

THE FRUSTRATION-AGGRESSION HYPOTHESIS REVISITED:  
A DEVIANCE CONGRUENCE PERSPECTIVE

by

WAYNE S. CRAWFORD, JR.

DIANE E. JOHNSON, COMMITTEE CO-CHAIR  
K. MICHELE KACMAR, COMMITTEE CO-CHAIR  
MARK B. GAVIN  
KIM SYDOW CAMPBELL  
MARILYN V. WHITMAN

A DISSERTATION

Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Management  
in the Graduate School of  
The University of Alabama

TUSCALOOSA, ALABAMA

2015

Copyright Wayne S. Crawford, Jr. 2015  
ALL RIGHTS RESERVED

## ABSTRACT

In 1939, Dollard and colleagues presented the frustration-aggression theory. The main tenet of the theory posits that individuals become frustrated when goal attainment is prohibited or interrupted. Further, following frustrating events, individuals will respond with aggressive behaviors as a form of retaliation against agents of the frustrating events. Organizational deviance has been posited as one such aggressive reaction (Fox & Spector, 1999). This dissertation takes a unique perspective on organizational deviance; I argue that situations may arise when organizational deviance perceptions also serve as an antecedent of frustration. Specifically, I argue that in circumstances where supervisors' and subordinates' perceptions of employee deviance are incongruent, or misaligned, employees will become frustrated. Frustrated employees engage in aggressive behaviors in the form of retaliation and displaced aggression (Berkowitz, 1989). In the current study, I propose that frustrated employees may both retaliate at work and displace their aggression in both the work and family domains. Thus, I argue frustration leads to higher levels of coworker abuse, greater levels of relationship conflict, and greater work-to-family conflict. I also hypothesize that frustration will result in employees engaging in fewer interpersonal citizenship behaviors, which is also detrimental to organizations. This dissertation uses a time-lagged research design and field sample to test the hypotheses offered. A sample of 215 supervisor-subordinate dyads from a large municipality in the southeastern United States was used for hypothesis testing. I followed the latent congruence modeling procedures to test the hypotheses offered (Cheung, 2009). The structural-equation based latent congruence model allowed me to test the effects of incongruence on the mediator

and whether frustration ultimately predicted the outcome variables. I did not find support for the hypothesized mediation model using congruence analysis.

## DEDICATION

I would like to dedicate this dissertation to all of my family, friends, and professors that have supported me throughout this journey. Your guidance, faith, love, and support have been, and continue to be, what makes it possible for me to continue pushing forward.

## LIST OF ABBREVIATIONS AND SYMBOLS

$N$	Sample Size
+	Positive Relationship
-	Negative Relationship
$SD$	Standard Deviation
$M$	Mean
LCM-1	Confirmatory Factor Analysis Component of Latent Congruence Model
LCM-2	Congruence Analysis Component of Latent Congruence Model
LCM-3	Component Analysis Component of Latent Congruence Model
CFA	Confirmatory Factor Analysis
$\sqrt{\quad}$	Square Root
AVE	Average Variance Explained
$r$	Correlation
<	Less Than
=	Equal to
$p$	Significance Level
<i>s.e.</i>	Standard Error of the Estimate
$b$	Unstandardized Beta Coefficient
$\chi^2$	Chi-square Statistic
$df$	Degrees of Freedom

$\Delta\chi^2$	Change in Chi-square Statistic
$\Delta df$	Change in Degrees of Freedom
†	Employee-rated Variable
‡	Supervisor-rated Variable

## ACKNOWLEDGMENTS

This dissertation is the culmination of many fortunate events, people, and God's providence. I am unable to express in words the respect, love, indebtedness, appreciation, and gratitude that I have for all of my family, friends, and professors that have taught and supported me throughout my life. I would like to first thank God, and my savior Jesus Christ. I would also like to thank my family for being entirely supportive and loving throughout this process. Specifically, to my wife, Brandee Crawford, thank you for being patient, loving, caring, and supportive to me over the last few years. To my parents, Wayne and Katy Crawford, and my father-in-law and mother-in-law, Scott and Gwynne Adams, I truly appreciate all of the love and support that you have all provided. To my brother, Aaron Crawford, I deeply appreciate how our relationship has grown with us. To my grandfather and grandmother, Marge and Gil Gunn, thank you for everything that you have done for Brandee and I, and for the great model of love that you both continue to demonstrate. To my sisters-in-law, Aimee Drummond and Casee Adams, I always enjoy our time and laughs together. To my brother-in-law, Doran Drummond, thank you for all the help that you've been over the years. Thank you all for the love and support that you have demonstrated towards me throughout the Ph. D. program. I wish that my grandfather and grandmother, the late Joseph and Jonette Crawford, were alive to enjoy this moment with me.

I would like to give special thanks to my dissertation committee. First, to my co-chair and Ph. D. advisor, Dr. Micki Kacmar. You have helped me beyond measure both personally and professionally. Without your support and encouragement I would have never made it to this point. To my co-chair, Dr. Diane Johnson, thank you for your thoughts and expertise on this

project. You have helped me think of new ideas and further develop my understanding of research. To Dr. Mark Gavin, Dr. Kim Sydow Campbell, and Dr. Marilyn Whitman, I truly appreciate the thoughts, comments, and time you have contributed to this project. I would like to thank you all collectively for being instrumental to my development as an academic and scholar. I could not have had a better committee. Thank you all for the support, encouragement, and knowledge that you have shared with me. To Alabama professors, Dr. Jonathon Halbesleben, Dr. Will Jackson, Dr. James King, Dr. George Franke, Dr. Jim Combs, Dr. Jeff Martin, Dr. Eric Williams, Dr. Craig Armstrong, Mr. David Ford, and Mr. Larry Baldwin, thank you for contributing to such a wonderful experience at the University of Alabama. I cannot express my gratitude and appreciation for your assistance, teaching, and encouragement. To Dr. Gordon Cheung, thank you for helping me understand the latent congruence modeling technique.

