

# UNDERSTANDING COUNTERPRODUCTIVE WORK BEHAVIOR: AGGRESSIVE EMPLOYEES' RESPONSES TO LEADER-MEMBER EXCHANGE

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This study provides further understanding of the integrative model of counterproductive work behavior (CWB). Specifically, it examined the antecedents of counterproductive work behavior as a function of both traits (i.e., aggression) and situational factors (leader-member exchange). Utilizing the channeling model proposed by Frost and colleagues (2007), trait aggression was evaluated using both explicit (i.e., self-report) and implicit (i.e., conditional reasoning) measures. As with previous research, there was a significant interaction between implicit and explicit aggression in relation to endorsements of CWB. Moreover, although LMX out-group relationships were more strongly associated with perceptions of unfairness, in-group LMX relationships were more strongly associated with endorsements of CWB. Furthermore, this effect was enhanced when participants were implicitly aggressive. Implications for practice and research are discussed.



UNDERSTANDING COUNTERPRODUCTIVE WORK BEHAVIOR: AGGRESSIVE  
EMPLOYEES' RESPONSES TO LEADER-MEMBER EXCHANGE

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## TABLE OF CONTENTS

LIST OF TABLES .....	v
LIST OF FIGURES .....	vi
CHAPTER I: INTRODUCTION.....	1
Counterproductive Work Behavior.....	2
Antecedents of Counterproductive Work Behavior.....	3
Situational Factors .....	3
Individual Factors .....	4
Integrative Approach .....	4
Trait Aggression and Counterproductive Work Behavior .....	5
Explicit Aggression.....	6
Implicit Aggression.....	7
Conditional Reasoning.....	7
Channeling Model of Aggression.....	8
Leader-Member Exchange.....	11
Benefits of High LMX Relationships .....	13
Problems with Low LMX and Differentiation.....	13
Aggression and LMX.....	16
CHAPTER II: METHODS .....	18
Sample.....	18
Procedure .....	18
Measures .....	18
Demographic Measure .....	18

Implicit Aggression.....	18
Explicit Aggression.....	19
Counterproductive Work Behavior.....	19
CHAPTER III: RESULTS.....	21
Test of Hypotheses.....	24
CHAPTER IV: DISCUSSION .....	28
Limitations .....	31
Conclusions.....	32
REFERENCES .....	34
APPENDIX A: DEMOGRAPHIC MEASURE .....	44
APPENDIX B: IRB APPROVAL FORM.....	45

## LIST OF TABLES

1. Table 1: Variable Correlations.....	21
2. Table 2: Standardized Model Effects.....	23
3. Table 3: Conditional Effects for Overt Aggression .....	27
4. Table 4: Conditional Effects for Covert Aggression .....	27

## LIST OF FIGURES

1. Figure 1: A Sample Vignette .....	20
2. Figure 2: Hypothesized Relationships .....	22
3. Figure 3: Measurement Model.....	22
4. Figure 4: Model Results.....	26

## CHAPTER 1: INTRODUCTION

Counterproductive work behavior (CWB) is an expansive problem for organizations (Bennett & Robinson, 2000) and a major concern for both managers and the general public (Spector, Fox, & Domagalski, 2006). Accordingly, in an attempt to reduce their occurrence, many researchers have attempted to explain both situational and individual antecedents of CWB (Douglas & Martinko, 2001). On the situational side, a substantial amount of research has found support for the relationship between perceptions of injustice and employee retaliation against the organization (e.g., Greenberg, 1993; Hershcovis et al., 2007; Masterson, Lewis, Goldman, & Taylor, 2000; Robinson & Bennett, 1995; Skarlicki & Folger, 1997; Skarlicki, Folger, & Tesluk, 1999; Spector & Fox, 2005). Furthermore, research has shown that differential relationships between supervisors and subordinates, often referred to as leader-member exchange (LMX), can lead employees to perceive injustice in certain situations. Specifically, negative outcomes have been shown to occur as a result of both low LMX relationships (Othman Ee, & Shi, 2009; Townsend, Phillips, & Elkins, 2000) and LMX differentiation (Hooper & Martin, 2008; Sherony & Green, 2002; Sias & Jablin, 1995).

Similar to the situational approach, there is a substantial amount of research demonstrating the relationship between personality traits and CWB (e.g., Douglas & Martinko, 2001; Hershcovis et al., 2007; Penney & Spector, 2002). For example, trait anger has been consistently shown to correlate with incidents of CWB (Hershcovis et al., 2007). Along these lines, Penney & Spector (2002) found that trait anger mediated the relationship between narcissism and CWB. Research has also shown that low self-control (Hepworth & Towler, 2004), negative affectivity (Hershcovis et al., 2007), attitudes toward revenge, and hostile attribution style (Douglas & Martinko, 2001) are all significantly related to CWB.

Taken together, many researchers have noted that an integrative approach, one that combines both situational and individual antecedents, may be the most effective way to predict and prevent CWBs (Hershcovis et al., 2007; Martinko et al., 2002; Robinson & Bennett, 1995; Skarlicki et al., 1999). Proponents of this approach assert that individual and situational antecedents interact in three primary ways. Specifically, individual differences such as negative affectivity, trait anger, and aggression influence (1) how employees perceive inequities (Martinko et al., 2002), (2) how employees respond to these inequities (Martinko et al., 2002; Skarlicki et al., 1999), and (3) who they target for their response (Hershcovis et al., 2007; Robinson & Bennett, 1995). Subsequently, some researchers have noted that it can be dangerous to adopt models of retaliation that do not account for both situational and dispositional variables (Skarlicki et al., 1999).

Given the importance of considering both situational and individual antecedents when examining CWBs, the purpose of this present study was to evaluate the relationship between trait aggression and inequity engendered within differential LMX relationships. More specifically, this study examined the relationship between individual differences in aggression and the endorsement of CWBs, both directly and indirectly through perceptions of fairness. Furthermore, the effect of the nature of the LMX relationship, in-group versus out-group, was examined.

### **Counterproductive Work Behavior**

Counterproductive work behaviors refer to any actions by employees that are intended to harm other employees or the organization directly (Neuman & Baron, 1998; Spector & Fox, 2005). Given this rather broad definition, there are numerous operationalizations that have been examined, including antisocial behaviors (Robinson & O'Leary-Kelly, 1998), workplace aggression (Douglas & Martinko, 2001; Hershcovis et al., 2007; Neuman & Baron, 1998),

employee retaliation (Skarlicki & Folger, 1997; Townsend et al., 2000), workplace incivility (Andersson & Pearson, 1999; Cortina, Magley, Williams, & Langhout, 2001), and bullying (Rayner, 1997). Irrespective of the specific operationalizations, it is important to note that all of these conceptualizations include reference to a behavior committed by an employee of the organization, not actions made by organizational outsiders (Sacket & Devore, 2001; Spector & Fox, 2005). Although destructive behaviors from organizational outsiders is also concerning, they typically occur at drastically different rates between industries, with the key factor being the amount of contact an employee or organization has with the public (Bureau of Labor Statistics, 2011). In these cases, the underlying motive for the act is often robbery or some other criminal desire (Neuman & Baron, 1998) and thus is typically researched independently of CWBs (O'Leary-Kelley, Griffin, & Glew, 1996).

