a negative event,  
33 and research indicates negative events prompt sensemaking searches more often than positive  
34 events (Folger & Cropanzano, 2001; Hastie, 1984; Wong & Weiner, 1981). Second, relative to  
35 top managers or the organization overall, supervisors play a frequent, powerful, and immediate  
36 role in the daily activities of employees (Brown, Treviño, & Harrison, 2005; Schein, 1985; Zohar  
37 & Luria, 2005). Therefore, the salience of supervisory activities to employees makes supervisor  
38 behavior a likely focus of sensemaking (Piccolo & Colquitt, 2006; Smircich & Morgan, 1982).  
39 Finally, research indicates that sensemaking processes become especially relevant under  
40 conditions of unfair treatment (Roberson, 2006). To the extent that employees view abuse as  
41 undeserved, it is thus particularly likely to trigger the sensemaking activities that accompany  
42 social information processing. Roberson (2006) suggests that in such situations, group members  
43 turn to each other to discuss their experiences and share their interpretations of events. This  
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4 leads to collective assessments of the typical group member experience.  
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6 Because of the potent and proximal impact of supervisory activities on employees, and  
7 the negative and unfair nature of abusive supervision events, employee sensemaking activities  
8 should therefore be especially heightened in the presence of supervisory abuse. Social  
9 information processing theory thus suggests that these sensemaking activities will result in  
10 shared perceptions of the supervisory abuse, which provide the foundation for an abusive  
11 supervision climate.  
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### 18 **The Composition Model**

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20 Abusive supervision climate requires these shared perceptions to be aggregated to the  
21 work-unit level. Thus, we must identify the appropriate composition model (Chan, 1998) for  
22 doing so. The composition model for a collective construct allows researchers to specify the  
23 manner whereby lower-level participants' perceptions constitute the higher-level construct (Chan,  
24 1998).  
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31 Our conceptualization of abusive supervision climate is what Chan (1998) terms an  
32 organizational collective climate, which reflects a referent-shift consensus model. Referent-shift  
33 consensus occurs when aggregation to the climate level begins with individual assessments of  
34 typical group experiences rather than their own personal experiences. Employing a referent-shift  
35 consensus model suggests that although abusive supervision climate is derived from individual-  
36 level perceptions of abuse, it is a construct conceptually distinct from individuals' perceptions of  
37 their own abuse experiences (Chan, 1998). This conceptualization of abusive supervision  
38 climate as a shared perception of the typical group experience is consistent with other climate  
39 research (e.g., Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Naumann & Bennett, 2000;  
40 Seibert, Silver, & Randolph, 2004; Zohar & Luria, 2005) and with Kozlowski and Klein's (2000)  
41 recommendation of the referent-shift composition model for assessing unit-level constructs.  
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53 To this point we have defined abusive supervision climate, described the theoretical  
54 process by which it emerges, and established the composition model that relates it to individual  
55 perceptions of abusive supervision. We now turn to the relationship between abusive supervision  
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4 climate and outcomes, and the processes by which those impacts occur.

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6 **THE EFFECT OF ABUSIVE SUPERVISION CLIMATE ON OUTCOMES:**  
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8 **A GROUP PROCESS MODEL**  
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10 Researchers interested in workgroups have long looked to group interaction processes as  
11 providing the link between team inputs and outputs. McGrath's (1964) input-process-output  
12 framework, for example, points to within-group interaction as key to understanding both  
13 attitudinal and performance group outcomes. Scholars have increasingly focused on opening the  
14 black box of this framework to determine what type of interaction processes occur within work  
15 teams and how they influence group outcomes (Hackman, 1987).  
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22 **Task and Interpersonal Processes in Groups**  
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24 Research on group processes points to two types of interaction processes as key to  
25 understanding group outcomes: those related to task performance (task processes) and those  
26 related to group maintenance (interpersonal processes), such as maintaining positive  
27 interpersonal relationships within the team. Traditional models of team effectiveness point to  
28 both as being important components of well-functioning groups. For example, Philip and  
29 Dunphy (1959) argued that workgroups have two basic duties. One involves solving the problem  
30 the group is committed to, whereas the other focuses on building, strengthening, and regulating  
31 group life. Thus, Philip and Dunphy suggested a dual-path process that focuses on the  
32 importance of both task interactions and social interactions among members of a workgroup.  
33 Bales (1958) also suggested a dual-path approach to group effectiveness, arguing that both task-  
34 related and socio-emotional processes in teams must be managed effectively for a group to  
35 perform well. Similarly, Gladstein's (1984) model of task group effectiveness emphasized the  
36 importance of both task-related processes and social-maintenance processes in linking group  
37 inputs to outcomes. More recent work on teams further strengthens the emphasis on these dual  
38 processes as shaping group outcomes. Hoegl and Gemuenden (2001), for example, developed a  
39 taxonomy of workgroup interactions that focuses on both social- and task-related group  
40 interactions as impacting outcomes.  
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4 This dual-path approach in the teams literature provides a framework for understanding  
5 the process by which work climates influence group outcomes. Work climates shape behavior by  
6 focusing employee attention on the particular behaviors an organization supports, rewards, and  
7 expects (Kuenzi & Schminke, 2009). Building on Hoegl and Germuenden's (2001) work,  
8 Cropanzano et al. (2011) suggested that climate shapes group behaviors by focusing attention on  
9 what is expected with respect to the two team process factors: interpersonal teamwork processes  
10 and task teamwork processes. Further, the attention focused on these two processes influences  
11 different outcomes. Attention focused on interpersonal teamwork processes (such as team  
12 cohesion and improving bonding and mutual support between members) will be related to  
13 interpersonally relevant outcomes like good citizenship behavior, and attention focused on task  
14 teamwork processes will be related to task-relevant outcomes such as group performance.  
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27 In this study we focus on two outcomes associated with interpersonal teamwork  
28 processes—group cooperation and group citizenship behavior—and one outcome associated with  
29 task teamwork processes—group performance. Group cooperation and citizenship behavior  
30 have both been referred to as group-related or group-oriented behaviors that are predominantly  
31 of a discretionary or voluntary nature (Dukerich, Golden, & Shortell, 2002; Olkkonen &  
32 Lipponen, 2006; Tyler & Blader, 2003). These group-oriented actions are considered extra-role  
33 behaviors, behaviors that are not formally recognized by the reward system in organizations  
34 (Bommer, Dierdorff, & Rubin, 2007; Kidwell, Mossholder, & Bennett, 1997; Organ, 1988).  
35 Group performance describes a task-oriented, in-role behavior in which group members engage.  
36 Specifically, group performance emphasizes the level of productivity and effectiveness with  
37 which workgroups perform their tasks (Tjosvold, Law, & Sun, 2003).  
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49 We build on and extend prior theorizing regarding climate, team processes, and work-unit  
50 outcomes. Previous research has focused on how the behavior of team members creates an  
51 environment that influences group interpersonal and task processes (Cropanzano et al., 2011) and  
52 how leader behavior also influences team processes (Chen & Bliese, 2002; Zaccaro, Rittman, &  
53 Marks, 2001). We extend this research by examining the impact of abusive supervision climate  
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4 on group outcomes via its impact on interpersonal and task processes. We focus on social  
5 identity and collective efficacy as indicators of interpersonal teamwork processes and task  
6 teamwork processes, respectively. Specifically, we suggest abusive supervision climate will be  
7 negatively related to these processes. Additionally, the interpersonal teamwork process (group  
8 identity) will be related to the interpersonal outcomes of group cooperation and group citizenship  
9 behavior. The task teamwork process (collective efficacy) will be related to the task outcome of  
10 group performance.  
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18 Below, we first discuss social identity as the link between abusive supervision climate  
19 and interpersonally-related outcomes (cooperation and citizenship behavior), followed by  
20 collective efficacy as the link between abusive supervision climate and the task outcome of  
21 group performance.  
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### 27 **The Mediating Effect of Social Identity**

28 Social identity theory (Tajfel & Turner, 1986) explores when and why individuals are  
29 likely to identify with—and act as part of—certain groups. Social identity refers to individuals'  
30 internalized sense of membership in a particular group and their tendency to define who they are  
31 in terms of “we” rather than “I.” Social identity theory suggests the self-concept is composed of  
32 two types of identity: personal identity and social identity. Personal identity is the set of  
33 idiosyncratic characteristics associated with an individual. Social identity is the set of attributes  
34 associated with salient groups (Ashforth & Mael, 1989). Tajfel and Turner (1979) assert that  
35 behavior can be located along an interpersonal/intergroup continuum anchored at one end by  
36 interpersonal behavior (behavior associated with acting as an individual) and at the other end by  
37 intergroup behavior (behavior resulting from group membership). Which behavior dominates  
38 depends on the level of social identification. Greater social identification is associated with  
39 higher levels of behavior that stem from group membership (Ashforth & Mael, 1989).  
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41 Additionally, the greater the social identification, the greater the effort individuals put forth on  
42 behalf of the group (Tyler & Blader, 2000).  
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57 Social identity theory suggests that when individuals strongly identify with a group, the  
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4 group identity is integrated into their self-concept. For these individuals the group's welfare is a  
5 central concern. Thus, their behavior is oriented toward benefiting the group, its needs, and the  
6 advancement of its goals (Ashforth & Mael, 1989; Blader & Tyler, 2009). Empirical research  
7 demonstrates that social identity influences group-oriented behavior. Higher levels of group  
8 identification lead to group-focused behavior such as in-group cooperation and helping. For  
9 example, Blader and Tyler (2009) found that social identity predicted supervisor-rated  
10 organizational citizenship behavior. Mael and Ashforth (1992) found that social identity was  
11 associated with higher levels of participation in group activities and the willingness to make  
12 financial contributions to the group.  
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22 Drawing from research on team processes (Hoegl & Gemuenden, 2001), we posit social  
23 identity is an indicator of interpersonal processes in work teams. Effective interpersonal  
24 processes among group members encompass practices such as frequent interactions, building  
25 social bonds and greater cohesion, and mutual support (Cropanzano et al. 2011). All of these  
26 processes are indicative of a strong identification with one's work unit (Haslam & Reicher, 2006;  
27 Tajfel & Turner, 1986). That is, workgroups that frequently interact, building stronger social  
28 bonds and fostering mutual support, also possess strong group identities.  
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37 Extending the work of Cropanzano et al. (2011), we suggest abusive supervision climate  
38 negatively influences social identity and interpersonal teamwork processes. Further,  
39 interpersonal teamwork processes influence interpersonally-oriented group outcomes (i.e., group  
40 cooperation and group OCB). Thus, we propose interpersonal teamwork processes mediate the  
41 relationship between abusive supervision climate and interpersonally-oriented group outcomes.  
42 Specifically, we examine social identity as a mediator of the relationship between abusive  
43 supervision climate and both group cooperation and group OCB.  
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51 Abusive supervision climate influences social identity and interpersonal teamwork  
52 processes in several ways. First, climate can provide teams with information about their value.  
53 Abusive supervision climate indicates to subordinates that neither they nor their group is valued,  
54 thereby diminishing the pride associated with group membership (Tyler & Blader, 2000). Pride  
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4 influences individuals' social identification with the group and their internalization of the group's  
5 goals and norms (Blader & Tyler, 2009; Tyler & Blader, 2000). These interpersonal teamwork  
6 processes influence team-oriented behavior such as group cooperation and group OCB (Blader &  
7 Tyler, 2009; De Cremer & van Knippenberg, 2005; De Cremer & van Vugt, 1998; Olkkonen &  
8 Lipponen, 2006).

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15 Second, shared perceptions of abusive supervision may also damage the status of the  
16 group (Ashforth & Mael, 1989; Tajfel & Turner, 1986). According to social identity theory,  
17 social identity is guided by the pursuit of an evaluatively positive self-concept (Tajfel & Turner,  
18 1986). Individuals will seek to identify with groups that enhance their self-esteem. Consequently,  
19 individuals are less likely to identify with a low status group. Rather, individuals will distance  
20 themselves psychologically from low status groups, decreasing interaction and efforts aimed at  
21 maintaining social ties within the group, thereby lowering levels of group identification  
22 (Ashforth & Mael, 1989; Tyler & Blader, 2000). The result will be fewer behaviors focused on  
23 group maintenance being performed among team members (Ashforth & Mael, 1989), and  
24 member attitudes and prosocial behaviors will suffer (De Cremer & van Vugt, 1998).