To my academic brothers Dr. Justice Tillman and Dr. Anthony Hood. Thank you for your advice and encouragement. To all of the Alabama Ph. D. students, thank you for the knowledge and conversations that we have shared over the years. I have developed substantially over the last few years due to our conversations which I have truly enjoyed. I would also like to thank the faculty at Southeastern Louisiana University, specifically my mentors, Drs. Carl and Toni Phillips, for preparing me for future educational opportunities and life in general. I will always appreciate my time in Hammond, La. I would also like to thank Jan Moyer, Marla Scott, and Angel Oswald for contributing to such a wonderful program at the University of Alabama.

## CONTENTS

ABSTRACT.....	ii
DEDICATION.....	iv
LIST OF ABBREVIATIONS AND SYMBOLS .....	v
ACKNOWLEDGMENTS .....	vii
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
CHAPTER 1 - INTRODUCTION.....	1
CHAPTER 2 - REVIEW OF LITERATURE.....	7
CHAPTER 3 - METHODS.....	21
CHAPTER 4 - RESULTS.....	36
CHAPTER 5 - DISCUSSION .....	52
REFERENCES .....	66
APPENDIX.....	73

LIST OF TABLES

Table 1: Means, Standard Deviations, and Correlations..... 36

Table 2: Confirmatory Factor Analyses..... 38

Table 3: Measurement Equivalence Tests for Deviance..... 41

Table 4: Descriptive Statistics for Latent Deviance Variables ..... 44

Table 5: Results of LCM-2 ..... 46

Table 6: Results of Tests of Indirect Effects..... 48

Table 7: Results of LCM-3 ..... 50

## LIST OF FIGURES

Figure 1: Conceptual Dissertation Model .....	6
Figure 2: Congruence Component of Measurement Model .....	29
Figure 3: Depiction of LCM-2 Structural Model.....	33
Figure 4: Depiction of LCM-3 Structural Model.....	34

## CHAPTER 1

### INTRODUCTION

Frustrated employees make up 20 percent or more of the workforce of a typical company (Royal & Agnew, 2011). Within some industries, frustrated employees comprise up to half of the workforce (Royal & Agnew, 2011). Noting the prevalence of employee frustration, understanding and reducing frustration in the workplace should be a key concern for both researchers and managers. Frustration occurs when an individual striving to obtain a goal experiences an interruption that conflicts with the attainment of that goal (Dollard, Miller, Doob, Mowrer, & Sears, 1939). There can be a number of sources of employee frustration, some of which are dispositional while others are situational. Examples of dispositional influences on frustration include employee personality traits such as anger and anxiety (Fox & Spector, 1999). Examples of situational influences on frustration include violations of generally accepted rules of conduct (Pastore, 1952). Frustrating events in the workplace are sometimes understood as constraints in the workplace, such as bad physical conditions, that block employees from completing valued work (Peters and O'Connor, 1980).

Employees experience a multitude of behavioral choices in organizational life. Of particular interest to managers should be the impact that frustration can have on employees' behavioral choices. For example, employees can choose to perform job duties and responsibilities at an optimal or suboptimal level, and the level of frustration they feel should play a role in determining at what level and which behaviors they perform. Employee behavioral

choices following frustration can be immensely detrimental to the organization. One such behavior that employees are likely to choose following frustration is aggression.

Workplace aggression represents efforts by individuals to harm current or former coworkers, or the organizations in which they are or were previously employed. Aggression is a common response to employee frustration. Some even argue that frustration always leads to some type of aggression (Dollard et al., 1939). Employees might retaliate against the source of frustration and also displace their aggression on innocent third parties. Thus, frustration encountered in the workplace may have negative implications for the work and family domains (Hoobler & Brass, 2006).

Frustration is posited to occur when an individual's behavioral sequence to obtaining a goal is interrupted or prohibited. If no substitute exists for obtaining the valued goal or outcome, the individual's frustration may elicit an aggressive action (Dollard et al., 1939). The extent to which an aggressive response will be provoked by one's frustration directly varies with the level of punishment anticipated for the aggressive act. That is, when an individual can get away with an aggressive response, it will be provoked. Researchers focusing on negative workplace behaviors, such as counterproductive (Storms & Spector, 1987), deviant (Robinson & Bennett, 1995), and maladaptive (Perlow & Latham, 1993) behaviors, have often relied on the frustration-aggression theory as an explanatory mechanism. The frustration-aggression theory has its roots in work by Dollard and colleagues (1939). This theoretical perspective models aggression, or negative workplace behaviors, as an outcome of frustration.

One negative workplace behavior, workplace deviance, involves voluntary employee behavior that contravenes organizational norms and jeopardizes the well-being of the organization and its members (Robinson & Bennett, 1995). Organizational deviance is behavior

detrimental to and aimed at the organization, such as arriving for work late, or leaving early. Interpersonal deviance is behavior targeted at others in the workplace, such as swearing at a coworker or gossiping about one's supervisor. Previous research has interpreted employee deviance (organizational and interpersonal) as an outcome of employee frustration (Fox & Spector, 1999; Hershcovis et al., 2007). However, I submit that there are circumstances in which deviance may serve as an antecedent to employee frustration.

In the employment relationship, both supervisors and subordinates develop perceptions of an employee's deviance. I argue that the extent to which an employee is viewed as deviant will lead to employee frustration. Specifically, when the supervisor and subordinate both consider the subordinate deviant, employee frustration will ensue. Frustration should occur when goal attainment is interrupted (Dollard et al., 1939). Even if the dyad is in agreement, and both parties view the subordinate as deviant, it is unlikely that the supervisor will be distributing favorable outcomes (e.g., promotions, inflated performance ratings, etc.) to that subordinate. On the other hand, if the supervisor and focal employee both agree that he or she is not a deviant employee, the employee will be less likely to experience frustration. Thus, I posit that as the average level of deviance ratings between supervisors and subordinates increase, employee frustration also increases.