### **Antecedents of CWB**

**Situational Factors.** As previously noted, a large body of research has shown evidence of situational antecedents of CWB (Greenberg, 1993; Hershcovis et al., 2007; Masterson et al., 2000; Skarlicki & Folger, 1997). For example, Fox & Spector (1999) found that situational constraints can lead to employee frustration, which may then lead to CWB. Along these lines, Hershcovis et al. (2007) found that situational constraints, interpersonal conflict, and job dissatisfaction, were all positively correlated with both interpersonal and organizational CWB.

Of particular relevance to this study are the perceptions of fairness and equity, in that when employees perceive unfairness in an organization, they may retaliate against the source of the perceived injustice. For example, Skarlicki and Folger (1997) noted that employees' perceptions of distributive, procedural, and interactional justice interacted to predict retaliation in the workplace. Similarly, Masterson et al. (2000) noted that the perceived fairness of just one

event (e.g., a performance appraisal) may affect further behaviors and attitudes against the responsible party. In a field study involving manufacturing plants, pay reductions were found to be associated with increased stealing, and this effect increased when inadequate explanations were given for the reduction (Greenberg, 1990). Additional research involving college students (Greenberg, 1993) noted that when individuals are inequitably rewarded, they may steal as a way to correct the perceived injustice and often feel that stealing is completely justified.

**Individual Factors.** There is also an abundance of research demonstrating how individual differences in particular traits can be possible antecedents of CWBs. For example, trait anger, attribution style, and attitudes toward revenge have all been found to correlate positively with CWB (Douglas & Martinko, 2001). Positive relationships with CWB have also been found for negative affectivity (Hershcovis et al., 2007), narcissism (Penney & Spector, 2002), and low self-control (Hepworth & Towler, 2004). Research has also shown that other more general personality traits (e.g., external locus of control, trait anxiety) can cause employees to become frustrated, which may then lead to increased CWB (Spector & Fox, 1999). Furthermore, Berry, Ones, & Sacket (2007) found that conscientiousness, agreeableness, and emotional stability were all negatively correlated with CWB.

**Integrative Approach.** Based on the independent successes of both the individual and situational approaches, some researchers have argued that the most effective way to predict CWB is by evaluating both situational and individual factors along with their interactions (e.g., Douglas & Martinko, 2001; Hershcovis et al., 2007; Martinko et al., 2002; Robinson & Bennett, 1995). For example, Skarlicki et al. (1999) noted that, by incorporating negative affectivity and agreeableness, they were able to explain more variance in retaliatory behavior than their previous model that solely focused on organizational justice. Specifically, the authors noted that negative

affectivity and agreeableness moderated the relationship between perceived fairness and organizational retaliation, indicating that both trait and situation interact in their prediction of CWBs.

Martinko et al. (2002) present a model for understanding CWB in which individual differences affect employees' causal reasoning process and likelihood to engage in CWB. Specifically, the authors argue that certain traits (e.g., sex, locus of control, attribution style, negative affectivity) influence how employees make attributions and respond to perceived injustices. Furthermore, these differences may determine whether employees engage in self-destructive (e.g., drug use, lower job performance) or retaliatory (e.g., stealing, vandalism) CWBs. Bennett and Robinson (2000) proposed that situational factors might influence organizational deviance (i.e., actions directed at the organization), while individual differences might explain interpersonal deviance (i.e., directed at the employees of the organization). Finally, Hershcovis et al. (2007) examined individual differences such as trait anger, sex, and negative affectivity, as well as situational factors such as interpersonal conflict, job dissatisfaction, and perceptions of justice in the workplace. They noted that both individual and situational factors play a role in predicting employee aggression, with the key factor being the target (i.e., supervisor, coworker, or the organization) of the aggressive act.

### **Trait Aggression and CWB**

Research has shown that the relationship between early childhood aggression and adult antisocial behavior (e.g., spousal abuse, arrests, traffic violations) is highly stable within individuals (Huesmann, Dubow, & Boxer, 2009; Olweus, 1979) and generations of families (Huesmann, Eron, Lefkowitz, & Walder, 1984). Accordingly, correlations between variables thought to relate to aggression (e.g., trait anger, negative affectivity, narcissism) and CWB have

been found (Douglas & Martinko, 2001; Hershcovis et al., 2007; Penney & Spector, 2002; Skarlicki et al., 1999). More specifically, Douglas and Martinko (2001) noted that individual differences in trait anger, attribution style, negative affectivity, attitudes toward revenge, self-control, and previous exposure to aggressive cultures, combined to explain 62% of the variance in self-reports of CWB.

**Explicit Aggression.** Typically, most of the tests used in organizational settings involve self-reports of attitudes and behaviors (Frost, Ko, & James, 2007). Self-reports have been useful to organizations as they can be utilized to assess a variety of traits that may be useful in predicting job performance and behavior (Barrick & Mount, 1996; Berry et al., 2007; Ones, Viswesvaran, & Schmidt, 1993; Schmidt & Hunter, 1998). For example, Ones et al. (2003) noted that integrity tests predicted both overall job performance and CWBs such as theft, absenteeism and disciplinary problems. Similarly, Barrick & Mount (1996) found that conscientiousness and emotional stability were valid predictors of both supervisor ratings of job performance and voluntary turnover. Furthermore, since self-report measures are usually standardized and relatively easy to score, they can easily be administered to large groups relatively cheaply (Bing, LeBreton, Davison, Migetz, & James, 2007). Despite the benefits of using self-report measures, many researchers have noted problems with the singular use of explicit measures for evaluating personality traits. For example, Bergman, McIntyre, and James (2004) argue that, as self-report measures inform people of the trait being measured, participants must be willing and able to report their traits accurately in order for the tests to be effective; however, in many cases individuals may be reluctant to reveal their traits (Fazio & Olson, 2003), particularly when they are asked to report negative qualities (Bing, Stewart et al., 2007; Fazio & Olson, 2003). This would be most prevalent in situations where the results of the tests are important to participants.

Accordingly, Barrick & Mount (1996) found that impression management influenced applicant scores on measures of both emotional stability and conscientiousness.

**Implicit Aggression.** As noted by Barrick and Mount (1996), in many cases, participants may not intentionally engage in deception. Many have asserted that many individuals may be simply unaware of any unconscious influences on their personality and are subsequently unable to accurately report on the nature of their personality (Bing, Stewart et al., 2007; Frost et al., 2007; Greenwald & Banaji, 1995; James, 1998; Winter, John, Stewart, Klohnen, & Duncan, 1998). Along these lines, a number of researchers have argued that whereas self-reports are good at measuring explicit components of personality, they are not adequate for measuring the implicit components (Bing, LeBreton et al., 2007; Greenwald & Banaji, 1995; James, 1998). Thus, specifically designed implicit personality measures are needed to provide a better method of assessing these unconscious biases (Greenwald & Banaji, 1995; McClelland, Koestner, & Weinberger, 1989; Winter et al., 1998). Additionally, as implicit measures typically test attributes that the respondent is unaware of, they are much more resilient to response distortion (Fazio & Olson, 2003; LeBreton, Barksdale, Robin, & James, 2007).