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35 Third, work climates influence the way in which members of the workgroup interact.  
36 Work climates provide information about what behaviors are expected and rewarded. In  
37 workgroups with strong abusive supervision climates, the climate indicates that appropriate  
38 interpersonal interaction is characterized by anger, rudeness, and hostility. When team members  
39 are treated with disrespect and hostility by others, negative attitudes toward the group emerge  
40 (Miner-Rubino & Reed, 2010), and members are less likely to develop and maintain stronger  
41 social bonds with one another (Cropanzano et al. 2011; Tyler & Blader, 2000). These negative  
42 interactions weaken interpersonal teamwork processes (Cropanzano et al., 2011) and members'  
43 group identity (Blader & Tyler, 2009).

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54 In all, we suggest abusive supervision climate harms group identification, which in turn  
55 will be detrimental to the emergence and maintenance of group-oriented behavior. Extending  
56 existing theoretical and empirical research on climate, teamwork processes, and team outcomes,  
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4 we suggest that interpersonal teamwork processes in the form of social identification with the  
5 group will mediate the relationship between abusive supervision climate and interpersonal work  
6 unit outcomes.  
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10 *Hypothesis 1. Group identification will mediate the relationship between abusive*  
11 *supervision climate and group cooperation and OCB.*  
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#### 14 **The Mediating Effect of Collective Efficacy**

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16 Task teamwork processes are the second mechanism by which work climate influences  
17 group outcomes (Cropanzano et al., 2011). Task teamwork processes are “task behaviors that  
18 enable the group to solve the objective problem to which the group is committed” (Philip &  
19 Dunphy, 1959: 162). Here we look to collective efficacy processes as representative of task  
20 teamwork processes. Collective efficacy represents one of the most prominent task-related group  
21 processes in the organizational literature (Ilgen, Hollenbeck, Johnson, & Jundt, 2005) and has  
22 been shown to play an important mediating role between group inputs and group outcomes in a  
23 variety of settings (Bandura, 1993; Earley, 1993; Gibson, 2001; Prussia & Kinicki, 1996).  
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33 Collective efficacy is “a group’s shared belief in its conjoint capabilities to organize and  
34 execute the courses of action required to produce given levels of attainments” (Bandura 1997:  
35 477). When strong collective efficacy exists, groups develop clear group goals as well as clear  
36 strategies for reaching those goals (Bandura 1997, 2001). Groups with strong collective efficacy  
37 manage their resources through more efficient analytical thinking and a more effective problem-  
38 solving process within the team. In all, a strong sense of collective efficacy is reflected in many  
39 group processes that are essential to a work unit’s performance.  
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47 Research has established that collective efficacy is a meaningful and measurable attribute  
48 of work units (Gibson, 1999; Kozlowski & Bell, 2003; Kozlowski & Ilgen, 2006) and is strongly  
49 related to group performance. Kozlowski and Bell note that “virtually all the studies that have  
50 examined the issue have found a positive relationship between collective efficacy and work team  
51 effectiveness” (p. 35.) Two meta-analyses also support the relationship between collective  
52 efficacy and group performance. Gully, Incalcaterra, Joshi, and Beaubien (2002) found a mean-  
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4 corrected correlation between team-level efficacy and team performance of .41 and Stajkovic,  
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6 Lee, and Nyberg (2009) found a corrected correlation of .37.  
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8 We argue abusive supervision climate negatively influences collective efficacy and task  
9  
10 teamwork processes. Further, task teamwork processes influence task-oriented group outcomes  
11  
12 (i.e., group performance). Thus, we expect task teamwork processes to mediate the relationship  
13  
14 between abusive supervision climate and task-oriented group outcomes. Specifically, we  
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16 examine collective efficacy as a mediator of the relationship between abusive supervision  
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18 climate and group performance.  
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20  
21 Abusive supervision climate influences collective efficacy and task teamwork processes  
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23 in two ways. First, abusive supervision climate influences psychological safety. Cropanzano et  
24  
25 al. (2011) argue psychological safety plays an important role in task teamwork processes.  
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27 Psychologically safe environments facilitate the development of collective efficacy because they  
28  
29 represent a setting in which team members seek and provide feedback and are willing to ask for  
30  
31 and provide help or expertise. These environments facilitate team learning and the team's ability  
32  
33 to take appropriate action to accomplish its work (Edmondson, 1999), which contributes to the  
34  
35 development of collective efficacy.  
36

37 An abusive supervision climate should be associated with low levels of psychological  
38  
39 safety. In abusive supervision climates, members are likely to fear ridicule. They are likely to be  
40  
41 wary of asking for help, which may be taken as a sign of incompetence, thereby subjecting  
42  
43 themselves to punishment and abuse. Further, a consequence of abuse is increased cynicism and  
44  
45 a generalized distrust of others (Keashly, 1998). Indeed, Tepper et al. (2004) found that  
46  
47 individuals responded negatively to the positive behavior of coworkers when supervisors were  
48  
49 abusive. These attributes of abusive supervision climate may harm task-related processes such as  
50  
51 team learning, goal setting, and developing common strategies for task accomplishment, thereby  
52  
53 decreasing collective efficacy, and in turn, negatively impacting performance behaviors.  
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56 Second, abusive supervision climate may influence the workgroup's collective efficacy  
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58 beliefs. Many pieces of information shape efficacy beliefs, including prior performance (Early &  
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4 Kanfer, 1985), verbal persuasion (Earley & Kanfer, 1985), psychological and affective arousal  
5 (Bandura, 1997), team perceptions of ability, amount and type of external aid received (Bandura,  
6 Adams, Hardy & Howells, 1980), and emotional states (Kavanagh & Bower, 1985). Abusive  
7 supervision actions are directly relevant to all of these pieces of information that may be  
8 processed by a workgroup. For example, survey items for abusive supervision (Tepper, 2000)  
9 assess the extent to which a supervisor reminds employees of previous mistakes and failures,  
10 withholds credit for positive performance, expresses beliefs about the incompetence of  
11 employees, publicly assigns blame for failure to employees, and so forth. Such actions will  
12 shape team assessments of their own ability to succeed—hence their collective efficacy—and in  
13 turn, team performance (Bandura 1997, 2001).  
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25 In sum, we suggest that task teamwork processes in the form of collective efficacy will  
26 mediate the relationship between abusive supervision climate and task-related work unit  
27 outcomes.  
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31 *Hypothesis 2. Collective efficacy will mediate the relationship between abusive*  
32 *supervision climate and group performance.*  
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## 35 **METHOD**

### 36 **Sample and Procedure**

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38 We recruited participants via the snowball sampling method (Tepper, 1995). We  
39 approached 453 students in an upper-level undergraduate business course in a large university in  
40 the southeastern U.S. to act as contact persons for regional organizations, in exchange for extra  
41 course credit. These contacts identified and recruited participants for the study in the form of  
42 workgroups within those organizations. If the student contact worked 20 hours or more, he or she  
43 was able to act as the focal employee participant and was further instructed to distribute survey  
44 links randomly to three additional coworkers and the immediate supervisor. If the student did  
45 not work at least 20 hours, he or she provided survey links to a focal employee in an organization,  
46 who, in turn, distributed survey links to the other participants (three coworkers and one  
47 supervisor). Participation was voluntary and respondents were assured full confidentiality.  
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4 Contact persons were informed that all participants had to be employees of the participating  
5 organization, working together in the same work unit with frequent interactions among  
6 employees. At the end of the study, 222 student contacts received credit for completing the  
7 process successfully, which consisted of the research team receiving usable surveys from a focal  
8 employee, three coworkers, and the unit supervisor.  
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14 Because workgroups vary considerably in size, we looked to previous research for  
15 guidance on the appropriate number of employees to sample from each workgroup. Research in  
16 the climate and groups literatures suggests that three to five employees from a work unit provide  
17 sufficient responses for assessing a workgroup (Colquitt, Noe & Jackson, 2002; Newman & Sin,  
18 2009; Richardson & Vandenberg, 2005; Schminke, Ambrose, & Neubaum, 2005; Schneider,  
19 Hanges, Smith, & Salvaggio, 2003; Schneider, Salvaggio, & Subirats, 2002; Schneider, White, &  
20 Paul, 1998; Tracey & Tews, 2005). Following these precedents, we asked our contact persons to  
21 recruit four employees per work unit (one focal employee and three coworkers).  
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31 In order to assure that the surveys were completed by the correct sources, we followed a  
32 fixed protocol. First, when introducing the study to contact persons and focal employees, we  
33 strongly emphasized the integrity of the scientific process and the importance of proper  
34 distribution of survey links to ensure that process. Second, we utilized Qualtrics as our survey  
35 tool, which allowed us to check IP addresses and time stamps to ensure that the surveys were  
36 submitted at different times and from different computers. The Qualtrics software recorded this  
37 information, and we detected no problematic responses.  
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45 We received a total of 882 employee responses from the 222 work units, for an average of  
46 3.97 employee respondents per work unit. These respondents were 46.6% male and averaged  
47 27.8 years of age, with 3.3 years of experience in the organization and 2.7 years in the  
48 department. The supervisor respondents were 63% male. They averaged 38.9 years of age, with  
49 8.4 years of experience in the organization and 5.4 years in the department. The employee  
50 surveys contained measures of abusive supervision climate, group identity, and collective  
51 efficacy. In addition, employees provided information regarding control variables (employee  
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4 tenure and group size). The supervisor survey contained scales measuring the outcome variables  
5 (group cooperation, group OCB, and group performance).  
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## 8 **Measures**

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10 *Abusive supervision climate.* To assess abusive supervision climate, we employed a five-  
11 item measure of abusive supervision (Mitchell & Ambrose, 2007), which has been adapted from  
12 Tepper's (2000) 15-item abusive supervision scale. These five items reflect a supervisor's active-  
13 aggressive abuse toward subordinates. We modified these items to reflect a referent shift, so as to  
14 capture perceptions of abuse targeted toward group members overall, rather than abuse targeted  
15 toward the self. Employees were asked to rate the extent to which they agreed with statements  
16 such as "My supervisor ridicules members of my work group" and "My supervisor tells members  
17 of my work group they are incompetent," using a five-point response format (1 = strongly  
18 disagree, 5 = strongly agree) ( $\alpha=.94$ ).  
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29 Following previous climate research (e.g., Chen et al., 2007; Colquitt et al., 2002; Liao &  
30 Rupp, 2005), we aggregated the individual-level perceptions by calculating the mean value of  
31 responses across group members to create the abusive supervision climate score. That is, we  
32 averaged the individual values for abusive supervision climate across all members in a work unit  
33 to arrive at a final group-level abusive supervision climate score.  
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39 Before aggregating the responses, we confirmed that the degree of agreement regarding  
40 abusive supervision climate was sufficient to justify this approach. We calculated  $r_{wg}$  scores  
41 (James, Demaree, & Wolf, 1984) as well as intraclass correlation coefficients, ICC(1) and ICC(2)  
42 (Bartko, 1976; James et al., 1984; Shrout & Fleiss, 1979). For each of these indices, scholars  
43 have proposed cut-off values that, which when met, confirm appropriateness of aggregation for a  
44 construct. These cut-off values are .70 (or above) for the  $r_{wg}$  score (James, et al., 1984), .10  
45 (indicating moderate agreement) to .25 (indicating strong agreement) for ICC(1) scores  
46 (LeBreton & Senter, 2008), and above .50 (moderate agreement) to .60 (strong agreement) for  
47 ICC(2) scores (Glick, 1985; LeBreton & Senter, 2008). The  $r_{wg}$  score for abusive supervision  
48 climate was .87, the ICC(1) score was .52, and the ICC(2) score was .81. All indicate adequate  
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4 agreement to justify aggregation.

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6 ***Construct validity of abusive supervision climate.*** The central theme of this research is  
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8 that conceptualizing abusive supervision at the group level (abusive supervision climate) allows  
9  
10 us to explore its relationship with group-level outcomes not addressed by individual-level  
11  
12 perspectives on abuse. Before testing for those relationships, however, we clarify the construct  
13  
14 space of the abusive supervision climate construct.