I also argue that when the two sets of deviance perceptions are incongruent, employees will become frustrated as their path to goal attainment is interrupted. This reaction is most likely to occur when the supervisor views the subordinate as deviant, but the subordinate does not. The greater the difference in the supervisor and subordinate perceptions of an employee's deviant behavior, the less likely the employee will be able to obtain his or her goals. Thus, one purpose

of this manuscript is to determine whether incongruent deviance perceptions lead to employee frustration.

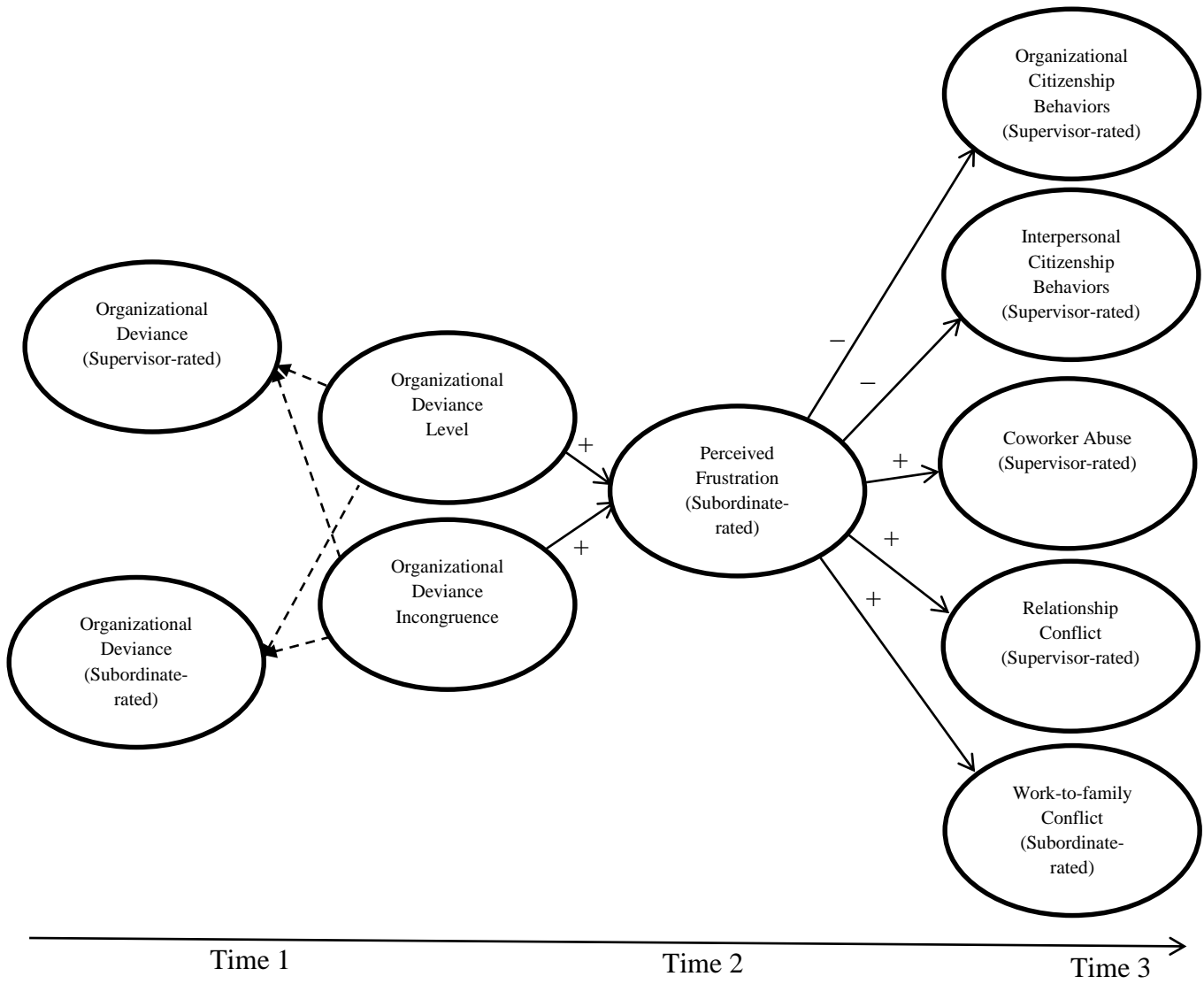
Once the employee is frustrated, he or she will seek an avenue to release this pressure. Retaliating against those viewed as responsible or those in close proximity is one mechanism that can be used. Another purpose of this manuscript is to investigate a host of retaliatory behaviors I posit will be associated with employee frustration. Organizational scholars have argued that retaliation allows victims an opportunity to get even with the aggressor, or source of frustration (Mitchell & Ambrose, 2007). While there is clear support for the retaliation proposition (e.g., see Anderson & Bushman, 2002), employees are at a disadvantage when considering retaliation against their supervisors. According to the displaced aggression tenet of the frustration-aggression theory (Dollard et al., 1939), situations that hinder individuals from directly retaliating against the true source of their frustration will result in displaced aggression. Specifically, frustrated individuals unwilling to retaliate directly against the source of their frustration will target others with their aggressive behavioral responses. In the workplace, potential targets include peers, but employees' frustration also may spillover into the home, where employees may displace their aggression on family members (Hoobler & Brass, 2006). Thus, I argue that employees' frustration will lead to negative workplace behaviors as employees attempt to retaliate against the source of frustration (supervisors) and other, more accessible targets (coworkers). Additionally, I submit that frustration experienced in the workplace may spillover to the family domain and increase work-to-family conflict (WFC).