**Conditional Reasoning.** Research has shown that aggressive individuals utilize a specific set of implicit reasoning biases that allow them to justify their aggressive behavior (James, McIntyre, Glisson, Bowler, & Mitchell, 2004). For example, Douglas and Martinko (2002) found that attributing negative outcomes to controllable and intentional actions by others (i.e., hostile attribution bias) and believing these actions are deserving of retaliation (i.e., attitudes towards revenge) were associated with aggression. Bowler, Woehr, Bowler, Wuensch, and McIntyre (2011) found that aggressive individuals may make different causal attributions for subordinate failure and may be more likely to endorse punitive responses. Along these lines,

James (1998) proposed that the reasoning process of aggressive individuals may be shaped by specific implicit biases, which he labeled justification mechanisms (JMs). James argued that these JMs may enable aggressive individuals to justify their antisocial behavior while maintaining a favorable self-image. For example, aggressive employees may retaliate against a supervisor, because they may feel that the supervisor is abusing their power over them (i.e., victimization of powerful others bias). To measure how instrumental these JMs are in guiding an individual's reasoning process, a new item format, denoted The Conditional Reasoning Test for Aggression (CRT-A), was developed. These items are designed to resemble traditional inductive reasoning problems but are actually directly evaluating the cognitive biasing induced by JMs (Bergman et al., 2007).

Overall, CR-based research has demonstrated promise in predicting workplace aggression. For example, a review by James et al. (2004) found that the CRT-A was reliable and was a valid measure of a variety of CWBs including work attendance, theft, fighting, and work unreliability, in both laboratory and field settings. Additionally, research involving job incumbents, job applicants, and undergraduate students has shown that CR-based measures appear to be resistant to faking (LeBreton et al., 2007; Bowler, Bowler, & Cope, in press). Finally, Bing, LeBreton et al. (2007) note that as the CRT-A is standardized it can be administered to groups relatively cheaply.

**Channeling Model of Aggression.** McClelland et al. (1989) first suggested that implicit and explicit measures represent distinct underlying motives, each of which direct behaviors differently. In support of this theory, Brunstein and Maier (2005) noted that implicit and self-attributed motives to achieve predicted different types of task behavior in students. Similarly, Winter et al. (1998) proposed an integrative model of personality, with motives representing the

underlying (implicit) desires of the individual and traits serving as the channels for these desires. Accordingly, in two longitudinal studies, they found that the interaction of a trait (extraversion) with motives (affiliation and power) predicted life outcomes better than by using either of these methods alone.

Drawing from Winter et al.'s (1998) model, Frost et al. (2007) proposed a channeling hypothesis for predicting workplace aggression that integrated both explicit and implicit aggression. Specifically, they argued that implicit aggression provides the necessary motivational force to engage in aggression and explicit aggression influences the way aggression is expressed. When testing their hypotheses, they noted that when implicit aggression was high and individuals viewed themselves as aggressive (i.e., high explicit aggression), they were more likely to engage in overt aggression (e.g., pushing, shoving, fighting). Conversely, when implicit aggression was high and individuals viewed themselves as non-aggressive (i.e., low explicit aggression), they tended to engage in more covert forms of aggression (e.g., intentional obstruction, ignoring requests). Additional research has found similar support for the channeling hypothesis. For example, in three separate studies, including both laboratory and field samples, Bing, Stewart et al. (2007) showed that combining both explicit and implicit measures of aggression improved predictions of dishonesty, traffic violations, and active organizational deviance. They further noted that the validity of self-reported aggression (i.e., explicit aggression) was dependent on individuals' implicit biases towards aggression.

Given the predictive validity of both explicit (Douglas & Martinko, 2001; Hepworth & Towler, 2004; Hershcovis et al., 2007; Penney & Spector, 2002) and implicit aggression (Bowler et al., 2011; James, 1998; LeBreton et al., 2007), there is a good deal of support for the direct effects of both explicit and implicit aggression on behavior. As noted by Douglas and Martinko

(2001), individual differences can explain a significant portion of the variance in organizational deviance. Thus, we would expect both explicit and implicit aggression to be related to endorsements of CWB.

***H1:** Both implicit and explicit aggression will be positively related to endorsements of both overt and covert CWB.*

Moreover, integrative models combining both implicit and explicit aggression have been shown to explain significantly more variance in CWBs than using either of the measures independently (Bing, Stewart et al., 2007; Frost et al., 2007). Specifically, research has shown that individuals are more likely to engage in overt forms of CWB (e.g., shoving, fighting) when they are both implicitly prepared for aggression and when they view themselves as aggressive (i.e., explicitly aggressive; Bing, Stewart et al., 2007; Frost et al., 2007). Therefore, we expect that implicit and explicit aggression will interact in their relationship with CWB.

***H2:** The relationship between implicit aggression and endorsement of overt CWB will become stronger as explicit aggression increases.*

In contrast to the above pattern, research has found that individuals are more likely to engage in covert CWBs when they have implicitly prepared for aggression, but view themselves as non-aggressive (i.e., low explicit aggression; Bing, Stewart et al., 2007; Frost et al., 2007). Given these findings, we expect the following relationship between implicit and explicit aggression when predicting covert CWB.

***H3:** The relationship between implicit aggression and endorsement of covert CWB will become stronger as explicit aggression decreases.*

## **Leader-Member Exchange**

As all organizations are social environments (Blau, 1964), the relationships between supervisors and subordinates are a critical area of interest. Leader-member exchange (LMX) theory directly examines these relationships and the subsequent categorizations that occur (Graen & Uhl-Bien, 1995; van Breukelen, Schyns, & Le Blanc, 2006). More specifically, one of the most interesting findings of LMX research relates to the differential relationships that are created between supervisors and their subordinates (Dansereau, Graen, & Haga, 1975) with differences in the quality of these relationships having a direct relationship with organizational outcomes such as job satisfaction (Gerstner & Day, 1997) and employee turnover (Graen, Liden, & Hoel, 1982).

Early proponents of LMX theory, originally called Vertical Dyad Linkage Theory (VDL), proposed that supervisors do not use a common style of leadership with all of their subordinates; instead, leaders treat their subordinates differently depending on their specific relationship with each employee (Graen & Cashman, 1975). In support of the theory, early LMX research showed that subordinates do not rate their supervisors consistently (Dansereau, et al., 1975). Furthermore, research showed that some subordinates reported having relationships with their supervisors that involved high levels of trust and obligation (i.e., in-group members), whereas other subordinates reported relationships that merely complied with role expectations (i.e., out-group members) (Zalesny & Graen, 1987).