15  
16 Previous climate research emphasizes the importance of establishing whether the  
17  
18 relationship between a work climate and individual-level outcomes is robust—that is, whether  
19  
20 relationships between group-level phenomena and outcomes hold, above and beyond individual-  
21  
22 level perceptions of the climate variable (Cropanzano et al., 2011; Liao & Rupp, 2005; Morgeson  
23  
24 & Hofmann, 1999). Both conceptual and empirical foundations exist for anticipating a  
25  
26 relationship between abusive supervision climate and individual-level outcomes.

27  
28 Conceptually, the effect of abusive supervision climate on individual members may stem  
29  
30 from the personal investment people have with their teams. More specifically, even though  
31  
32 abusive supervision climate damages important team-level processes, individual members may  
33  
34 also be affected by negative behavior aimed at the group. This may happen in two ways.

35  
36 First, negative supervisory behavior aimed at group members may adversely influence  
37  
38 those members' perception of their own social standing within the group and the value associated  
39  
40 with being a member of the work unit (Tyler, 1989; Tyler, DeGoey, & Smith, 1996). This  
41  
42 negative treatment may manifest itself at the individual level in the form of less cooperative and  
43  
44 extra-role behavior, lower levels of commitment to the group, decreased pride in group  
45  
46 membership, and lower self-esteem (Tyler et al., 1996).

47  
48 Second, negative treatment aimed at a group can also have a broader set of effects on  
49  
50 individual-level outcomes because it indicates a general deficiency of respect for the group itself,  
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52 thus further harming members' ability to take pride in their group membership (Deutsch & Steil,  
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54 1988; Lind & Earley, 1992). For example, when an authority figure mistreats or abuses a  
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56 member of a group, this action communicates to the group's members its low social standing  
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4 (Tyler, 1989). This loss in group status may thereby create individual-level consequences such  
5 as reductions in individuals' self-worth and self-esteem (Tyler, 1989; Tyler et al., 1996; Tyler &  
6 Blader, 2000). These negative influences may in turn affect individual responses to abuse. For  
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(Tyler, 1989). This loss in group status may thereby create individual-level consequences such as reductions in individuals' self-worth and self-esteem (Tyler, 1989; Tyler et al., 1996; Tyler & Blader, 2000). These negative influences may in turn affect individual responses to abuse. For example, Priesemuth, Arnaud, and Schminke (2013) found that a reduced focus on team processes, created by an unfair work environment, encouraged self-serving political behaviors in members of work units. This suggests that in addition to negative behaviors workgroups display as a function of an abusive climate, individual members may simultaneously experience unfavorable attitudes and emotional states, and express corresponding negative behaviors.

Other research indicates that group-level conditions can exert considerable influence on individual-level outcomes. For example, Gladstein (1984) showed that specific configurations of team-level maintenance and task behaviors influenced individual job satisfaction. Hoegl and Gemuenden (2001) likewise found teamwork process quality to be related to individual member satisfaction and learning. Similarly, Hochwarter, Kiewitz, Castro, Perrewé, and Ferris (2003) demonstrated the relationship of collective efficacy to individual job satisfaction, and Jex and Bliese (1999) confirmed its relationship to individual-level job satisfaction, organizational commitment, and psychological strain.

In short, both theory and empirical evidence point to group-level influences on individual-level outcomes. Therefore, before examining the influence of abusive supervision climate on group processes and consequences, we address two questions: (1) Does abusive supervision climate also predict individual-level outcomes? (2) If so, does abusive supervision climate provide explanatory power for those individual-level outcomes, above and beyond individual-level abuse experiences? We do so by exploring the impact of abusive supervision climate on various individual-level outcomes that previous research has found to be associated with individual-level abusive supervision experiences—job-related attitudes (turnover intentions, job satisfaction, and commitment), job-related behaviors (job performance, OCB, and antisocial behavior), work-family conflict, and health-related concerns (emotional exhaustion and overall well-being). In each case we assess whether abusive supervision climate accounts for variance

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4 in individual-level outcomes while controlling for individual abuse experiences.

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6 We explored these issues in a separate sample using the same sampling method as  
7  
8 described above. We approached 843 organizational contacts and received data from 237 work  
9  
10 units, resulting in an average of 4.87 respondents per work unit. Of these, 237 employees were  
11  
12 focal respondents and 919 were coworkers. We used established measures for all variables, and  
13  
14 the resulting reliability coefficients all exceeded the acceptable norm of .70<sup>1</sup> (Nunnally, 1978).  
15  
16 Furthermore, aggregation indices of abusive supervision climate exceeded conventional  
17  
18 standards of agreement ( $r_{wg} = .75$ ;  $ICC(1) = .29$ ;  $ICC(2) = .67$ ), thus supporting aggregation of the  
19  
20 abusive supervision climate measure to a group-level construct.  
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22  
23 Confirmatory factor analyses using LISREL 8.8 (Jöreskog & Sörbom, 2006) lent further  
24  
25 support for discriminant validity and showed that all scale items loaded onto their corresponding  
26  
27 constructs. That is, we tested an 11-factor model, which included abusive supervision climate,  
28  
29 abusive supervision at the individual level, the three attitudinal outcomes, work-family conflict,  
30  
31 two health-related outcome variables, and the three behavioral consequences all as separate  
32  
33 factors. Results indicated the 11-factor model fit the data well ( $\chi^2 = 2939.66$ ,  $df = 1655$ ,  $p < .001$ ,  
34  
35  $RMSEA = .06$ ,  $CFI = .97$ ;  $NFI = .92$ ,  $NNFI = .97$ ). We compared these fit results with those of  
36  
37 alternative 10-factor, five-factor, and one-factor models. The 10-factor model combined the  
38  
39 abusive supervision climate and individual perceptions of abuse as one latent factor. The five-  
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41 factor model included the abusive supervision climate and individual perceptions of abuse as one  
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43 factor; the other four factors were the attitudinal outcomes, the health-related concerns (well-  
44  
45 being and emotional exhaustion), work-family conflict, and the behavioral outcomes. A one-  
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47 factor model loaded all items onto a single factor. The 11-factor model had a superior fit over  
48  
49 each alternative model.<sup>2</sup> In all, these results supported the distinctiveness of the abusive  
50  
51 supervision climate measure and our measurement model as a whole.  
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54 Controlling for employee age, gender (Bamberger & Bacharach, 2006; Thau, Bennett,  
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56 Mitchell, & Marrs, 2009; Zellars et al., 2002) and individual perceptions of abusive supervision  
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58 ( $\alpha = .94$ ), regression analyses demonstrated that abusive supervision climate was significantly  
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4 related to each of the individual-level employee attitude outcomes. That is, abusive supervision  
5 climate related positively to subordinate turnover intentions ( $\beta=0.56$   $p<. 01$ ), and negatively to  
6 job satisfaction ( $\beta=-0.42$ ,  $p<. 01$ ) and organizational commitment ( $\beta=-0.34$ ,  $p<. 01$ ), above and  
7 beyond individual perceptions of abuse. Abusive supervision climate was also significantly  
8 related to each of the conflict and health-related outcomes. It was positively related to work-  
9 family conflict ( $\beta=0.27$ ,  $p<. 05$ ) and to employee emotional exhaustion ( $\beta=0.55$ ,  $p<. 01$ ), and  
10 negatively related to overall well-being ( $\beta=-0.27$ ,  $p<. 01$ )—in each case, above and beyond  
11 individual perceptions of abusive supervision. The results did not, however, reveal a significant  
12 relationship between abusive supervision climate and any of the individual-level behavioral  
13 outcomes we explored (performance, OCB, and antisocial behavior). Our findings suggest these  
14 employee behaviors were primarily impacted by individual perceptions of abuse.  
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27 Overall, our findings show abusive supervision climate represents a construct that is  
28 distinct from individual perceptions of abuse. Further, abusive supervision climate is related to  
29 many individual-level outcomes, and for attitudinal, conflict, and health-related outcomes, its  
30 effect holds above and beyond the influence exerted by individual abuse perceptions.  
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35 **Group identification.** Group identification was assessed with Doosje, Ellemers and  
36 Spears' (1995) four-item group identification scale. Employees were asked to reflect upon the  
37 team they currently worked with and respond to items such as "I define myself as a member of  
38 the group," and "I identify with other members of my group," using a five-point response format  
39 (1 = strongly disagree, 5 = strongly agree) ( $\alpha=.87$ ). The mean  $r_{wg}$  score across the sample  
40 was .87. The ICC(1) score for group identification was .21, and the ICC(2) score was .51, both  
41 indicating sufficient agreement for aggregation (LeBreton & Senter, 2008).  
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50 **Collective efficacy.** We assessed collective efficacy with Jex and Bliese's (1999) four-  
51 item measure of collective efficacy, adapted to reflect members of a workgroup as the referent.  
52 Using a five-point response format (1 = strongly disagree, 5 = strongly agree), employees rated  
53 the extent to which they agreed with statements such as "I have real confidence in my team's  
54 ability to be successful" and "I think my team does a better job at tasks than most teams"  
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4 ( $\alpha=.87$ ). The mean  $r_{wg}$  score for collective efficacy was .82. The ICC(1) score was .20, and the  
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6 ICC(2) score was .50, indicating aggregation was appropriate.  
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8       **Group cooperation.** Cooperation in the group was assessed with Chatman and Flynn's  
9 (2001) five-item scale for cooperative team norms. Supervisors rated the extent to which they  
10 agreed with statements such as "There is a high level of cooperation between members of the  
11 work group I supervise," on a five-point response format (1 = strongly disagree, 5 = strongly  
12 agree). Item analyses revealed that a reverse-coded item in the scale, "There is little cooperation  
13 among members on tasks," negatively influenced the reliability of the measure. Research has  
14 pointed out concerns and problems of measures containing reverse-coded items. Participants can  
15 misinterpret or misread reverse-coded items, as it is easy to overlook words that negate a certain  
16 statement (Swain, Weathers, & Niedrich 2008; Weijters & Baumgartner, 2012). Moreover,  
17 research has found that reverse-coded items yield inconsistent factor structures (Netemeyer,  
18 Bearden, & Sharma, 2003). We therefore removed this item from our analysis, which resulted in  
19 four items assessing cooperation between work unit members ( $\alpha=.70$ ).  
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33       **Organizational citizenship behavior.** Employee OCB was assessed on a five-point  
34 response format (1=strongly disagree, 5=strongly agree) using Podsakoff, MacKenzie, Moorman,  
35 and Fetter's (1990) five-item helping scale. Supervisors rated the extent to which they agreed  
36 with statements such as "Members of the work group are always ready to lend a helping hand to  
37 those around" and "Employees in the work group I supervise help others who have been absent  
38 and are returning to work" ( $\alpha=.85$ ).  
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45       **Group performance.** Workgroup performance was assessed with a six-item measure  
46 from Tjosvold et al., (2003), adapted to have the members of the work unit as the referent for  
47 each item. Hence, supervisors rated the extent to which they agreed with statements such as  
48 "Members of the work group I supervise work effectively," and "Members of the work group I  
49 manage meet or exceed their productivity requirements," on a five-point response format (1 =  
50 strongly disagree, 5 = strongly agree) ( $\alpha=.88$ ).  
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57       **Control variables.** Following previous research, we also controlled for average group  
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4 size and group experience (average tenure of department members) when predicting group-level  
5 outcomes (cooperation, OCB, and performance) (Mayer et al., 2009; Stewart, 2006).  
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## 8 RESULTS

### 9 Descriptive Statistics and Correlations

10 Table 1 shows the means, standard deviations, intercorrelations, and scale reliabilities.  
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12 The correlations were moderate between abusive supervision climate and the three outcome  
13 variables, as well as between abusive supervision climate and the two indicators of our proposed  
14 mediating mechanisms: group identification and collective efficacy. The results also reveal  
15 moderate correlations between the mediating mechanisms and the work unit outcomes.  
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24 Insert Table 1 about here  
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### 28 Analyses