Other than displacing aggression towards others in the work and family domains, frustrated employees also may actively retaliate by withdrawing behaviors that benefit the organization and those in it. Retaliating against the organization offers frustrated employees a

way of indirectly retaliating against their supervisors, or the source of frustration. One way of indirectly retaliating following a frustrating event would be to engage in less citizenship behaviors. Organizational citizenship behaviors (OCBs) have been defined as employee behaviors that support the broader social and psychological environment in organizations (Organ, 1997). One type of OCB is interpersonal citizenship (OCBI) which include behaviors directed at fellow employees. Examples of OCBI are helping coworkers when their workload becomes unmanageable or listening to their problems. A second type of OCB is organizational citizenship (OCBO) which includes behaviors directed at the organization. OCBO has been labeled as sportsmanship (e.g., not complaining about trivial matters) and civic virtue (e.g., keeping up with matters that affect the organization) (Lepine, Erez, & Johnson, 2002; Organ, 1988). Though employees may be unwilling to retaliate against their supervisors directly, the extent to which they engage in OCBs is completely under their control. Therefore, I argue that in addition to experiencing conflict at home and in the workplace, frustrated employees will actively withdraw from positive organizational behaviors in the form of OCBs directed at their coworkers, supervisor, and organization.

The relationships described above are depicted in the conceptual model shown in Figure 1. As shown in Figure 1, my dissertation seeks to advance the field by determining the extent to which incongruent perceptions between a subordinate and supervisor regarding the subordinate's deviance leads to employee frustration. I also examine whether this frustration leads to a host of negative outcomes affecting both the work and family domains.

Figure 1. Conceptual Dissertation Model.



## CHAPTER 2

### REVIEW OF LITERATURE

#### **Frustration-Aggression Theory**

When the frustration-aggression hypothesis was developed, frustration was defined as “an interference with the occurrence of an instigated goal-response at its proper time in the behavior sequence” (Dollard et al., 1939, pg. 7). The basic premise was that individuals would become frustrated if they were kept from the satisfactions they expected due to their goal-directed behavior. General support for the notion that frustration leads to aggression has been found. For example, early studies have provided evidence that frustrating scenarios produce aggressive responses from participants (Buss, 1963). Additionally, studies have found frustration has been demonstrated to elicit anger and verbal aggression from subjects (Kulik & Brown, 1979).

However, this definition has received criticism since its origination. Subsequent research has treated frustration as an emotional reaction spurred by frustrating events. Berkowitz argued one issue with the original formulation of the frustration-aggression hypothesis was the disregard of the role of the arousal of negative emotion. That is, sources of frustration may lead to aggression in the workplace, but these events first lead to a negative emotion such as perceived frustration, which in turn may lead to aggressive behavior. Sources of frustration can include constraints in the workplace that hinder goal attainment (Peters & O’Connor, 1980). In the workplace, sources of frustration may occur and produce an emotional reaction within

employees. The emotional reaction to frustration can be defined as perceived frustration (Storms & Spector, 1987). Thus, modeling frustration as an emotional reaction spurred from a frustrating event is more appropriate than arguing that a frustrating event directly impacts behavioral reactions.

The notion that a frustrating event will elicit aggressive behavioral responses is rooted in Dollard et al.'s (1939) book, titled *Frustration and Aggression*. Dollard and his colleagues postulated that human aggression is driven by frustration. In fact, the authors' original manuscript went as far as to say, "Aggression is always a consequence of frustration" (pg. 1). Dollard et al. originally defined frustration as occurring when an individual, who is striving to obtain a goal, experiences an interruption that conflicts with the attainment of that goal. For example, in the employment context, an employee's attainment of favorable performance ratings may be thwarted by a variety of situational and relational constraints.

Several characteristics are used to predict the strength of an aggressive response. First, the more an employee anticipates satisfaction from obtaining a goal, the more aggressively inclined he or she becomes when denied that level of satisfaction (Dollard et al., 1939). Therefore, goals that produce less satisfaction to employees should elicit less aggressive responses. Second, the aggressive response will reflect the extent to which the transgressor interrupted goal attainment. Specifically, an employee will respond less aggressively if his or her goal attainment efforts are only moderately interrupted. Third, the frequency with which an employee experiences frustrating events will impact the extent to which he or she responds in an aggressive manner.

Dollard et al. (1939) argued that aggression could be defined as behaviors engaged in by an individual with the goal of inflicting harm on or injuring the target of the aggression. Though

frustration is posited to incite aggressive behavioral responses, some situational constraints can deter aggressive responses. Specifically, Dollard and colleagues theorized that aggressive behaviors targeted towards the source of frustration would have an inverse relationship with perceptions of possible punishment. Individuals will be less likely to respond with aggressive behaviors following frustrating events if they perceive that they, or their loved ones, will be punished in return. In addition, the authors argued that, when faced with the threat of punishment, individuals identify other targets on whom to displace their aggression. In the employment context, displaced aggression is a plausible result of frustration when the source of the frustration is the supervisor, as the supervisor has the upper hand in the relationship.

However, scholars have questioned the original hypothesis, particularly regarding the events that lead to aggression. First, though confirming evidence of the original hypothesis exists, some have argued that only events or situations that violate generally accepted rules of conduct cause frustration (Pastore, 1952). Nevertheless, even legitimate violations or accidents, can spur frustration as well, though the frustration may be to a lesser extent (Berkowitz, 1989). Second, attributions have been argued to determine the extent to which aggressive behaviors follow from thwarted goal attainment. Hostility towards transgressors can be lessened by providing mitigating information which explains that mistreatment is not a deliberate personal attack (Zillman, 1978). It is noteworthy that deliberately blocking goal progression will likely produce a more direct aggressive response, particularly retaliation towards the source of frustration. Nonetheless, a large portion of people express anger even following a legitimate event or accident (Averill, 1982). This highlights that frustrations, and subsequent aggressive behaviors, may be elicited without necessarily attributing purposeful wrongdoings to the transgressor.