According to LMX theory, relationships between out-group members and supervisors are limited to formal job obligations (Dansereau et al., 1975). Out-group members comply with supervisor requests because of the reward and legitimate power of the leader and have little consideration for the leader's goals. Furthermore, out-group members are not likely to accept

extra responsibilities or tasks beyond what is required for the job (Graen, 1976). In contrast, Graen notes that the relationship between in-group members and supervisors is characterized by having higher quality and greater numbers of social exchanges. Additionally, both subordinates and supervisors have a sense of obligation to each other and subordinates are often expected to go beyond the formal job requirements. In exchange for the additional tasks that in-group members are expected to perform, they may receive social resources from the supervisor such as work advice, mentoring, and encouragement (van Breukelen et al., 2006), which may then lead to more tangible rewards such as position advancement or favorable task assignments (Graen & Uhl-Bien, 1995).

Early researchers believed that supervisors formed these different relationships simply because they did not have the resources and time available to form in-group relationships with all of their subordinates (Graen, 1976); therefore, leaders act as more of a leader to the in-group members and more of a manager to the out-group (van Breukelen et al., 2006). Furthermore, researchers believed that most organizational groups would consist of only a few in-group members and the remainder of the subordinates would belong to the out-group (Graen, 1976). Later LMX research shifted from characterizing employees as belonging to in-groups or out-groups to evaluating the quality of the relationships (Graen & Uhl-Bien, 1995). Relationships between supervisors and subordinates were described as having high LMX (i.e., a positive exchange relationship) or low LMX (i.e., simply fulfilling role obligations) (van Breukelen et al., 2006). In addition the goals of LMX researchers shifted from simply describing the quality of the relationship, to showing the benefits of having high LMX relationships with *all* subordinates (Graen, Novak, & Sommerkamp, 1982; Graen & Uhl-Bien, 1995; Scandura & Graen, 1984).

**Benefits of High LMX Relationships.** In addition to some of the benefits already mentioned, high LMX relationships have been shown to positively correlate with a number of desirable organizational factors such as task performance, job satisfaction, organizational citizen behaviors, and commitment (Graen & Uhl-Bien, 1995; van Breukelen et al., 2006). A meta-analysis by Gerstner and Day (1997) showed that LMX was correlated to a number of organizational outcomes including job performance, job satisfaction, organizational commitment, role perceptions, and turnover intentions. More recently, Ilies, Nahrgang, and Morgeson (2007) examined the effects of LMX finding significant positive correlations between LMX and citizenship behaviors at both the individual (e.g., helping behaviors, interpersonal facilitation) and organizational level (e.g., job dedication, civic virtue). Besides being positively correlated to desirable outcomes, high LMX relationships have been found to correlate negatively to undesirable organizational outcomes (Graen & Uhl-Bien, 1995). For example, a study involving employees in an information systems department showed that LMX was significantly negatively correlated with employee turnover (Graen et al., 1982). Additionally, Murphy, Wayne, Liden, and Erdogan (2003) found that LMX was negatively related to social loafing.

**Problems with Low LMX and Differentiation.** Scandura (1999) suggested that organizational justice perspectives should be considered when evaluating LMX relationships. According to the author, differential treatment of employees in low LMX and high LMX groups can be considered fair provided that subordinates feel proper procedures were followed (i.e., procedural justice) and these procedures were communicated in a honest and fair manner (i.e., interactional justice). Following this logic, Murphy et al. (2003) found a significant positive relationship between interactional justice and LMX. However, Scandura (1999) further noted

that employees may feel a sense of inequity when they perceive group assignment as unfair. Othman et al. (2009) suggest that errors in group assignment can occur because of biases made by the leaders when judging the performance of subordinates (e.g., similarity bias or attribution biases) or because of upward influence tactics used by the subordinates (i.e., impression management tactics). Furthermore, errors made during performance appraisals that occur as a result of these upward influence tactics can lead to lower commitment and cohesion in the group. To maintain fairness and avoid feelings of inequity by subordinates in low LMX groups, supervisors must continually reevaluate subordinates for inclusion in the high LMX group (Scandura, 1999). Additionally, they must be careful to judge employees by their performance and not let demographic variables or biases influence their inclusion of high LMX members (Othman et al., 2009).

Research has shown that LMX differentiation may also have negative consequences on coworker relationships in organizations. Hooper and Martin (2008) examined the effects of LMX differentiation by testing employees from several industries. After controlling for LMX quality, the authors found that perceived LMX differentiation correlated negatively with job satisfaction and well-being and this effect was mediated by reported team conflict. Additionally, LMX quality and perceived LMX differentiation were negatively related. Along these lines, Sias and Jablin (1995) found that subordinates in low LMX relationships were more likely to report negative incidents of differential treatment and find the treatment unfair. Furthermore, they were likely to discuss this unfair treatment with coworkers. Beukelen, Konst, and Vlist (2002) found that when LMX differentiation was excessively high, LMX quality did not have the usual benefits on subordinates' work commitment. Finally, Sherony and Green (2002) examined the way in which LMX influenced co-worker exchange relationships. Results indicated that when

co-workers had comparable LMX relationships, regardless of whether they belonged to high LMX or low LMX relationships, they tended to have better co-worker exchange.

It is also possible that many of the positive effects found in studies examining high LMX relationships may also reflect retaliations made by subordinates in low LMX relationships. For example, as noted by Graen et al. (1982), employees who experienced low LMX were significantly more likely to quit the company than employees who experienced high LMX. Thus, there is the potential for employees to simply quit as a way of retaliating against perceived injustices committed by their supervisor. Similarly, as noted by Townsend et al. (2000), when employees are in low LMX relationships, they are more likely to engage in retaliatory behaviors against the organization. This occurred regardless of whether the reports were judged from the supervisor's or subordinate's perspective. Finally, Murphy et al. (2003) found that low LMX relationships were negatively related to perceptions of interactional justice and positively related to supervisor ratings of social loafing. The authors proposed that subordinates in low LMX situations experience perceptions of unfairness and may engage in social loafing as a way to balance the exchanges with their supervisors.

Proponents of LMX theory suggest that leaders should try to develop high LMX relationships with all subordinates. (Graen & Uhl-Bien, 1995) However, others have noted that one problem with this view has been researchers' failure to consider additional factors that may affect how employees respond to LMX (Erdogan & Liden, 2002; Yukl, 2002); although, some research has shown the benefits of a contingency approach (Erdogan, Liden, & Kramer, 2006). Specifically, some researchers have noted that there has been little research examining how LMX could be dysfunctional (Othman et al., 2009) and lead to retaliatory behaviors by subordinates (Othman et al., 2009; Townsend et al., 2000). Although research in this area has

been limited, there is some evidence to suggest that low LMX relationships may relate to both perceptions of unfairness (Murphy et al., 2003; Sias & Jablin, 1995) and employee retaliation (Graen et al. 1982; Murphy et al., 2003; Townsend et al., 2000). Given this evidence, the following hypotheses are proposed:

*H4: There will be lower perceptions of fairness when negative supervisor behaviors occur within low LMX relationships than when they occur within high LMX relationships.*

*H5: There will be higher endorsements of overt and covert CWB when negative supervisor behaviors occur within low LMX relationships than when they occur within high LMX relationships.*

**Aggression and LMX.** As previously noted, employees in low LMX relationships may be more likely to engage in CWB than employees in high LMX relationships. Additionally, this effect may be stronger in individuals predisposed toward aggression. Since aggressive employees have conditional reasoning biases that enable them to reason and behave aggressively (James, 1998) they should be even more likely to retaliate in low LMX situations. For example, the “*retribution bias*” and “*derogation of target bias*” may influence how aggressive individuals interpret and respond to low LMX relationships. The “*retribution bias*” refers to the tendency of aggressive individuals to implicitly believe that aggression is warranted in order to restore justice for some perceived wrongdoing (James et al., 2004). When aggressive individuals are in low LMX relationships, they may feel that the supervisor has harmed them by treating them differently than high LMX employees. Further, they may view the supervisor as possessing negative qualities that make them even more deserving of retaliation (i.e., “*derogation of target bias*”).