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30 We first conducted a CFA of the variables in our model, utilizing a maximum-likelihood  
31 estimation in LISREL 8.8 (Jöreskog & Sörbom, 2006). We tested a model that consisted of six  
32 factors: abusive supervision climate, group identification, collective efficacy, group cooperation,  
33 group OCB, and group performance. Results showed the six-factor model fit the data well ( $\chi^2 =$   
34 750.88,  $df = 335$ ,  $p < .001$ , RMSEA = .07, CFI = .96, NFI = .94, NNFI = .96). We further  
35 compared the six-factor model to an alternative four-factor model, which included abusive  
36 supervision climate as a single factor, the two mediator variables (group identity and collective  
37 efficacy) as a single factor, the two group-oriented behaviors as a separate factor, and group  
38 performance as another factor ( $\chi^2 = 957.78$ ,  $df = 344$ ,  $p < .001$ , RMSEA = .09, CFI = .94, NFI =  
39 91, NNFI = .93). Finally, we compared the six-factor model to a one-factor model, in which all  
40 items loaded onto a single factor ( $\chi^2 = 3161.55$ ,  $df = 350$ ,  $p < .001$ , RMSEA = .19, CFI = .52,  
41 NFI = .51, NNFI = .48). A chi-square difference test showed the six-factor model exhibited a  
42 significantly better fit than the four-factor model ( $\chi^2_{\text{difference}} = 206.90$ ,  $df = 9$ ,  $p < .001$ ) and the  
43 one-factor model ( $\chi^2_{\text{difference}} = 2410.67$ ,  $df = 15$ ,  $p < .001$ ).  
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4 The purpose of this study was to explore the mediating mechanisms by which abusive  
5 supervision climate influenced group-oriented outcomes such as cooperation and group OCB,  
6 and task-oriented outcomes such as group performance. In order to test our multiple mediation  
7 model, we followed a structural equation modeling (SEM) approach using LISREL 8.8 (Jöreskog  
8 & Sörbom, 2006). Because the two mediating variables represent conceptually related group  
9 processes, we allowed the error terms of the factors to covary. Similarly, the error terms of three  
10 outcome variables were allowed to covary. Figure 2 displays the structural equation model.  
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20 Insert Figure 2 about here  
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25 Results show that the model had a good fit to the data ( $\chi^2 = 847.38, df = 389, p < .001,$   
26 RMSEA = .07, CFI = .96, NFI = .93, NNFI = .95; Bentler & Bonett, 1980; Browne & Cudeck,  
27 1993; MacCallum, Browne, & Sagawara, 1996), supporting the hypothesized relationships of  
28 abusive supervision climate with group identity ( $\beta = -.48, p < .01$ ) and collective efficacy ( $\beta = -.50,$   
29  $p < .01$ ); group identification with group cooperation ( $\beta = .32, p < .01$ ) and group OCB ( $\beta = .28,$   
30  $p < .01$ ); and collective efficacy with group performance ( $\beta = .31, p < .01$ ).  
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37 To further examine whether group identification and collective efficacy fully or partially  
38 mediated the relationship between abusive supervision climate and the work unit outcomes, we  
39 tested an alternative model that included direct paths from the independent variable to the  
40 outcome variables. This partial mediation model also provided a good fit to the data ( $\chi^2 = 837.98,$   
41  $df = 386, p < .001,$  RMSEA = .07, CFI = .96, NFI = .93, NNFI = .96). A chi-square difference test  
42 showed that the partial mediation model offered a slightly better fit ( $\chi^2_{\text{difference}} = 9.4, df = 3, p < .05$ )  
43 than the full mediation model, indicating that abusive supervision climate exerts some direct  
44 effect on outcomes, as well as indirect effects through our hypothesized mediators. Results show  
45 significant direct paths from abusive supervision climate to group cooperation ( $\beta = -.22, p < .05$ )  
46 and group performance ( $\beta = -.18, p < .01$ ), but not between abusive supervision climate and group  
47 OCB. This indicates that group identity and collective efficacy partially mediated the  
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4 relationships between abusive supervision climate and group cooperation and group performance,  
5 respectively, whereas group identity fully mediated the link between abusive supervision climate  
6 and group OCB. (See Figure 3).  
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16 Finally, we examined the indirect effects of abusive supervision climate on the three  
17 outcome variables. Indirect effects reflect the extent to which the independent variable influences  
18 the outcomes through the mediating mechanisms. The SEM results revealed that all three indirect  
19 effects were significant (cooperation  $\beta = -.12$ ,  $p < .01$ , OCB  $\beta = -.12$ ,  $p < .01$ , performance  $\beta = -.10$ ,  
20  $p < .01$ ). In all, Hypotheses 1 and 2 were supported.  
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### 26 Supplemental Analyses

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28 Because our sample came from a variety of organizations, ranging from large  
29 international corporations with thousands of employees to small startup firms with few  
30 employees, the average number of employees per work unit was 13.91. This higher mean of  
31 group members may raise questions about the representativeness in our work unit sample and a  
32 potential resulting bias in the data. To address this issue, we conducted supplementary analyses.  
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39 First, we took a closer look at the sample. Analyses revealed that, although work units  
40 averaged 14 members, the data indicated a smaller median of 8.75 employees per unit, and an  
41 even smaller mode of six employees per unit. These numbers indicate that the majority of our  
42 work units sampled were relatively small, so in most cases a substantial proportion of work unit  
43 members participated in the data collection process. Further analyses show that we were able to  
44 gather data from, on average, slightly more than half of the total members (51%) of the  
45 participating work units.  
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53 Moreover, we explored whether the percentage of participating group members exerted a  
54 moderating effect on the relationships in our model. No such relationships were found between  
55 abusive supervision climate and either the mediating mechanisms or the three outcome variables;  
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4 thus, the number of respondents employed in our sample does not appear to bias results related to  
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6 group processes and group outcomes.  
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## 8 **DISCUSSION**

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10 In the last decade, much has been learned about abusive supervision. However, by  
11 conceptualizing abusive supervision at the individual level and emphasizing the negative impact  
12 of abuse on individual members in the organization, prior research likely understates abusive  
13 supervision's full impact. By focusing only on targeted individuals, it overlooks the possibility  
14 that abuse becomes embedded in the climate of workgroups, thereby affecting the group at large.  
15 A primary contribution of our research therefore lies in recognizing the existence of an abusive  
16 supervision climate. That is, our research expands the traditional individual-level focus by  
17 considering abusive supervision as a group-level variable impacting group teamwork processes  
18 and thus affecting whole work units and departments.  
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29 We provide a test of the mediating mechanisms by which abusive supervision climate  
30 impacts workgroup behavior. The results demonstrate that each of the hypothesized mediation  
31 mechanisms plays a significant role in explaining the impact of abusive supervision climate on  
32 outcomes. Group identity mediated the relationship between abusive supervision climate and the  
33 group-oriented outcomes of OCB and cooperation. Collective efficacy mediated the relationship  
34 between abusive supervision climate and group performance.  
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41 More specifically, we argued an abusive supervision climate may influence outcomes via  
42 interpersonal teamwork processes reflected in group identity because abuse signals that the group  
43 and its members are not valued (Tyler & Blader, 2000) and because it signals that rude and  
44 disrespectful treatment is appropriate for interpersonal interactions. Consequently, an abusive  
45 climate frustrates team interactions, commitment and social bonding of group members.  
46 Demoralized members psychologically withdraw from the work team, reducing identification  
47 with the team. This is associated with less cooperative behaviors among members.  
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55 Abusive supervision climate also influences outcomes via the task teamwork processes  
56 reflected in collective efficacy. An abusive supervisory climate fractures the psychological  
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4 safety that allows team members to seek and provide feedback, help, and expertise that underlie  
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6 its ability to learn and engage in appropriate actions to accomplish its work. The absence of such  
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8 an environment will negatively impact a team's belief in its own task efficacy, thereby negatively  
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10 affecting the unit's performance. In all, the results indicate the potential power of abusive  
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12 supervision climate and that its influence on different outcomes is exerted through different paths.  
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14 Previous research on teams has emphasized the impact of two distinct group processes—  
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16 interpersonal teamwork and task teamwork—on group outcomes (Cropanzano et al., 2011;  
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18 Gladstein, 1984; Hoegl & Gemuenden, 2001). Our findings are consistent with previous findings  
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20 in which work climates are related to outcomes through these interpersonal and task processes.  
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23 Our results further highlight important points for work on abusive supervision. In other  
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25 words, the conceptual shift to a focus on group processes, as well as the specific results of our  
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27 study, have important implications for abusive supervision researchers. First, our research  
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29 demonstrates abusive supervision is more than an individual-level phenomenon. Employees also  
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31 form collective impressions of abusive supervision, and these shared perceptions influence group  
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33 outcomes. Thus, a supervisor need not be abusive to a particular individual to have negative  
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35 effects on that individual and how that individual relates to, and interacts with, group members.  
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37 Abusive supervision can become embedded in the fabric of the workgroup, thereby having  
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39 greater influence than suggested by individual-level perspectives on abusive supervision. This  
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41 idea is underscored by considering the relationship between abusive supervision climate and  
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43 individual-level outcomes including work attitudes, health-related outcomes, and work-family  
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45 conflict. We show an abusive climate impacts these individual responses beyond the effect of  
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47 individual-level measures of abusive supervision. Thus, consistent with Johns' (2006) discussion  
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49 of the importance of context in organizational research, these results suggest abusive supervision  
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51 climate is an important contextual variable for abusive supervision researchers.  
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54 Second, by integrating research on work climates and group process models (e.g.,  
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56 Cropanzano et al., 2011; Hoegl & Gemuenden, 2001), we identify new mechanisms by which  
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58 abusive supervision impacts employee behavior in work units. Previous research has explored a  
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4 variety of theoretical explanations for the impact of abuse on employees, including theories of  
5 fairness (Aryee, Sun, Chen, & Debrah, 2007; Tepper, 2000), aggression (Mitchell & Ambrose,  
6 2007), social learning and social information processing (Mawritz, Mayer, Hoobler, Wayne, &  
7 Marinova, 2012; Restubog, Scott, & Zagenczyk, 2011), and personality (Bamberger &  
8 Bacharach, 2006; Tepper, Duffy, & Shaw, 2001). However, researchers have not considered the  
9 role of social identity or collective efficacy in understanding the impact of abusive supervision.  
10 Our study suggests both of these constructs represent powerful underlying mechanisms by which  
11 abuse affects outcomes at the group level.  
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21 Furthermore, this paper demonstrates the importance of considering multiple processes  
22 simultaneously to understand fully how abusive supervision climate impacts group outcomes.  
23 Examining multiple mediators simultaneously helps to clarify the influence abusive supervision  
24 climate exerts on group processes, which affect a broad range of outcomes. Based on our  
25 examination of multiple mediating mechanisms, it is clear that the negative influence of abusive  
26 supervision climate is multifaceted.  
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33 Finally, our study shows abusive supervision climate influences group-level outcomes not  
34 previously considered in abusive supervision research. Thus, we expand the understanding of  
35 abusive supervision by exploring the nomological net of abusive supervision climate and the  
36 processes by which it influences outcomes. In so doing, we demonstrate the broad influence  
37 abusive supervisors have on their subordinates and the workgroups in their organizations.  
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### 43 **Implications for Future Research and Practice**