Another criticism of Dollard et al.'s (1939) original hypothesis is the need to consider the emotional reaction of the individual experiencing frustration. That is, researchers have since hypothesized that Dollard et al. missed the mediating mechanism that operates between the frustrating event and the aggressive behavior. As Berkowitz (1989) noted, "It is not the exact nature of the aversive incident that is important but how intense the resulting negative affect is" (pg. 10). Thus, the key to the frustration-aggression relationship is the affective response to the frustrating situation (Fox & Spector, 1999).

While frustration typically leads to aggression targeted at the agent who provoked it, some situations also elicit displaced aggression. Displaced aggression will likely occur in situations where the source of frustration is not available, intangible, and retaliation or punishment is feared (Miller, 1941). The employment relationship presents one such situation. Frustration provoked by a supervisor, who has the upper hand, may lead frustrated subordinates to displace their aggression in some way. For example, rather than directing their aggression at the source of frustration (i.e., supervisor), they may direct their aggression to less powerful or more available targets. The extent of displaced aggression is inversely related to how intensely an individual is provoked (Marcus-Newhall, Pederson, Carlson, & Miller, 2000). Employees who are more extensively provoked to frustration will directly retaliate against the source of frustration. When the provocation is less extreme, employees are more likely to displace their aggression. In addition, the level of displaced aggression will be greater in settings viewed as negative (Miller & Marcus-Newhall, 1997), and when the target of the displaced aggression is perceived as similar to the instigator of the frustration (Marcus-Newhall et al., 2000).

Workplace aggression represents efforts by individuals to harm others or the organization in which they are employed (Neuman & Baron, 1998). Workplace aggression has been

differentiated from workplace violence, which encompasses extreme acts of aggression involving physical assault. Workplace aggression can take many forms of behaviors and is much more prevalent than workplace violence. Workplace aggression consists of an interpersonal (aggression targeted at others) and an organizational (aggression targeted at the organization) dimension (Robinson & Bennett, 1995). Workplace aggression may take multiple forms, including deviance (e.g., Bennett & Robinson, 2000), interpersonal conflict (e.g., Spector & Jex, 1998), and retaliation (e.g., Skarlicki & Folger, 1997). Employee deviance is typically treated as an aggressive response. However, as shown in Figure 1, I believe there are circumstances when deviance perceptions may elicit frustration. Specifically, if supervisors and subordinates hold incongruent beliefs regarding the employee's deviance, goal-directed behaviors may be thwarted.

### **Deviance - Incongruence**

Workplace deviance involves voluntary employee behavior that violates organizational norms and threatens the well-being of the organization and its members (Robinson & Bennett, 1995). Examples of deviant behaviors include violence, vandalism, drug use, and leaving work early or arriving late. Deviant behaviors are problematic for organizations due to the costs and production loss associated with such behaviors. For example, yearly organizational losses due to employee theft are estimated to be over 40 billion dollars (Coffin, 2003). Predictors of workplace deviance include abusive supervision (Wang, Mao, Wu, & Liu, 2012), sleep deprivation (Christian & Ellis, 2011), justice perceptions (O'Neill, Lewis, & Carswell, 2011), and personality (Oh, Lee, Ashton, & de Vries, 2011). Workplace deviance can take the form of interpersonal (e.g., gossip or violence) and organizational (e.g., arriving late or completing personal activities on the job) deviance (Berry, Ones, & Sackett, 2007; Robinson & Bennett, 1995).

Many theoretical mechanisms have been utilized by researchers to offer explanations for employee deviance. From a social exchange perspective, employees may experience mistreatment, or be the victim of workplace aggression, and engage in subsequent deviant behaviors aimed at both the organization and those within it to balance the exchange relationship (O'Boyle, Forsyth, Banks, & McDaniel, 2012). From an uncertainty management viewpoint, alternate leadership styles may lead to varying levels of situational uncertainty. Uncertain situations can then result in higher levels of deviance following abusive supervision (Thau, Bennett, Mitchell, & Marrs, 2009). From a self-determination lens, employees will engage in deviant behaviors if their key needs go unsatisfied, which can occur due to negative events such as abusive supervision (Lian, Ferris, & Brown, 2012). Thus, while multiple theoretical mechanisms have been drawn upon to understand the predictors of employee deviance, researchers have solely focused on deviance as an outcome. As an outcome, deviance occurs due to frustrating events, negative situations, or imbalances in exchange relationships.

Applying frustration-aggression theory, I suggest that deviance also can serve as a predictor of employee frustration. In the employment relationship, employees may become frustrated following the interruption of goal attainment (Dollard et al., 1939). Goal attainment, in the employment context, could be associated with obtaining good work assignments, increased time off, favorable performance ratings, and subsequent rewards. The attainment of these favorable outcomes may be hindered if the supervisor and subordinate have incongruent perceptions regarding the employee's deviance. In circumstances where large differences exist between supervisor and subordinate deviance perceptions, the employee may experience frustration as it could become more difficult to obtain favorable outcomes if the supervisor views him or her as deviant. Employees may be reluctant to admit to their deviant behaviors due to the

fear of consequences. However, supervisors should not be as reluctant to rate their subordinates' deviance, as there is no fear of consequences. Additionally, supervisor perceptions may be biased or contain error. Nonetheless, if the supervisor perceives an employee as deviant, it will be unlikely that the employee will accomplish his or her goals. Thus, if a supervisor views a subordinate as deviant, and the subordinate reports engaging in low levels of employee deviance, I expect the employee to become frustrated. Frustration may arise as subordinates are not seen as they believe themselves to be. In this situation, employees may be unable to obtain goals at work due to being viewed as deviant by their supervisor. Negative emotions experienced by the employee following frustrating events is the key to the frustration-aggression hypothesis (Fox & Spector, 1999). That is, subordinates may experience frustration as their own deviance perceptions become incongruent with their supervisors' perceptions. Thus, I propose that incongruent perceptions from subordinates' and supervisors' ratings of employee deviance will be associated with employees' perceived frustration.