***H6:** As implicit aggression increases, the relationship between low LMX and endorsements of overt and covert CWB will grow stronger.*

Research has shown that some individuals are more sensitive to inequity differences (Martinko et al., 2002) and may be more likely to retaliate against perceived injustices (Skarlicki et al., 1999). Regarding the relationship between implicit aggression and perceptions of fairness, the “*victimization of target bias*” may be of particular relevance in determining how aggressive employees will respond to low LMX relationships. The “*victimization of target bias*” refers to implicit biases that shape how aggressive individuals view positions of authority. Specifically, the bias (i.e., JM) makes it more likely that aggressive individuals will view actions by people of authority as abuses of power that are deserving of retaliation (James, 1998; James et al., 2004). Given this reasoning bias, it is likely that aggressive employees will view any additional responsibilities given to them by supervisors as being unfair and deserving of retaliation. Additionally, this effect may be stronger when employees are in low LMX relationships, since they may feel that group assignment is unjustified and is yet another example of the supervisor abusing their power.

***H7:** Perceptions of fairness will mediate the relationship between implicit aggression and endorsements of both overt and covert CWB. Furthermore, this indirect effect will become stronger when negative supervisor behaviors occur within low LMX than when they occur within high LMX relationships.*

## CHAPTER II: METHODS

### Sample

Participants were sampled from undergraduate students from introductory psychology classes at a large southeastern university. The total sample size consisted of 620 students. Just over 67% of the participants were female and the mean age was 18.52 years ( $SD = 4.88$ ). Approximately 77% identified themselves as Caucasian, with 13% identifying as African American, and 9% identifying as a member of another specific group. In exchange for their involvement in the study, participants received research credit towards a course requirement.

### Procedure

All measures used in the study were administered in survey form online using Qualtrics Survey Software. Prior to participating in the study, the students were provided with a consent form that they completed before any other measures were generated in Qualtrics. Upon completing the consent form, the students were given a demographic questionnaire, the explicit and implicit measures, and the vignettes described below.

### Measures

**Demographic Measure.** A short questionnaire was given to gather basic demographic characteristics of the participants. The questionnaire consisted of five basic questions and is included in Appendix A.

**Implicit Aggression.** Implicit aggression was measured using the CRT-A. The CRT-A consists of 25 multiple choice questions. There are four possible answers to each question. For each aggressive response chosen, the respondent receives a score of +1, while each non-aggressive response is scored as 0. Higher scores on the CRT-A indicate that individuals are implicitly prepared to engage in aggressive behaviors. Although scores are evaluated on a continuum, individuals who score 8 or above are usually classified as aggressive. All scoring

procedures were obtained from James et al. (2004). The mean score on the CRT-A was 4.75 ( $SD = 2.19$ ). The CRT-A demonstrated an acceptable internal consistency ( $KR-20 = .81$ ) with scores being unrelated to age ( $r = .04, p = .31$ ), sex,  $F(1,617) = 2.44, p = .12$ , and race,  $F(2,617) = 2.42, p = .09$ .

**Explicit Aggression.** Explicit aggression was measured using the 8 item Angry-Hostility (A-H) scale of the NEO PI-R. The test is designed to measure how likely individuals are to experience anger, frustration, and bitterness (Costa & McCrae, 1992). It is given in a paper and pencil or computer format and can be administered and scored quickly. The mean score on the A-H scale was 21.99 ( $SD = 2.19$ ). This scale demonstrated an acceptable internal consistency ( $\alpha = .74$ ) with scores being unrelated to age ( $r = -.03, p = .49$ ), sex,  $F(1,617) = 2.08, p = .15$ , and race,  $F(2,617) = .18, p = .84$ .

**Counterproductive Behavior.** To simulate various workplace scenarios, two vignettes were developed. The vignettes featured background information designed to simulate various supervisor/subordinate relationships (i.e., high or low LMX). One of the vignettes described a high LMX relationship and the other vignette described a low LMX relationship using the following format:

1. Todd is good friends with the supervisor of his department and often joins his supervisor and a few other coworkers to play golf after work. (High LMX)
2. Tim works in a large manufacturing plant. Sometimes, Tim's supervisor and some of Tim's coworkers go out after work to have drinks. Since Tim does not drink, he feels awkward and usually avoids going out with them. (Low LMX)

After describing the LMX relationship, additional information about the supervisor and subordinate was provided. Specifically, each vignette described a situation where the supervisor

had just taken a negative action against the subordinate (e.g., forcing the subordinate to work additional hours). The vignettes then featured several statements that allowed participants to rate how fair they thought the situation was and whether they thought the subordinate was justified in retaliating against the mistreatment by engaging in overt and covert CWB. To illustrate, a complete sample vignette is shown in Figure 1.

*Todd is good friends with the supervisor of his department and often joins his supervisor and a few other coworkers to play golf after work. The supervisor has told Todd that he relies on him to get work done and usually gives Todd additional work responsibilities beyond his job description. Recently, the supervisor asked Todd to help him with a project that may require working additional hours.*

A. Overall, how fair is this situation?

Not at all	Slightly	Somewhat	Very	Completely
Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified
<input type="checkbox"/>				

B. How justified is Todd in confronting his boss and telling him that “he is tired of being taken advantage of just because they are friends?”

Not at all	Slightly	Somewhat	Very	Completely
Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified
<input type="checkbox"/>				

C. How justified is Todd in accepting the supervisor’s request but then slacking off during regular working hours to make up for the hours he worked?

Not at all	Slightly	Somewhat	Very	Completely
Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified	Fair/Justified
<input type="checkbox"/>				

Figure 1. A sample vignette.

### CHAPTER III: RESULTS

To test the hypotheses, a moderated mediation model was constructed using Mplus 7.0 (see Figures 2 and 3). Prior to examining the model, bivariate correlations for the test variables were computed and are shown in Table 1. Model results indicated no meaningful differences between the observed and expected covariance matrices,  $\chi^2(18, N = 620) = 372.95, p < .001$ . Furthermore, the model demonstrated an acceptable RMSEA, SRMR, CFI, and TLI (0.00, 0.00, 1.00, and 1.00) respectively. Standard effects and test statistics for both overt and covert CWB, as well as perceptions of fairness, are shown in Table 2.