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45 Our multiple-mediator model also suggests avenues for future research. Variables  
46 undoubtedly exist that enhance or weaken the relationship between abusive supervision climate  
47 and interpersonal and task processes in teams. For example, climate strength (the strength of  
48 agreement in the group about climate) is likely to play an important role. Research on other  
49 forms of workgroup climate (e.g., justice, innovation, service) demonstrates that climate strength  
50 moderates the relationship between climate and outcomes (Colquitt et al., 2002; González-Romá,  
51 Peiró, & Tordera, 2002; Schneider et al., 2002). Further, the group identity and collective  
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4 efficacy literatures have a rich history of theoretical and empirical research that could further  
5 inform research on abusive supervision. For example, research on collective efficacy suggests  
6 task interdependence influences the development of collective efficacy (Paskevich, Brawley,  
7 Dorsch, & Widmeyer, 1999). Recently, Gibson and Earley (2007) suggested task  
8 interdependence may moderate the relationship between antecedents and collective efficacy.  
9 Thus, task interdependence may play a role in the influence of abusive supervision climate,  
10 collective efficacy, and group performance.  
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18 The pattern of full and partial mediation results also points to future research  
19 opportunities. The impact of abusive supervision climate on OCB was fully mediated by group  
20 identity. However, the impact of abusive supervision climate on group cooperation and  
21 performance was only partially mediated by group identity and collective efficacy, respectively.  
22 Thus, these direct influences of abusive supervision climate on outcomes may be worthy of  
23 further examination. Moreover, these results suggest the effects of abusive supervision climate  
24 on outcomes may operate through additional mediational paths, such as other aspects of  
25 interpersonal and team processes not fully captured in our model. In general, the consideration  
26 of interpersonal and task processes in teams opens new avenues for abusive supervision research.  
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37 The influence of group identity and collective efficacy in predicting group-level outcomes  
38 also raises the possibility that at the individual level, abusive supervision may influence  
39 individual-level identification with the group and individual efficacy as well. Research  
40 demonstrates a clear relationship between social identity and individual-level outcomes such as  
41 cooperation and helping (Blader & Tyler, 2009). Similarly, research on efficacy demonstrates a  
42 strong relationship between individual efficacy beliefs and individual performance (Bandura,  
43 2001). Further, although research has not considered the influence of abusive supervision on  
44 these individual-level constructs, research on related constructs like leadership suggests abusive  
45 supervision is likely to influence individuals' social identification and efficacy beliefs (van  
46 Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004; Walumbwa, Avolio, & Zhu, 2008).  
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57 Considering abusive supervision at the climate level has implications for practitioners as  
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4 well. Of course, a low tolerance for abuse, and training for abusive supervisors, may be the most  
5 direct routes for an organization to address abusive supervision issues. Nonetheless, the results  
6 suggest other approaches may be fruitful as well. Understanding that abusive supervision  
7 climate influences outcomes in multiple ways provides guidance for organizational interventions.  
8 For example, pockets of abuse (perhaps well hidden) may persist even in organizations dedicated  
9 to minimizing its presence. Our results suggest organizations might consider initiatives aimed at  
10 mitigating the negative impact of such residual abuse. For example, training and activities aimed  
11 at enhancing collective efficacy or social identity have the potential to buffer work teams from  
12 the negative influences of residual abuse. (See, for example, Kozlowski & Ilgen, 2006: 91.)  
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## 22 **Limitations**

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24 The study has some limitations that should be noted. First, the data are cross-sectional.  
25 This limits our ability to infer causality. Second, it is likely the complexity of the relationships  
26 among these variables is greater than that captured in our model. Although we were able to test  
27 multiple mediation processes simultaneously, we neither modeled nor tested potential moderators  
28 of these mediation effects. As noted above, research in related areas points to potential  
29 moderators, and future research is needed to explore the boundary conditions of the relationships  
30 that emerged in our study.  
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39 Third, the student or organizational contact person in our study received limited instruc-  
40 tions on what type of work units were subject to the recruitment and survey process. For exam-  
41 ple, no specific instructions were given regarding the optimal size of the workgroups we hoped  
42 to study. Furthermore, although the contact persons were instructed to distribute surveys ran-  
43 domly to organizational members and coworkers, we were unable to track this part of the proce-  
44 dure. These two shortcomings in our data collection effort may raise at least two concerns. First,  
45 our data may suffer from a selection bias, as the focal employee may have distributed surveys to  
46 similar others (e.g., coworker friends) instead of randomly choosing coworkers. This, in turn,  
47 may affect the level of agreement within groups (Schneider, 1987), potentially impacting the re-  
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4 Another matter related to the sample might be the issue of representativeness, namely  
5 whether surveying a small number of employees from a larger unit provides an adequate repre-  
6 sentation of an entire workgroup. This is a valid concern, although our supplementary analyses  
7 showed that representativeness does not seem problematic in our sample, where work units in  
8 which a smaller percentage of employees were surveyed did not yield different results than  
9 groups in which a larger percentage of group members contributed. These analyses are further  
10 strengthened by statistics showing that, on average, our sample reflected responses from more  
11 than half of the employees represented in the work units surveyed. Still, the challenge of obtain-  
12 ing a representative sample of team members remains a meaningful concern.  
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22 Our study has some notable strengths as well. For example, we collected multi-source  
23 data from both supervisors and subordinates. Our data are therefore unlikely to suffer from  
24 common method variance or same source bias (Podsakoff, MacKenzie, Lee & Podsakoff, 2003).  
25 Finally, examining multiple mediators simultaneously provides a more complete perspective on  
26 the relationship between abusive supervision climate and outcomes than if each mediation path  
27 were explored in isolation. Research has adopted a similar multiple-mediator approach in other  
28 areas—such as career success, (Seibert, Kraimer, & Liden, 2001); ethical leadership (Walumb-  
29 wa, Mayer, Wang, Wang, Workman, & Christensen, 2011); discrimination (Goldman, Slaughter,  
30 Schmit, Wiley, & Brooks, 2008); trust in teams (De Jong & Elfring, 2010)—to better understand  
31 the phenomenon of interest. We believe a multiple mediator approach will similarly advance  
32 research in abusive supervision.  
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## 45 **Conclusion**

46 Interest in abusive supervision has increased in the last decade. The focus of this research,  
47 however, has remained on abusive supervision as an individual-level phenomenon. Our goal in  
48 this paper has been to take the abusive supervision literature in new directions by providing  
49 scholars with different perspectives regarding the phenomenon of abusive supervision, the  
50 processes by which it influences outcomes, and its future role in our models and theories.  
51 Drawing on theoretical perspectives not previously utilized in the abusive supervision literature,  
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4 this paper sheds light on the influence abusive supervision climate can have on workgroups and  
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6 the employees that comprise them. Our results suggest that group identification and collective  
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8 efficacy may function as critical elements in this process. This research, therefore, provides a  
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10 foundation for better understanding abusive supervision in the workplace.  
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**Footnotes**

<sup>1</sup> The measures and reliabilities for all scales in the construct validity study were as follows: Abusive supervision climate ( $\alpha=.94$ ), individual abusive supervision ( $\alpha=.94$ ), job satisfaction ( $\alpha=.92$ ), Cammann, Fichman, Jenkins, and Klesh (1983); turnover intentions ( $\alpha=.95$ ), Tepper, Carr, Breaux, Geider, Hu, and Hua (2009); organizational commitment ( $\alpha=.85$ ), Meyer and Allen's (1997); work-family conflict ( $\alpha=.92$ ), Netemeyer, Boles, and McMurrian (1996); emotional exhaustion ( $\alpha=.93$ ), Maslach and Jackson (1981); overall well-being ( $\alpha=.82$ ), Robins (1986); performance ( $\alpha=.76$ ), Williams and Anderson (1991); organizational citizenship behavior (OCB) ( $\alpha=.84$ ), Podsakoff, MacKenzie, Moorman, and Fetter (1990); antisocial behavior ( $\alpha=.80$ ), Robinson and O'Leary-Kelly (1998).

<sup>2</sup> The confirmatory factor analyses and chi-square difference tests in the construct validity study revealed the following information: Ten-factor model:  $\chi^2 = 3080.77$ ,  $df = 1665$ ,  $p < .001$ , RMSEA = .06, CFI = .97, NFI=. 92, NNFI=. 96,  $\chi^2_{\text{difference}} = 141.11$ ,  $df = 10$ ,  $p < .001$ .; five-factor model:  $\chi^2 = 4146.18$ ,  $df = 1700$ ,  $p < .001$ , RMSEA = .08, CFI = .92, NFI=. 88, NNFI=. 91,  $\chi^2_{\text{difference}} = 1206.53$ ,  $df = 45$ ,  $p < .001$ .; one-factor model:  $\chi^2 = 8193.03$ ,  $df = 1710$ ,  $p < .001$ , RMSEA = .13, CFI = .60, NFI=. 57, NNFI=. 59,  $\chi^2_{\text{difference}} = 5253.37$ ,  $df = 55$ ,  $p < .001$ .

## REFERENCES

- 1  
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7  
8 Aryee, S., Chen, Z. X., Sun, L., & Debrah, Y. A. 2007. Antecedents and outcomes of abusive  
9 supervision: Test of a trickle-down model. *Journal of Applied Psychology*, 92: 191-201.  
10  
11 Ashforth, B.E. 1985. Climate formation: Issues and extensions. *Academy of Management*  
12 *Review*, 10: 837-847.  
13  
14 Ashforth, B.E., & Mael, F. 1989. Social identity theory and the organization. *Academy of*  
15 *Management Review*, 14: 20-39.  
16  
17 Bales, R. F. 1958. Task roles and social roles in problem-solving groups. In E. E. Maccoby, T. M.  
18 Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology 3rd ed.*: 437-447. New  
19 York: Holt, Rinhart, & Winston.  
20  
21 Bamberger, P.A., & Bacharach, S.B. 2006. Abusive supervision and subordinate problem  
22 drinking: Taking resistance, stress and subordinate personality into account. *Human*  
23 *Relations*, 59: 723-752.  
24  
25 Bandura, A. 1993. Perceived self-efficacy in cognitive development and functioning.  
26 *Educational Psychology*, 28: 117-148.  
27  
28 Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: Freeman.  
29  
30 Bandura, A. 2001. Social cognitive theory: An agentic perspective. *Annual Review of*  
31 *Psychology*, 52: 1-26.  
32  
33 Bandura, A., Adams, N.E., Hardy, A.B., & Howells, G.N. 1980. Test of the generality of self-  
34 efficacy theory. *Cognitive Therapy and Research*, 4: 39-66.  
35  
36 Bartko, J. J. 1976. On various intraclass correlation reliability coefficients. *Psychological*  
37 *Bulletin*, 83: 762-765.  
38  
39 Bentler, P., & Bonett, D. 1980. Significance tests and goodness of fit in the analysis of  
40 covariance structures. *Psychological Bulletin*, 88: 588-606.  
41  
42  
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3  
4 Blader, S. L., & Tyler, T. R. 2009. Testing and extending the Group Engagement Model:  
5  
6 Linkages between social identity, procedural justice, economic outcomes and extra role  
7  
8 behavior. *Journal of Applied Psychology*, 94: 445-464.  
9
- 10 Bommer, W. H., Dierdorff, E. C., & Rubin, R. S. 2007. Does prevalence mitigate relevance? The  
11  
12 moderating effect of group-level OCB on employee performance. *Academy of*  
13  
14 *Management Journal*, 50: 1481-1494.  
15
- 16 Brown, M. E., Treviño, L. K., & Harrison, D. A. 2005. Ethical leadership: A social learning  
17  
18 perspective for construct development and testing. *Organizational Behavior and Human*  
19  
20 *Decision Processes*, 97: 117–134.  
21
- 22 Browne, M. W. & Cudeck, R. 1993. Alternative ways of assessing model fit. In K. A. Bollen, & J.  
23  
24 S. Long (Eds.) *Testing structural equation models*: 136–162. Beverly Hills, CA: Sage.  
25
- 26 Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. 1983. Assessing the attitudes and  
27  
28 perceptions of organizational members. In S. E. Seashore, E. E. Lawler, P. H. Mirvis, & C.  
29  
30 Cammann (Eds.), *Assessing organizational change*: 71-138. New York: Wiley.  
31  
32
- 33 Chan, D. 1998. Functional relationships among constructs in the same content domain at  
34  
35 different levels of analysis: A typology of composition models. *Journal of Applied*  
36  
37 *Psychology*, 83: 234–246.  
38
- 39 Chatman, J.A., & Flynn, F.J. 2001. The influence of demographic heterogeneity on the  
40  
41 emergence and consequences of cooperative norms in work teams. *Academy of*  
42  
43 *Management Journal*, 44: 956-974.  
44
- 45 Chen, G., & Bliese, P. D. 2002. The role of different levels of leadership in predicting self-and  
46  
47 collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, 87: 549-  
48  
49 556.  
50
- 51 Chen, G., Kirkman, B.L., Kanfer, R., Allen, D., & Rosen, B. 2007. A multilevel study of  
52  
53 leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, 92:  
54  
55 331–346.  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Colquitt, J. A., Noe, R. A., & Jackson, C. L. 2002. Justice in teams: Antecedents and  
5  
6 consequences of procedural justice climate. *Personnel Psychology*, 55: 83-109.  
7
- 8 Cropanzano, R., Li, A., & Benson, L., III. 2011. Peer justice and teamwork process. *Group &*  
9  
10 *Organization Management*, 36: 567-596.  
11
- 12 De Cremer, D., & van Knippenberg, D. 2005. Cooperation as a function of leader self-sacrifice,  
13  
14 trust, and identification. *Leadership and Organization Development Journal*, 26: 355-  
15  
16 369.  
17
- 18 De Cremer, D., & van Vugt, M. 1998. Collective identity and cooperation in a public goods  
19  
20 dilemma: A matter of trust or self-efficacy? *Current Research In Social Psychology*, 3:  
21  
22 1-11.  
23
- 24 De Jong, B. A., & Elfring, T. 2010. How does trust affect the performance of ongoing teams?  
25  
26 The mediating role of reflexivity, monitoring, and effort. *Academy of Management*  
27  
28 *Journal*, 53: 535-549.  
29
- 30 Deutsch, M., & Steil, J. M. 1988. Awakening the sense of injustice. *Social Justice Research*, 2:  
31  
32 3-23.  
33
- 34 Doosje, B., Ellemers, N., & Spears, R. 1995. Perceived intragroup variability as a function of  
35  
36 group status and identification. *Journal of Experimental Social Psychology*, 31: 410-439.  
37
- 38 Duffy, M. K., Ganster, D. C., Shaw, J. D., Johnson, J. L., & Pagon, M. 2006. The social context  
39  
40 of undermining at work. *Organizational Behavior and Human Decision Processes*, 101:  
41  
42 104-126.  
43
- 44 Dukerich, J.M., Golden B.R., Shortell, S.M. 2002. Keeping an eye on the beholder: The impact  
45  
46 of organizational identification, identity and image on the cooperative behaviors of  
47  
48 physicians. *Administrative Science Quarterly*, 47: 507-533.  
49
- 50 Earley, P. C. 1993. East meets West meets Mideast: Further explorations of collectivistic and  
51  
52 individualistic work groups. *Academy of Management Journal*, 36: 319-348.  
53  
54  
55  
56  
57  
58  
59  
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- 1  
2  
3  
4 Earley, P.C., & Kanfer, R. 1985. The influence of component participation and role models on  
5 goal acceptance, goal satisfaction, and performance. *Organizational Behavior and*  
6 *Human Decision Processes*, 36: 378-390.  
7  
8  
9  
10 Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative*  
11 *Science Quarterly*, 44: 350–383.  
12  
13  
14 Ehrhart, M. G. 2004. Leadership and justice climate as antecedents of unit-level organizational  
15 citizenship behavior. *Personnel Psychology*, 57: 61-94.  
16  
17  
18 Folger, R., & Cropanzano, R. 2001. Fairness theory: Justice as accountability. In J. Greenberg &  
19 R. Cropanzano (Eds.), *Advances in organizational justice*: 1–55. Stanford, CA: Stanford  
20 Univ. Press.  
21  
22  
23  
24 Gibson, C. B. 1999. Do they do what they believe they can? Group efficacy and group  
25 effectiveness across tasks and cultures. *Academy of Management Journal*, 42: 138-152.  
26  
27  
28 Gibson, C.B. 2001. Me and us: Differential relationships among goal-setting training, efficacy  
29 and effectiveness at the individual and team level. *Journal of Organizational Behavior*,  
30 22: 789 – 808.  
31  
32  
33  
34 Gibson, C.B., & Earley, P.C. 2007. Collective cognition in action: Accumulation, interaction,  
35 examination and accommodation in the development and operation of group efficacy  
36 beliefs in the workplace. *Academy of Management Review*, 32: 438-458.  
37  
38  
39  
40 Gladstein, D. L. 1984. Groups in context: A model of task group effectiveness. *Administrative*  
41 *Science Quarterly*, 29: 499-517.  
42  
43  
44  
45 Glick, W. H. 1985. Conceptualizing and measuring organizational and psychological climate:  
46 Pitfalls in multilevel research. *Academy of Management Review*, 10: 601-616.  
47  
48  
49 Goldman, B. M., Slaughter, J. E., Schmit, J. W., Wiley, J.W., & Brooks, S. M. 2008. Perceptions  
50 of discrimination: A multiple needs model perspective. *Journal of Management*, 34:  
51 955-977.  
52  
53  
54  
55 González-Romá, V., Peiró, J.M., & Tordera, N. 2002. An examination of the antecedents and  
56 moderator influences of climate strength. *Journal of Applied Psychology*, 87: 465–473.  
57  
58  
59  
60