**Hypothesis 1.** *Incongruent perceptions of deviance which occur when the subordinate's ratings of deviance are lower than the supervisor's ratings of deviance, will be positively related to employee perceptions of frustration.*

### **Deviance - Level**

In addition to the shared perception supervisors and subordinates may hold regarding an employee's deviance, the average level of deviance ratings also may produce employee frustration. Frustration may occur due to constraints in the workplace that keep employees from completing work (Peters & O'Connor, 1980). As supervisors' and subordinates' average level of deviance perceptions increases, it may become difficult for subordinates to accomplish work. As subordinates' perceptions of their own deviance increases, I expect that they will be more

frustrated at work. That is, I expect that as employees engage in deviant acts, they are less able to complete work. Moreover, as supervisors report higher levels of employee deviance, employees are likely to be treated unfavorably and, in turn, become frustrated. As the average level of the combined supervisor and subordinate ratings of the subordinate's deviance increases, it will be even less likely that the subordinate can obtain favored outcomes. Thus, as shown in Figure 1, I argue that as the average level of deviance reported by a supervisor-subordinate dyad increases, it will be associated with increased frustration.

**Hypothesis 2.** *The average level of deviance reported by a supervisor-subordinate dyad will be positively related to employee perceptions of frustration.*

### **Outcomes of Frustration**

Frustration in the workplace arises due to the thwarting of goal-directed behaviors (Dollard et. al, 1939). The frustration-aggression hypothesis rests on the proposition that aggression follows frustration. Research supports these contentions and has shown that subordinates will retaliate against supervisors for frustrating events by engaging in negative workplace behaviors (Dupré, Inness, Connelly, Barling, & Hopton, 2006; Thau et al., 2009). However, employees may be reluctant to respond directly against their supervisors. In addition to organizations prohibiting negative workplace behaviors, the supervisor also has more power in the relationship and may control desired resources. Therefore, I argue that rather than directly retaliating with aggressive behaviors targeted at the supervisor, subordinates may find more subtle ways to retaliate.

One way to accomplish retaliation would be to limit engagement in OCBs. OCBs are often discretionary acts that promote the functioning of the organization (Organ, 1990). One form of OCBs, OCBO, is directed solely at the organization. Examples of OCBO include

protecting the organization from potential problems and expressing loyalty to the organization. Due to the discretionary nature of such behaviors, subordinates directly control the extent to which they engage in OCBs. Thus, employees may first resort to more covert retaliation by withdrawing from citizenship behaviors (Jermier, Knights, & Nord, 1994). From a social exchange theory perspective (Gouldner, 1960), if an employee becomes frustrated in the workplace, he or she will try to balance the exchange relationship. To balance the relationship, the employee could limit his or her OCBs. By limiting OCBs, an employee may be able to covertly retaliate against the organization and supervisor, and also balance the exchange relationship in his or her own mind. Though the effects of withdrawing from OCBs are not as dramatic as other forms of retaliation (e.g., workplace violence), withdrawing from such behaviors may produce adverse consequences for organizations (Skarlicki & Folger, 1997). Thus, as shown in Figure 1, I suggest that one behavioral reaction to frustration in the workplace will be the withdrawal of OCBO. Greater levels of employee frustration should be associated with lower levels of OCBO.

**Hypothesis 3.** *Perceived frustration will be negatively related to citizenship behaviors directed at the organization.*

Although violence may be the most aggressive behavior at the employee's discretion, this type of behavior has been considered "the tip of the iceberg" concerning negative behaviors in the workplace (see Folger & Baron, 1996). Employees having no power advantage may resort to more stealthy acts in the workplace (Homans, 1961). Another way of releasing frustration could be to limit the extent to which one participates in citizenship behaviors directed at others within the organization. This form of OCBs, OCBI, primarily involves helping others at work. Although an employee's coworkers may not be the source of perceived frustration, OCBs promote the

effectiveness of the organization (Organ, 1990). Similarly to OCBOs, OCBI offer another opportunity for the employee to balance the exchange relationship. Specifically, frustrated employees may be reluctant to continue engaging in OCBI as they were before they experienced frustration. Following from social exchange theory, the employee will view the relationship as imbalanced once their frustration surfaces. Since an immediate supervisor personifies the organization to the aggrieved employee (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002), secretly retaliating against the individual members in the organization in order to hinder performance may be a consequence of employee frustration. Therefore, employees may covertly retaliate against other members in the organization, albeit indirectly, by lessening the amount of OCBI in which they participate. That is, the greater an employee's frustration, the less he or she will engage in citizenship behaviors directed at others within the organization.

**Hypothesis 4.** *Perceived frustration will be negatively related to citizenship behaviors directed at others within the organization.*

Following frustrating experiences, behavioral responses also can take more visible, aggressive forms, such as making negative comments about, or expressing anger towards, others in the workplace. While retaliation directed at the transgressor is a common response in the aggression literature (Mitchell & Ambrose, 2012), some situations do not allow for such retaliatory behaviors. In circumstances where individuals are at a power disadvantage, such as subordinates in the employment relationship, displacing aggression towards less powerful others is a possible course of action. Displaced aggression represents the redirection of one's harm-doing behaviors from a primary to a secondary target (Tedeschi & Norman, 1985). Research has provided evidence that due to the nature of the employment relationship, displaced aggression

can be triggered towards others in the workplace and at home (Hoobler & Brass, 2006; Miller, Pedersen, Earleywine, & Pollock, 2003). Subordinates may turn to displaced aggression when frustration in the workplace stems from their supervisor since employees are less likely to directly retaliate against their supervisors due to the fear of punishment (Miller, 1941).