Table 1  
*Variable Correlations*

	1	2	3	4	5	6
Fairness	1.00					
Overt Behavior	-.24**	1.00				
Covert Behavior	-.26**	.31**	1.00			
Implicit Aggression	-.19**	.30**	.26**	1.00		
Explicit Aggression	.12**	.04	.08*	-.12**	1.00	
LMX	-.16**	-.30**	-.16**	.02	-.01	1.00

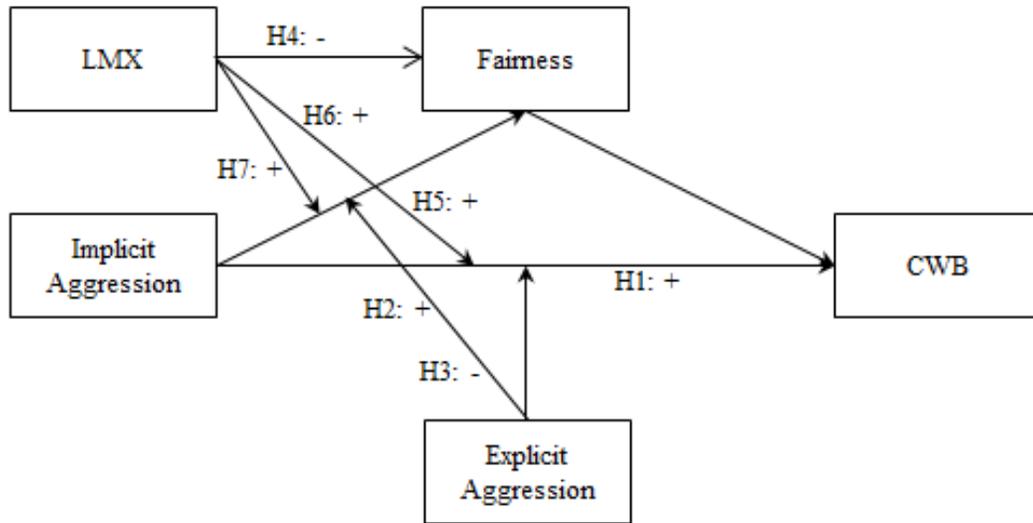


Figure 2. Hypothesized relationships

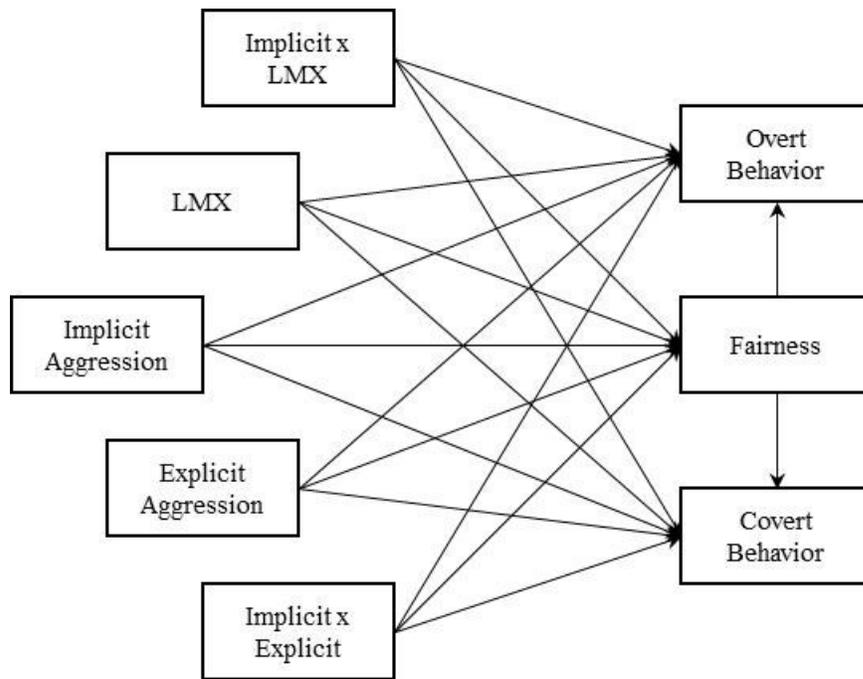


Figure 3. Measurement model.

Table 2

*Standardized Model Effects*

Variable	(Intercept) Standardized Estimate	SE	<i>t</i>	<i>R</i> <sup>2</sup>
Fairness On	-.21			0.07***
Implicit	-.18	.038	-4.58***	
Explicit	-.10	.039	-2.57**	
Implicit * Explicit	.01	.039	0.34	
LMX	-.16	.038	-4.07***	
Implicit * LMX	.03	.039	0.67	
Overt CWB On	-.09			0.26***
Fairness	-.26	.035	-7.31***	
Implicit	.26	.034	7.63***	
Explicit	-.11	.035	-3.12**	
Implicit * Explicit	-.09	.034	-2.64**	
LMX	-.35	.033	-10.54***	
Implicit * LMX	-.09	.034	-2.51*	
Covert CWB On	-.38			0.19***
Fairness	-.26	.037	-7.22***	
Implicit	.23	.036	6.31***	
Explicit	-.15	.036	-4.06***	
Implicit * Explicit	-.09	.036	-2.36*	
LMX	-.21	.036	-5.87***	
Implicit * LMX	-.06	.036	-1.56	
Covert with Overt	.12	0.040	3.04**	

Note. \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

## Test of Hypotheses

Hypotheses 1, 2, and 3 all concern the relationship between aggression and CWB. Specifically, Hypothesis 1 proposed that implicit and explicit aggression would be positively related to endorsements of CWB. As shown in the Table 1, implicit aggression was positively related to both overt ( $r = .30, p < .01$ ) and covert ( $r = .26, p < .01$ ) CWB. Additionally, although the effects of explicit aggression were small, they were in the predicted direction for both overt ( $r = .04, p = .34$ ) and covert ( $r = .08, p < .05$ ) CWB, providing support for Hypothesis 1. Hypotheses 2 and 3 proposed that the relationship between implicit aggression and CWB would be moderated by explicit aggression. Specifically, the relationship between implicit aggression and endorsements of overt CWB was predicted to become stronger as explicit aggression increased (Hypotheses 2); conversely, the relationship between implicit aggression and covert CWB was predicted to become stronger as explicit aggression decreased (Hypothesis 3). Figure 4 illustrates that the interaction between implicit and explicit aggression was significant for overt ( $\beta = -.09, t = -2.64, p < .01$ ) and covert ( $\beta = -.09, t = -2.36, p < .01$ ) CWB. As shown in Tables 3 and 4, the positive association between implicit aggressiveness and endorsement of CWB increased in magnitude as explicit aggressiveness increased, for both overt and covert CWB. These findings provide support for Hypothesis 2, but fail to support Hypothesis 3.