- 1  
2  
3  
4 Greenbaum, R. L., Mawritz, M. B., Mayer, D. M., & Priesemuth, M. 2013. To act out, to  
5  
6 withdraw, or to constructively resist? Employee reactions to supervisor abuse of  
7  
8 customers and the moderating role of employee moral identity. *Human Relations*, 66:  
9  
10 925-950.
- 11  
12 Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beaubien, J. M. 2002. A meta-analysis of team-  
13  
14 efficacy, potency, and performance: Interdependence and level of analysis as moderators  
15  
16 of observed relationships. *Journal of Applied Psychology*, 87: 819-832.
- 17  
18 Hackman, J.R. 1987. The design of work teams. In J. W. Lorsch (Ed.), *Handbook of*  
19  
20 *organizational behavior*: 315-342. Englewood Cliffs, NJ: Prentice-Hall.
- 21  
22 Hardin, C., & Higgins, E. T. 1995. Shared reality: How social verification makes the subjective  
23  
24 objective. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and*  
25  
26 *cognition: Foundations of social behavior*: 828–842. New York: Guilford.
- 27  
28 Haslam, S. A., & Reicher, S. 2006. Stressing the group: Social identity and the unfolding  
29  
30 dynamics of responses to stress. *Journal of Applied Psychology*, 91: 1037-1052.
- 31  
32 Hastie, R. 1984. Causes and effects of causal attribution. *Journal of Personality and Social*  
33  
34 *Psychology*, 46: 44–56.
- 35  
36 Hochwarter, W. A., Kiewitz, C., Castro, S. L., Perrewè, P. L., & Ferris, G. R. 2003. Positive  
37  
38 affectivity and collective efficacy as moderators of the relationship between perceived  
39  
40 politics and job satisfaction. *Journal of Applied Social Psychology*, 33: 1009-1035.
- 41  
42 Hoegl, M., & Gemuenden, H. G. 2001. Teamwork quality and the success of innovative projects:  
43  
44 A theoretical concept and empirical evidence. *Organization Science*, 12: 435-449.
- 45  
46 Ilgen, D.R., Hollenbeck, J.R., Johnson, M.D., & Jundt, D.K. 2005. Teams in organizations: From  
47  
48 input-process-output models to IMOI models. *Annual Review of Psychology*, 56: 517-  
49  
50 543.
- 51  
52 James, L. R., Demaree, R. G., & Wolf, G. 1984. Estimating within-group interrater reliability  
53  
54 with and without response bias. *Journal of Applied Psychology*, 69: 85-98.
- 55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Jex, S. M., & Bliese, P. D. 1999. Efficacy beliefs as a moderator of the impact of work-related  
5 stressors: A multi-level study. *Journal of Applied Psychology*, 84: 349-361.  
6  
7  
8 Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of*  
9  
10 *Management Review*, 31: 386-408.  
11  
12 Jöreskog, K. G., & Sörbom, D. 2006. *LISREL for windows*. Lincolnwood, IL: Scientific  
13 Software International, Inc.  
14  
15  
16 Kavanagh D. J., & Bower G. H. 1985. Mood and self-efficacy: Impact of joy and sadness on  
17 perceived capabilities. *Cognitive Therapy and Research*, 9: 507-525.  
18  
19  
20 Keashly, L. 1998. Emotional abuse in the workplace: Conceptual and empirical issues. *Journal*  
21  
22 *of Emotional Abuse*, 1: 85-117.  
23  
24  
25 Kidwell, R. E., Mossholder, K. W., & Bennett, N. 1997. Cohesiveness and organizational  
26 citizenship behavior: A multilevel analysis using work groups and individuals. *Journal of*  
27  
28 *Management*, 23: 775-793.  
29  
30  
31 Kozlowski, S. W. J., & Bell, B. S. 2003. Work groups and teams in organizations. In W. Borman,  
32 R. Liden, & R. Klimoski (Eds.), *Handbook of psychology: Industrial and*  
33  
34 *organizational psychology*, vol. 12: 333-375. New York: Wiley.  
35  
36  
37 Kozlowski, S. W. J., & Ilgen, D. R. 2006. Enhancing the effectiveness of work groups and teams.  
38  
39 *Psychological Science in the Public Interest*, 7: 77-124.  
40  
41  
42 Kozlowski, S. W. J., & Klein, K. J. 2000. A multilevel approach to theory and research in  
43 organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J.  
44 Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations:*  
45  
46 *Foundations, extensions, and new directions*: 3-90. San Francisco, CA: Sage.  
47  
48  
49 Kuenzi, M., & Schminke, M. 2009. Assembling fragments into a lens: A review, critique, and  
50 proposed research agenda for the organizational work climate literature. *Journal of*  
51  
52 *Management*, 35: 634-717.  
53  
54  
55 LeBreton, J. M., & Senter, J. L. 2008. Answers to twenty questions about interrater reliability  
56 and interrater agreement. *Organizational Research Methods*, 11: 815-852.  
57  
58  
59  
60



- 1  
2  
3  
4 Lian, H., Ferris, D. L., & Brown, D. J. 2012. Does power distance exacerbate or mitigate the  
5 effects of abusive supervision? It depends on the outcome. *Journal of Applied*  
6 *Psychology*, 97: 107-123.  
7  
8  
9  
10 Liao, H., & Rupp, D. E. 2005. The impact of justice climate and justice orientation on work  
11 outcomes: A cross-level multifoci framework. *Journal of Applied Psychology*, 90: 242-  
12 256.  
13  
14  
15  
16 Lind, E. A., & Earley, P. C. 1992. Procedural justice and culture. *International Journal of*  
17 *Psychology*, 27: 227-242.  
18  
19  
20 MacCallum, R. C., Browne, M. W., & Sugawara, H. M. 1996. Power analysis and determination  
21 of sample size for covariance structure modeling. *Psychological Methods*, 1: 130-149.  
22  
23  
24 Mael, F., & Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated  
25 model of organizational identification. *Journal of organizational Behavior*, 13: 103-123.  
26  
27  
28 Maslach, C., & Jackson, S.E. 1981. The measurement of experienced burnout. *Journal of*  
29 *Occupational Behavior*, 2: 99-113.  
30  
31  
32 Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. J. 2012. A trickle-  
33 down model of abusive supervision. *Personnel Psychology*, 65: 325-357.  
34  
35  
36 Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. 2009. How low does  
37 ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and*  
38 *Human Decision Processes*, 108: 1-13.  
39  
40  
41  
42 McGrath, J.E. 1964. *Social psychology: A brief introduction*. New York: Rinehart and  
43 Winston, Inc.  
44  
45  
46 Meyer, J., & Allen, N. 1997. *Commitment in the workplace*. Thousand Oaks, CA: Sage  
47 Publications.  
48  
49  
50 Miner-Rubino, K., & Reed, W. D. 2010. Testing a moderated mediational model of workgroup  
51 incivility: The roles of organizational trust and group regard. *Journal of Applied Social*  
52 *Psychology*, 40: 3148-3168.  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Mitchell, M. S., & Ambrose, M. L. 2007. Abusive supervision and workplace deviance and the  
5 moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, 92:  
6 1159-1168.  
7  
8  
9  
10 Mitchell, M. S., & Ambrose, M. L. 2012. Employees' behavioral reactions to supervisor  
11 aggression: An examination of individual and situational factors. *Journal of Applied*  
12 *Psychology*, 97: 1148-1170.  
13  
14  
15  
16 Mitchell, M. S., Vogel, R. M., & Folger, R. 2012. Beyond the consequences to the victim: The  
17 impact of abusive supervision on third-party observers. In R. A. Giacalone & M. D.  
18 Promislo (Eds.), *Handbook of unethical work behavior: Implications for individual*  
19 *well-being*: 23-43. Armonk, NY: M. E. Sharpe.  
20  
21  
22  
23  
24  
25 Morgeson, F. P., & Hofmann, D. A. 1999. The structure and function of collective constructs:  
26 Implications for multilevel research and theory development. *Academy of Management*  
27 *Review*, 24: 249-265.  
28  
29  
30  
31 Naumann, S. E., & Bennett, N. 2000. A case for procedural justice climate: Development and test  
32 of a multilevel model. *Academy of Management Journal*, 43: 881-889.  
33  
34  
35 Netemeyer, R. G., Bearden, W.O., Sharma, S. 2003. *Scaling procedures: Issues and applications*.  
36 Thousand Oaks, CA: Sage Publications.  
37  
38  
39 Netemeyer, R.G., Boles, J.S., & McMurrian, R. 1996. Development and validation of work  
40 family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81: 400-  
41 410.  
42  
43  
44  
45 Newman, D. A., & Sin, H. 2009. How do missing data bias estimates of within-group agreement?  
46 Sensitivity of SDWG, CVWG, r WG, r WG(J), and ICC to systematic nonresponse.  
47 *Organizational Research Methods*, 12: 113-147.  
48  
49  
50  
51 Nunnally, J.C. 1978. *Psychometric Theory, 2nd ed*. New York: McGraw-Hill.  
52  
53  
54 Olkkonen, M.E., & Lipponen, J. 2006. Relationships between organizational justice,  
55 identification with organization and work unit, and group-related outcomes.  
56 *Organizational Behavior and Human Decision Processes*, 100: 202-215.  
57  
58  
59  
60