One way of alleviating frustration indirectly is to displace one's aggression on his or her coworkers. Employees may be less hesitant to react aggressively towards their coworkers because the likelihood of being disciplined is lessened (Harris, Harvey, & Booth, 2010). Coworker abuse can be defined as the display of hostile verbal and nonverbal behaviors aimed at coworkers. This type of abuse in the workplace is similar to that of abusive supervision (Tepper, 2000), only the abuse passes from coworker to coworker, rather than from supervisor to subordinate. Coworker abuse can take both indirect and direct forms. Indirect coworker abuse represents "softer" behaviors, such as breaking promises made to others, while direct abuse represents aggressive behaviors such as making negative comments towards others and expressing anger at them. Aggressively responding towards coworkers is a much safer practice than aggressively responding towards one's supervisor (Hoobler & Brass, 2006). Therefore, as shown in Figure 1, I argue that greater levels of employee frustration will be associated with higher levels of coworker abuse. The greater one's frustration, the more frequently he or she will abuse his or her coworkers.

**Hypothesis 5.** *Perceived frustration will be positively related to coworker abuse.*

Frustrated employees' retaliation efforts may take multiple forms. As discussed above, one way to accomplish retaliation indirectly is by targeting one's coworkers. When targeting coworkers, the fear of retaliation is lessened as the authority shared by an employee and his or her coworkers is the same (Jehn, Northcraft, & Neale, 1999). Thus, frustrated employees are

likely to increase conflict in their work group. Relationship conflict in work groups represents an awareness of incompatibilities amongst coworkers (Jehn & Mannix, 2001). Conflict in the relationship between employees and their coworkers can be in the form of personality and emotional conflicts or general tension with the work group. Relationship conflict can be detrimental to organizations by decreasing creativity, consensus building, productivity, and satisfaction in groups (Evan, 1965; Gladstein, 1984; Pelled, 1996; Wall & Nolan, 1986). By introducing or increasing the conflict in their work groups, employees may relieve some of their frustration caused by their supervisors. Targeting coworkers is much more covert than directly targeting supervisors as coworkers have no power advantage. As shown in Figure 1, I argue that supervisors will view frustrated employees as the center of conflict in their work group. Specifically, I posit there will be a positive relationship between an employee's perceived frustration and the extent to which that employee engages in conflict with members of his or her work group.

**Hypothesis 6.** *Perceived frustration will be positively related to relationship conflict between subordinates and their coworkers.*

Research investigating employee aggression largely emphasizes retaliation in the work domain. However, employees also may take their frustration home if they are unable to relieve their frustration at work. Spillover has been established as a key linkage between the work and family domains (Grzywacz, Almeida, & McDonald, 2002). One type of spillover, work-family conflict, represents “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect (Greenhaus & Beutell, 1985, p. 77). This type of negative spillover can take two directions (Frone, 2003): work-to-family conflict (WFC), or when one's work role interferes with one's family role, and family-to-work conflict

(FWC), or when one's family role interferes with one's work role. Frustration in the workplace can impact the family domain by leading to WFC. Three forms of WFC have been delineated in the literature: time-based conflict (the extent to which time expended in the work role hinders effective functioning in the family role), strain-based conflict (the extent to which strain experienced at work intrudes into and interferes with participation in the family), and behavior-based conflict (when behaviors required at work are incompatible with behaviors required at home) (Carlson, Kacmar, & Williams, 2000; Greenhaus & Beutell, 1985). Frustration experienced in the workplace may hinder an individual from being as effective in the family domain as he or she may be otherwise. Thus, I hypothesize that there will be a positive relationship between employee frustration and work-to-family conflict.

**Hypothesis 7.** *Perceived frustration will be positively related to subordinates' work-to-family conflict.*

In addition to the hypotheses above, I also argue that employees' perceived frustration is the mediating mechanism that links incongruent perceptions regarding employee deviance to the host of outcomes previously identified. Previous calls have been made to not only examine workplace aggression and its antecedents as a single event, but look at the social interactions within which aggression takes place over time (Andersson & Pearson, 1999; Hoobler & Brass, 2006). Resulting employee affect can be just as, or more important in eliciting aggressive behavioral responses than the event that spurred the frustration (Berkowitz, 1989). Indeed, the emotional reaction that the employee experiences following the frustrating incident is the key to the frustration-aggression hypothesis (Fox & Spector, 1999). Thus, I argue that rather than frustrating events directly provoking an aggressive response, these events provoke perceived frustration in employees. In turn, frustrated employees will respond with a host of negative

behaviors, which may include aggression. This approach to workplace aggression complements the proposed model in Figure 1, in that it models frustrating events, affective reactions, and subsequent behavioral reactions in both the work and family domain. Thus, I suggest that perceived frustration serves as the mediating mechanism between incongruent deviance perceptions and multiple behavioral responses.

**Hypothesis 8.** *Perceived frustration mediates the relationship between incongruent deviant perceptions and the subsequent reduction of positive behaviors and the increase in negative behaviors.*

## CHAPTER 3

### METHODS

#### **Overview of Research Design**

Prior to surveying employees, I obtained approval from the Institutional Review Board at the University of Alabama. All participants for the current study were provided with an informed consent page explaining the participants' rights prior to the first administration of surveys. I tested my hypotheses using a time-lagged study design where the data were collected over three points in time. The independent variables were collected at Time 1, the mediating variable was collected at Time 2, and the dependent variables were collected at Time 3. There was approximately six weeks between each time point. Six weeks allows time between sessions to reduce participant fatigue in addition to being adequate time for the organization to organize employees in sessions to optimize survey efforts. Participants were provided with paper copies of the surveys. All subordinates were provided with a subordinate survey. All supervisors also were provided with a supervisor survey, in addition to the subordinate survey, and were asked to complete both surveys.