Low LMX relationships were expected to be associated with greater perceptions of unfairness (Hypothesis 4) and endorsements of CWB (Hypothesis 5). As shown in Table 1, vignettes simulating low LMX relationships were more likely to be perceived as unfair ( $r = -.16, p < .01$ ) (i.e., Hypothesis 4 was supported), but less likely to be associated with endorsements of overt ( $r = -.30, p < .01$ ) and covert ( $r = -.16, p < .01$ ) CWB, failing to support Hypothesis 5. Hypotheses 6 and 7 referred to the relationship between LMX and aggression on participants

endorsements of CWB. Hypothesis 6 proposed that the relationship between low LMX and endorsements of CWB would become stronger as implicit aggression increased. As shown in Figure 4, this relationship was significant for overt ( $\beta = -.09, t = -2.51, p < .05$ ), but not covert ( $\beta = -.06, t = -1.56, p = .12$ ) CWB. Hypothesis 7 proposed that perceptions of fairness would mediate the relationship between implicit aggression and endorsement of CWB. Additionally, this effect was predicted to be stronger for low LMX relationships. As shown in Figure 4, implicit aggression was related to lower perceptions of fairness ( $\beta = -.18, t = -4.58, p < .01$ ), which were in turn related to higher endorsements of overt ( $\beta = -.26, t = -7.31, p < .01$ ) and covert ( $\beta = -.26, t = -7.22, p < .01$ ) CWB. However, while the indirect effect (through fairness) was significant, the effect was small  $(-.18)(-.26) = .047$  and contributed little to the total effect of implicit aggression on CWB. Specifically, the direct effect of implicit aggression was 5.5 times larger than the indirect effect. Furthermore, the mediating role of fairness did not differ significantly between LMX conditions ( $\beta = .03, t = .67, p = .50$ ), providing little support for Hypothesis 7.

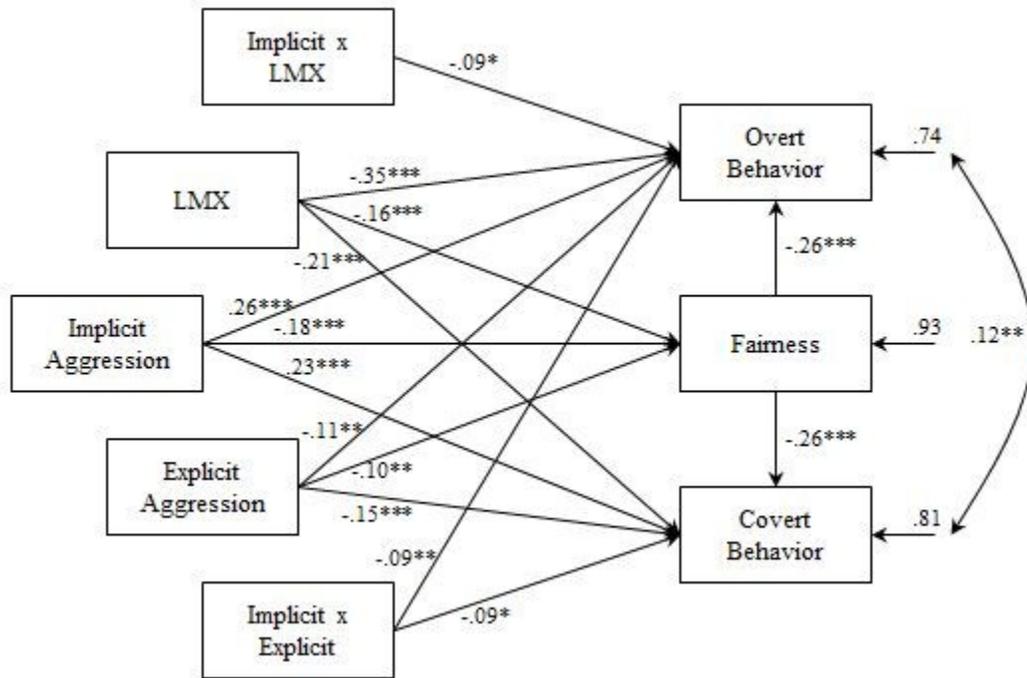


Figure 4. Model results.

Table 3  
*Conditional Effects for Overt Aggression*

Explicit Aggression	Group	Effect	SE	<i>t</i>	95 % CI
-1.03	In	.24*	.050	4.72	[.14, .33]
-1.03	Out	.09	.051	1.68	[-.01, .19]
0.00	In	.31*	.043	7.26	[.23, .39]
0.00	Out	.16*	.044	3.64	[.07, .25]
1.03	In	.38*	.052	7.34	[.28, .49]
1.03	Out	.23*	.053	4.39	[.13, .34]

Note. \*  $p < .001$

Table 4  
*Conditional Effects for Covert Aggression*

Explicit Aggression	Group	Effect	SE	<i>t</i>	95 % CI
-1.03	In	.17*	.047	3.53	[.07, .26]
-1.03	Out	.08	.049	1.62	[-.02, .17]
0.00	In	.23*	.041	5.68	[.15, .31]
0.00	Out	.14*	.042	3.39	[.06, .22]
1.03	In	.29*	.050	5.89	[.20, .39]
1.03	Out	.20*	.051	4.03	[.10, .30]

Note. \*  $p < .001$

## CHAPTER IV: DISCUSSION

The purpose of this study was to examine the way in which individual differences in aggression and LMX may affect participants' willingness to endorse CWB. To this end, we examined the direct effects and interaction of implicit and explicit aggression on participants' willingness to endorse CWB. Additionally, we examined the direct effects of LMX quality and the interaction of LMX quality and aggression on participants' willingness to endorse CWB. As expected, implicit aggression was related to endorsements of CWB both directly and indirectly through perceptions of fairness. Specifically, participants who were implicitly prepared for aggression were less likely to think that the vignettes were fair and more likely to advocate retaliation by endorsing overt and covert CWBs. Further, the direct relationship between implicit aggression and endorsement of CWB increased as participants' levels of explicit aggression increased.

The positive correlations for implicit aggression are consistent with what have been found in the literature (Bing, Stewart et al., 2007; Frost et al., 2007) and demonstrate the importance of considering individual differences in employees' implicit aggression when predicting CWB. Additionally, although the conditional effects of explicit aggression were not in the predicted direction for covert aggression (i.e., Hypothesis 3 was not supported), the conditional effects of explicit aggression were in the predicted direction for overt CWB, providing support for Hypothesis 2. Regardless of the direction, the significance of the interaction between implicit and explicit aggression for both overt and covert CWB provide strong support for the importance of considering both forms of aggression when predicting CWB.

LMX quality had significant direct effects on participants' perceptions of fairness, as well as their endorsements of overt and covert CWB. As expected, vignettes simulating employees in low LMX relationships were more likely to be perceived as unfair. This may be because employees in low LMX relationships feel that there is a double insult present. Not only are they unable to join the high LMX group (i.e., in-group), they are also being asked to accept additional responsibilities or missing benefits that the high LMX group receives.

However, surprisingly, vignettes simulating high LMX relationships were more likely to receive endorsements of overt and covert CWBs. This finding is interesting and seems to reflect differences in how members in low LMX and high LMX relationships respond to perceived mistreatment. While members of low LMX groups might interpret this mistreatment as unfair, they may view the mistreatment as being an inevitable reality of low LMX relationships. In other words, their expectations of the relationship are not violated (i.e., it may not be that the supervisor is mistreating them, they may be simply rewarding the high LMX group). In a sense then, employees in low LMX relationships may become apathetic about the mistreatment.