- 1  
2  
3  
4 Organ, D. W. 1988. *Organizational citizenship behavior: The good soldier syndrome*.  
5  
6 Lexington, MA: Lexington Books.  
7
- 8 Paskevich, D.M., Brawley, L.R., Dorsch, K.D., & Widmeyer, W.N. 1999. Relationship between  
9  
10 collective efficacy and team cohesion: Conceptual and measurement issues. *Group Dy-*  
11  
12 *namics*, 3: 210–222.  
13
- 14 Philip, H., & Dunphy, D. 1959. Developmental trends in small groups. *Sociometry*, 22: 162-174.  
15
- 16 Piccolo, R. F., & Colquitt, J. A. 2006. Transformational leadership and job behaviors: The  
17  
18 mediating role of job characteristics. *Academy of Management Journal*, 49: 327-340.  
19
- 20 Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. 2003. Common method biases in  
21  
22 behavioral research: A critical review of the literature and recommended remedies.  
23  
24 *Journal of Applied Psychology*, 5: 879-903.  
25
- 26 Podsakoff, P. M., MacKenzie, S. B., Moorman, R.H., & Fetter, R. 1990. The impact of  
27  
28 transformational leader behaviors on employee trust, satisfaction, and organizational  
29  
30 citizenship behaviors. *The Leadership Quarterly*, 1: 107-142  
31  
32
- 33 Priesemuth, M., Arnaud, A., & Schminke, M. 2013. Bad behavior in groups: The impact of  
34  
35 overall justice climate and functional dependence on counterproductive work behavior in  
36  
37 work units. *Group & Organization Management*, 38: 230-257.  
38
- 39 Prussia, G.E., & A.J. Kinicki. 1996. A motivational investigation of group effectiveness using  
40  
41 social-cognitive theory. *Journal of Applied Psychology*, 81: 187–198.  
42
- 43 Restubog, S.L.D., Scott, K.D., & Zagenczyk, T.J. 2011. When distress hits home: The effects of  
44  
45 contextual factors and psychological distress in predicting employee responses to abusive  
46  
47 supervision. *Journal of Applied Psychology*, 96: 713-729.  
48
- 49 Richardson, H. A., & Vandenberg, R. J. 2005. Integrating managerial perceptions and  
50  
51 transformational leadership into a work-unit level model of employee involvement.  
52  
53 *Journal of Organizational Behavior*, 26: 1-29.  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Roberson, Q. M. 2006. Justice in teams: The activation and role of sensemaking in the  
5  
6 emergence of justice climates. *Organizational Behavior and Human Decision Processes*,  
7  
8 100: 177-192.  
9
- 10 Robins, L. 1986. The development and characteristics of the NIMH Diagnostic Interview  
11  
12 Schedule. In M. Weissman, J. Myers, & C. Ross (Eds.), *Community surveys of*  
13  
14 *psychiatric disorders*: 403-427. New Brunswick, NJ: Rutgers University Press.  
15
- 16 Robinson, S., & O'Leary-Kelly, A. 1998. Monkey see, monkey do: The influence of work groups  
17  
18 on the antisocial behavior of employees. *Academy of Management Journal*, 41: 658–  
19  
20 672.  
21
- 22 Salancik, G.R., & Pfeffer, J. 1978. A social information processing approach to job attitudes and  
23  
24 task design. *Administrative Science Quarterly*, 23: 224-253.  
25
- 26 Schein, E. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass.  
27
- 28 Schminke, M., Ambrose, M. L., & Neubaum, D. O. 2005. The effect of leader moral  
29  
30 development on ethical climate and employee attitudes. *Organizational Behavior and*  
31  
32 *Human Decision Processes*, 97: 135-151.  
33
- 34 Schneider, B. 1987. The people make the place. *Personnel Psychology*, 40: 437-451.  
35
- 36 Schneider, B., Hanges, P., Smith, B., & Salvaggio, A. 2003. Which comes first: Employee  
37  
38 attitudes or organizational financial and market performance? *Journal of Applied*  
39  
40 *Psychology*, 88: 836-850.  
41
- 42 Schneider, B., & Reichers, A. 1983. On the etiology of climates. *Personnel Psychology*, 36: 881-  
43  
44 889.  
45
- 46 Schneider, B., Salvaggio, A., & Subirats, E. 2002. Climate strength: A new direction for climate  
47  
48 research. *Journal of Applied Psychology*, 87: 220-230.  
49
- 50 Schneider, B., White, S. S., & Paul, M. C. 1998. Linking service climate and customer  
51  
52 perceptions of service quality: Test of a causal model. *Journal of Applied Psychology*, 83:  
53  
54 150-163.  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Seibert, S. E., Kraimer, M. L., & Liden, R. C. 2001. A social capital theory of career success.  
5  
6 *Academy of Management Journal*, 44: 219-237.  
7
- 8 Seibert, S., Silver, S., & Randolph, W. A. 2004. Taking empowerment to the next level: A  
9  
10 multiple-level model of empowerment, performance, and satisfaction. *Academy of*  
11  
12 *Management Journal*, 47: 332-349.  
13
- 14 Shrout, P. E., & Fleiss, J. L. 1979. Intraclass correlations: Uses in assessing rater reliability.  
15  
16 *Psychological Bulletin*, 86: 420-428.  
17
- 18 Smircich, L., & Morgan, G. 1982. Leadership: The management of meaning. *Journal of Applied*  
19  
20 *Behavioral Science*, 18: 257-273.  
21
- 22 Stajkovic, A. D., Lee, D., & Nyberg, A. J. 2009. Collective efficacy, group potency, and group  
23  
24 performance: Meta-analyses of their relationships, and test of a mediation model.  
25  
26 *Journal of Applied Psychology*, 94: 814-829.  
27
- 28 Stewart, G. L. 2006. A meta-analytic review of relationships between team design features and  
29  
30 team performance. *Journal of Management*, 32: 29-55.  
31
- 32 Swain S. D., Weathers D., & Niedrich R. W. 2008. Assessing three sources of misresponse to  
33  
34 reversed likert items. *Journal of Marketing Research*, 45: 116 – 131.  
35
- 36 Tajfel, H., & Turner, J.C. 1979. An integrative theory of intergroup conflict. In W.G. Austin & S.  
37  
38 Worchel (Eds.), *The social psychology of intergroup relations*: 33-47. Monterey, CA:  
39  
40 Brooke-Cole.  
41
- 42 Tajfel, H., & Turner, J.C. 1986. The social identity theory of intergroup behavior. In S. Worchell  
43  
44 and W.G. Austin (Eds.), *Psychology of intergroup relations*: 7-24. Chicago: Nelson-Hall.  
45
- 46 Tepper, B. J. 1995. Upward maintenance tactics in supervisory mentoring and nonmentoring  
47  
48 relationships. *Academy of Management Journal*, 38: 1191-1205.  
49
- 50 Tepper, B. J. 2000. Consequences of abusive supervision. *Academy of Management Journal*, 42:  
51  
52 178-190.  
53
- 54 Tepper, B. J. 2007. Abusive supervision in work organizations: Review, synthesis, and research.  
55  
56  
57 *Journal of Management*, 33: 261-289.  
58  
59  
60

- 1  
2  
3  
4 Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. 2009. Abusive  
5  
6 supervision, intentions to quit, and employees' workplace deviance: A power/dependence  
7  
8 analysis. *Organizational Behavior and Human Decision Processes*, 59: 101-123.  
9
- 10 Tepper, B. J., Duffy, M. K., & Shaw, J. 2001. Personality moderators of the relationship between  
11  
12 abusive supervision and subordinates' resistance. *Journal of Applied Psychology*, 86:  
13  
14 974-983.  
15
- 16 Tepper, B.J., Hoobler, J., Duffy, M.K., & Ensley, M.D. 2004. Moderators of the relationships  
17  
18 between coworkers' organizational citizenship behavior and fellow employees' attitude.  
19  
20 *Journal of Applied Psychology*, 89: 455-465.  
21
- 22 Thau, S., Bennett, R. J., Mitchell, M. S., & Marrs, M. B. 2009. How management style  
23  
24 moderates the relationship between abusive supervision and workplace deviance: An  
25  
26 uncertainty management theory perspective. *Organizational Behavior and Human*  
27  
28 *Decision Processes*, 108: 79-92.  
29
- 30 Tjosvold D., Law K. S., & Sun H. 2003. Collectivistic and individualistic values: Their effects  
31  
32 on group dynamics and productivity in China. *Group Decision and Negotiation*, 12: 243-  
33  
34 263.  
35  
36
- 37 Tracey, J. B., & Tews, M. J. 2005. Construct validity of a general training climate scale.  
38  
39 *Organizational Research Methods*, 8: 353-374.  
40
- 41 Tyler, T. R. 1989. The psychology of procedural justice: A test of the group-value model.  
42  
43 *Journal of Personality and Social Psychology*, 57: 830-838.  
44
- 45 Tyler, T. R., & Blader, S. L. 2000. *Cooperation in groups: Procedural justice, social identity,*  
46  
47 *and behavioral engagement*. Philadelphia: Psychology Press.  
48
- 49 Tyler, T. R., & Blader, S. L. 2003. The group engagement model: Procedural justice, social  
50  
51 identity, and cooperative behavior. *Personality and Social Psychology Review*, 7: 349-  
52  
53 361.  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Tyler, T. R., DeGoey, P., & Smith, H. 1996. Understanding why the justice of group procedures  
5 matters: A test of the psychological dynamics of the group-value model. *Journal of*  
6 *Personality and Social Psychology*, 70: 913-930.  
7  
8  
9  
10 van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M.A. 2004. Leadership,  
11 self, and identity: A review and research agenda. *The Leadership Quarterly*, 15: 825-856.  
12  
13  
14 Walumbwa, F.O., Avolio, B.J., & Zhu, W. 2008. How transformational leadership weaves its  
15 influence on individual job performance: The role of identification and efficacy beliefs.  
16 *Personnel Psychology*, 61: 793-825.  
17  
18  
19  
20 Walumbwa, F. O. Mayer, D. M., Wang, P., Wang, H., Workman, K. M., & Christensen, A. L.  
21  
22 2011. Linking ethical leadership and employee performance: Leader-member exchange  
23 and self-efficacy as mediators. *Organizational Behavior and Human Decision Processes*,  
24 115: 204-213.  
25  
26  
27  
28  
29 Weijters, B., & Baumgartner, H. 2012. Misresponse to reversed and negated items  
30 in surveys: A review. *Journal of Marketing Research*, 49: 737-747.  
31  
32  
33 Williams, L. J., & Anderson, S. E. 1991. Job satisfaction and organizational commitment as  
34 predictors of organizational citizenship and in-role behavior. *Journal of Management*, 17:  
35 601–617.  
36  
37  
38  
39 Wong, P. T. P., & Weiner, B. 1981. When people ask “why” questions, and the heuristics of  
40 attributional search. *Journal of Personality and Social Psychology*, 40: 650–663.  
41  
42  
43 Zaccaro, S. J., Rittman, A. L., & Marks, M. A. 2002. Team leadership. *The Leadership*  
44 *Quarterly*, 12: 451-483.  
45  
46  
47 Zellars, K.L., Tepper, B.J., & Duffy, M.K. 2002. Abusive supervision and subordinates’  
48 organizational citizenship behavior. *Journal of Applied Psychology*, 87: 1068-1076.  
49  
50  
51 Zohar, D., & Luria, G. 2005. A multilevel model of safety climate: Cross-level relationships  
52 between organization and group-level climates. *Journal of Applied Psychology*, 90: 616-  
53 628.  
54  
55  
56  
57  
58  
59  
60