On the other hand, although employees in high LMX relationships may not view mistreatment as unfairly as employees in low LMX relationships, they are more likely to endorse retaliation against the mistreatment. Perhaps, because they feel the effort they have put forth in building and maintaining the high LMX relationship should be rewarded. In effect, the supervisor is not withholding their end of the bargain and should be punished in order to restore the balance of the social exchange relationship. They may also be more likely to internalize the mistreatment, since they may feel like the supervisor is taking advantage of their relationship.

Finally, the conditional effect of LMX quality on the direct relationship between implicit aggression and overt aggression was significant. Specifically, aggression was even more likely to

lead to endorsements of overt CWB when vignettes simulated high LMX relationships. At the extremes, employees who were both implicitly and explicitly prepared to aggress and who were also in high LMX relationships were the most likely of all participants to endorse overt CWB. Although this finding was not statistically significant for covert CWB, a quick inspection of Table 4 illustrates that the effect of LMX quality and aggression was similar.

Given the above findings, it seems clear that an integrative model for predicting CWB provides substantial benefits over a model that only considers individual or situational factors. This finding is important, not only for selection practitioners, but also for organizations to consider when implementing systems to reduce CWB. Specifically, it may take a two-step approach to reduce CWBs. The first-step should be to do everything possible to avoid selecting aggressive employees (Douglas & Martinko, 2001), particularly when the job requires extensive interactions with others. As predicted, the best way to accomplish this feat may be to incorporate both implicit and explicit measures of aggression (Bing, Stewart et al., 2007; Frost et al., 2007). The second step is to take measures to avoid situations that produce perceptions of unfairness. As the paper shows, these situations may cause retaliation even among non-aggressive individuals. With regards to LMX, supervisors should be cognizant of the dangers that can occur when they have differential relationships with their employees. While the benefits of high LMX relationships have long been touted, some of the dangers of low LMX relationships have only recently been studied (Othman et al., 2009; Townsend et al., 2000). However, this paper shows that high LMX relationships may also cause problems when employees do not perceive additional demands or missed opportunities as fair. This problem can become even more dangerous when employees in high LMX groups are aggressive. To recap then, not only should you avoid hiring aggressive employees, you should avoid making them angry!

## **Limitations**

The main limitation of this study concerns the generalizability of the results to field settings. First, since many of the participants were freshman or sophomore psychology students with little work experience, it is possible that their responses may not represent typical employees. Second, since CWB was measured by examining participants' endorsements of CWB and actual employee behavior was not observed, it is possible the results may not generalize to business settings.

Given the main focus of the study was to evaluate how aggressive employees respond to LMX relationships, it is important to consider past research on aggression when addressing these limitations. First, aggression has been shown to predict a wide variety of delinquent behaviors throughout an individual's lifespan (Huesmann et al., 1984; Huesmann et al., 2009; Olweus, 1979). Second, research has shown that aggression can be an effective predictor of CWB in both laboratory and field settings (Bing, Stewart et al., 2007; Bowler et al., 2011; Douglas & Martinko, 2001; Frost et al., 2007). Third, research has found that aggression has similar relationships with situational (e.g., provocation, alcohol) and individual (e.g., sex, Type A personality) variables in laboratory and field settings, providing strong evidence of the external validity of laboratory studies (Anderson & Bushman, 1997). Finally, although not specifically related to aggression, research has demonstrated that direct observation may not provide a significant advantage over paper people methods (Woehr & Lance, 1991).

A final limitation that should be mentioned is that this study used cross-sectional data and did not employ a longitudinal design. Some researchers have argued that longitudinal data may be necessary to ensure biased estimates do not occur when testing mediation hypotheses (Maxwell & Cole, 2007). However, it should also be noted that many of the studies involving

mediation hypotheses have not used fully longitudinal data (Maxwell, Cole, & Mitchell, 2011). Furthermore, while all of the noted limitations should be considered when evaluating the findings of this study, the results are certainly worthy of further examination, especially considering the demonstrated generalizability of laboratory studies on aggression. Additionally, given the seriousness and potential of cost of CWB and the demonstrated relationship between CWB and aggression, the findings could have substantial benefits for organizations. Specifically, the results may provide insight into how aggressive employees interpret and respond to differential relationships.

## **Conclusions**

This study found that aggression was related to perceptions of fairness and endorsements of CWB. Specifically, when both forms of aggression were high, participants were more likely to endorse CWB. Furthermore, implicit aggression was indirectly related to endorsements of CWB through perceptions of fairness. LMX was also related to perceptions of fairness and endorsements of CWB. Although low LMX relationships were related to higher perceptions of unfairness, high LMX relationships were more associated with endorsements of CWB. Furthermore, the relationship between high LMX and CWB was stronger when participants were implicitly aggressive.

Overall the results provide support for the channeling model of aggression proposed by Frost and colleagues (2007). Additionally, this study demonstrates how LMX and aggression can interact to affect endorsements of CWB. Further research is needed to better understand this relationship, as well as discover how other individual differences may affect the relationship between LMX and CWB. The findings could have practical benefits for organizations and

supervisors. Specifically, the results could be used to inform supervisors of the possible consequences that can occur when they engender differential relationships with their employees.

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## APPENDIX A: DEMOGRAPHIC MEASURE

1. How old are you?
2. What is your sex?
  - Male
  - Female
3. What is your race?
  - White
  - Black, African American, or Negro
  - American Indian or Alaska Native
  - Asian (e.g., Asian Indian, Filipino, Japanese, Korean, Vietnamese, or other Asian)
  - Pacific Islander (e.g., Native Hawaiian, Guamanian, Chamorro, or other Pacific Islander)
  - Other
4. Are you of Hispanic, Latino, or Spanish origin?
  - No, not of Hispanic, Latino, or Spanish origin
  - Yes, Mexican, Mexican American, or Chicano
  - Some College
  - Yes, Puerto Rican
  - Yes, Cuban
  - Yes, another Hispanic, Latino, or Spanish origin
5. What is your marital status?
  - Single
  - Not Married, In a Relationship
  - Married
  - Divorced
  - Widowed

## APPENDIX B: IRB APPROVAL FORM



**EAST CAROLINA UNIVERSITY**  
**University & Medical Center Institutional Review Board Office**  
4N-70 Brody Medical Sciences Building · Mail Stop 682  
600 Moye Boulevard · Greenville, NC 27834  
Office 252-744-2914 · Fax 252-744-2284 · [www.ecu.edu/irb](http://www.ecu.edu/irb)

### Notification of Exempt Certification

From: Social/Behavioral IRB  
To: [Mark Bowler](#)  
CC:  
Date: 10/10/2012  
Re: [UMCIRB 12-001668](#)  
Personality and Leader-Member Exchange

I am pleased to inform you that your research submission has been certified as exempt on 10/10/2012. This study is eligible for Exempt Certification under category #2.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

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IRB00000705 East Carolina U IRB #1 (Biomedical) IRB00000418  
IRB00002761 East Carolina U IRB #2 (Behavioral/S&G) IRB00000418 IRB000004973