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2  
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4  
5  
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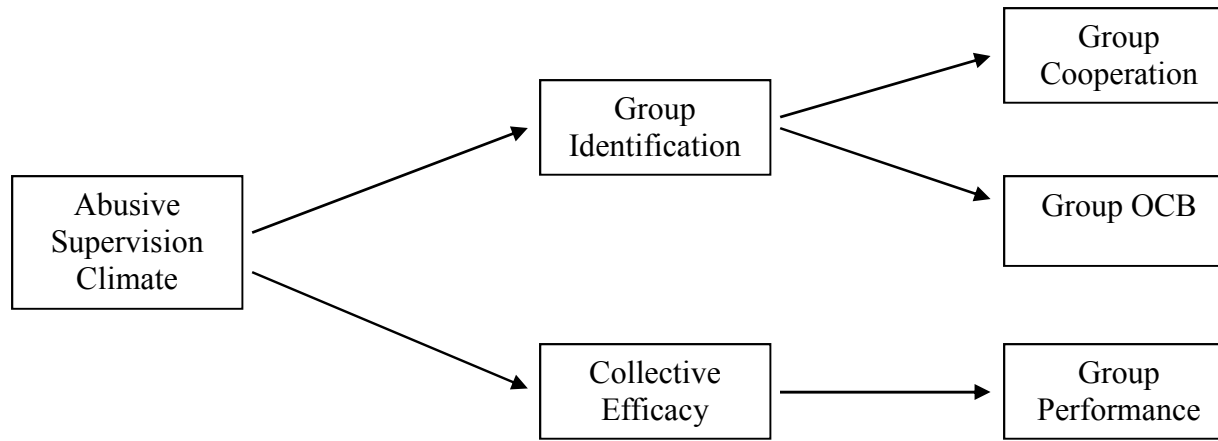
**TABLE 1**  
**Means, Standard Deviations, and Correlations Among Study Variables**

Variables	M	SD	1	2	3	4	5	6	7	8
1. Average Tenure	2.67	2.11	---							
2. Average Group Size	13.91	14.15	.19*	---						
3. Abusive Supervision Climate	1.56	.69	-.04	.00	(.94)					
4. Group Identification	4.14	.46	-.04	.01	-.44*	(.87)				
5. Collective Efficacy	4.06	.43	.02	.06	-.46*	.72*	(.87)			
6. Group Cooperation	4.03	.55	.04	.06	-.25*	.27*	.39*	(.70)		
7. Group OCB	4.07	.61	-.00	.04	-.18*	.27*	.31*	.64*	(.85)	
8. Group Performance	4.14	.55	.09	.02	-.28*	.27*	.38*	.68*	.63*	(.88)

*Note.* N=222 work units. \*  $p < .01$ ; Coefficient  $\alpha$  reliabilities are reported in parentheses on the diagonal.



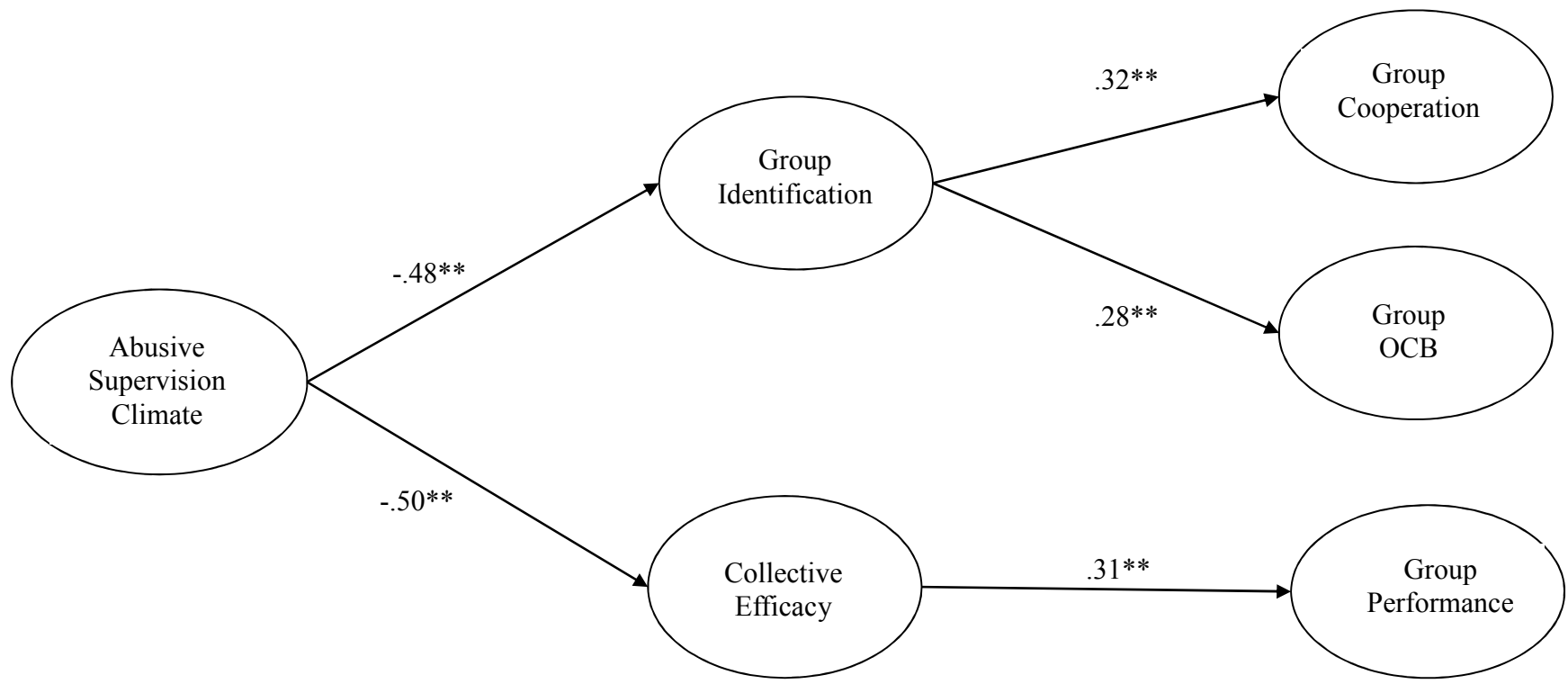
**FIGURE 1**  
**Conceptual Model**



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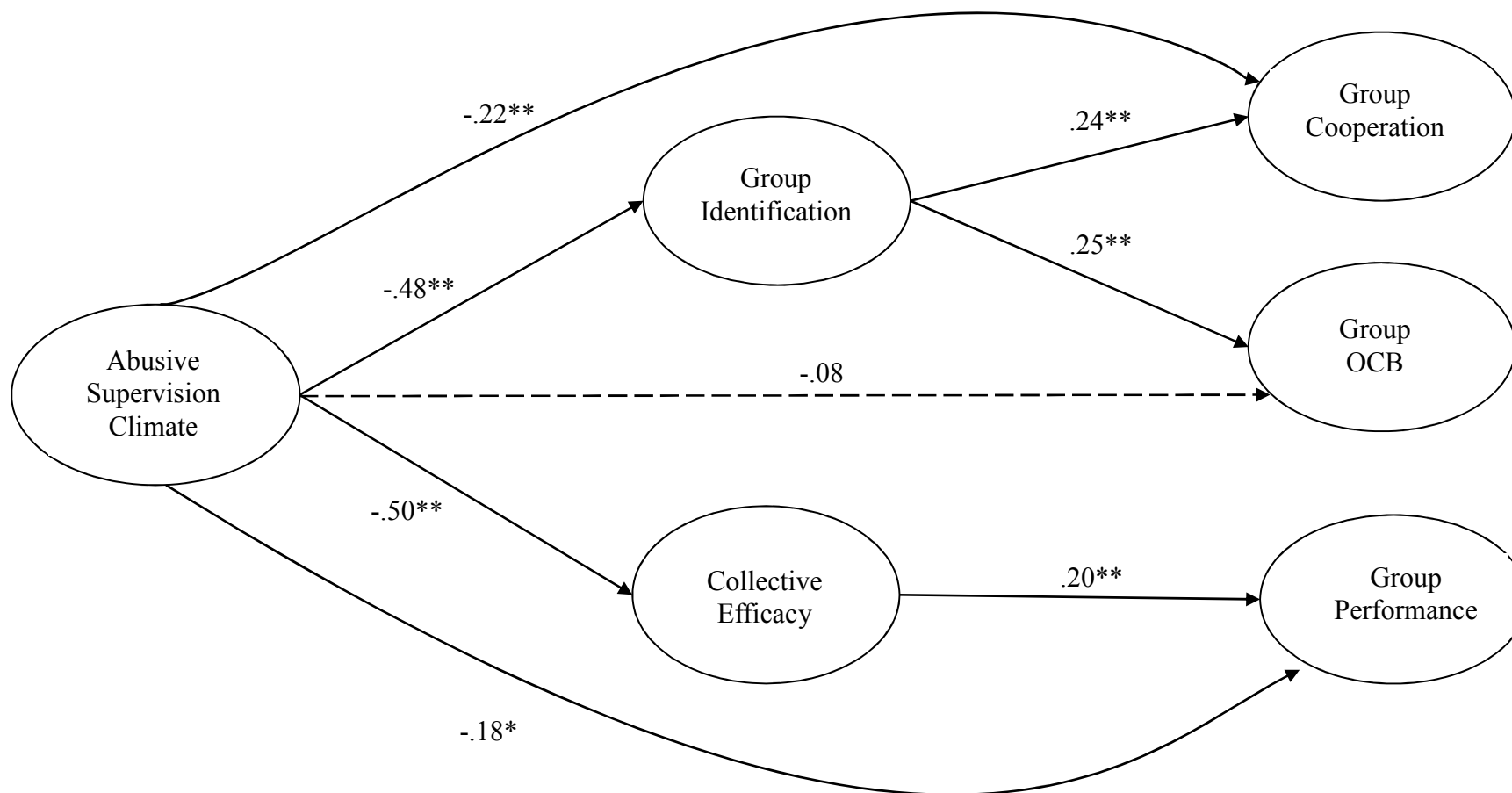
**FIGURE 2**  
**Structural Equation Model (Full Mediation)**



Note. \*  $p < .05$  \*\*  $p < .01$

FIGURE 3

Structural Equation Model (Partial Mediation)



Note. \*  $p < .05$  \*\*  $p < .01$

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### Biographical Information

Manuela Priesemuth (mpriesemuth@wlu.ca) is an assistant professor of Organizational Behavior/Human Resource Management in the School of Business & Economics at Wilfrid Laurier University. She received her Ph.D. in Management from the University of Central Florida. Her research interests include workplace aggression (e.g., abusive supervision), behavioral ethics, and organizational justice.

Marshall Schminke (mschminke@ucf.edu) is the BB&T Professor of Business Ethics at the University of Central Florida. He received his Ph.D. from Carnegie Mellon University. His research focuses on integrating individual and organizational aspects with respect to business ethics and organizational justice.

Maureen Ambrose (mambrose@ucf.edu) is the Gordon J. Barnett Professor of Business Ethics at the University of Central Florida. She received her Ph.D. in Industrial/Organizational Psychology from the University of Illinois at Urbana-Champaign. Her research interests include organizational fairness, ethics, and workplace deviance.

Robert Folger (rfolger@ucf.edu) is the Distinguished Alumni Endowed Professor in Business Ethics at the University of Central Florida. He received his Ph.D. from the University of North Carolina at Chapel Hill. His current research concentrates on behavioral ethics, organizational justice, and abusive supervision.