#### **Sample**

To determine the sample size that would be needed to adequately test the hypotheses in the current study, I conducted a power analysis. Using the *a-priori* sample size calculator for structural equation models, offered at <http://www.danielsoper.com/statcalc3/calc.aspx?id=89>, the recommended minimum sample size is 313 (Cohen, 1988; Soper, 2014; Westland, 2010). This number was obtained by inputting a small effect size (i.e., .1), a desired power level of .95, 10

latent variables, 46 indicator variables, and a probability level of .05. I used a small effect size to obtain a conservative estimate of sample size.

Some researchers have offered rule-of-thumb suggestions for selecting an appropriate sample size. For instance, Bentler and Chou (1987) recommended a ratio of 5:1 between sample size and number of free parameters to be estimated while Bollen (1989) suggested a sample size of at least several cases per observed variable. These approaches would suggest I need a sample size of between 180 and 230. More recent studies based on Monte Carlo simulations, would suggest using an indicator-to-latent variable ratio approach to determine minimum sample size (Westland, 2010). The estimate obtained from Daniel Soper's website follows this approach. Thus, I attempted to collect data from a sample of 350 supervisor-subordinate dyads.

I used a sample of employees from a public, government agency in the southeastern region of the United States. Through a personal contact, I proposed the research project to an attorney of the municipality and a Human Resource representative for the agency. Following this, I personally contacted each of the directors of the departments from which I collected data. Also, I collected demographic information of the participants from the departments' administrative assistants in an effort to use multiple sources and to gather the most accurate descriptive information about the participants.

The two departments were composed of approximately 375 supervisor-subordinate dyads that covered all levels of the departments. Following a listwise deletion method, which included only respondents who provided a response to every item for the study variables, usable data was returned for 215 dyads (approximately 57% response rate). Using this deletion method resulted in no missing data being replaced or estimated.

## **Procedure**

Prior to survey administration, the director of each department asked all individuals who supervise others to notify their direct reports about the upcoming survey administration. The directors were asked to distribute memorandums prior to the beginning of the survey administration as well as once before each wave of surveys. The memorandums notified all employees of the purpose of the research and demonstrated the directors' support for the project. I worked with the directors and supervisors to schedule survey distributions on site, where all surveys were completed.

Employees were scheduled to attend a one-hour session during each wave of survey administration. Each wave took approximately one week to complete. Employees completed the surveys in groups ranging in size from five to thirty. All supervisors were separated from subordinates so that confidential performance ratings of their direct reports could be made. I arrived to each site, distributed all surveys, picked up completed surveys, and left the location with all completed materials. This procedure was repeated for each survey administration. Prior to distributing the surveys, I introduced myself to all participants, briefly explained the format and layout of the survey, ensured participant confidentiality, and explained how the study results would be presented to the organization in an aggregated form.

Following each survey administration, I recoded all reverse coded data. All data was coded such that high values represent high levels of the constructs collected. Throughout the coding process, any employees who did not complete the survey, or completed the entire survey with only one response (i.e., flat-lined), were removed. I also examined all data to ensure that the responses were within plausible ranges (i.e., between one and five). Following each wave of survey administration, I examined the internal reliability estimates for each scale to make any necessary changes accordingly. Next, I created scale level variables by averaging the items that

comprised each scale. I then examined the means of the scale to ensure the means were as expected. Additionally, I ran correlations between the scale level variables to examine whether the correlations between the variables of interest were as expected in both direction and magnitude.

## **Measures**

Unless otherwise noted, responses to all measures used in this study were assessed using a 5-point Likert-scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). All items that were used can be found in the Appendix.

### ***Subordinate-rated measures***

*Organizational deviance.* To measure organizational deviance, I used an 8-item measure developed by Aquino, Lewis, and Bradfield (1999). Participants were asked to indicate how often they have engaged in a variety of deviant behaviors, such as “intentionally arrived late for work,” and “lied about the number of hours I worked,” over the previous six months. Participants responded with a scale ranging from 1 (*never*) to 5 (*often*). The Cronbach’s alpha for this scale was .71. Deviance from the subordinate was captured during the first round of survey administration.

*Frustration.* To measure frustration, I used a 3-item measure developed by Peters, O’Connor, and Rudolf (1980). A sample item included, “Trying to get this job done is a very frustrating experience.” The Cronbach’s alpha for this scale was .71. Frustration was collected during the second round of survey administration.

*Work-to-family conflict.* To measure WFC, I used the shortened version of the 9-item WFC scale developed by Carlson et al. (2000). The shortened version is a 3-item scale developed by Matthews, Kath, and Barnes-Farrell (2010). The shortened version includes one item from

each dimension of WFC. A sample item included, “I have to miss family activities due to the amount of time I must spend on work responsibilities.” The Cronbach’s alpha for this scale was .60. Work-to-family conflict was measured during the third round of survey administration.

### ***Supervisor-rated measures***

*Organizational deviance.* To measure organizational deviance, I used the same 8-item measure developed by Aquino et al. (1999). Supervisors were asked to indicate how often they believe their subordinates have engaged in a variety of deviant behaviors, such as “intentionally arrived late for work,” and “lied about the number of hours they worked,” over the previous six months. Similarly to participants, supervisors responded with a scale ranging from 1 (*never*) to 5 (*often*). This scale had a Cronbach’s alpha of .80. Deviance from the supervisor was collected during the first round of survey administration.

*Organizational citizenship behaviors.* To measure OCBO, I used a 6-item measure developed by Williams and Anderson (1991). A sample item included, “This individual adheres to informal rules devised to maintain order.” This scale had a Cronbach’s alpha of .73. Organizational citizenship behaviors were measured during the third survey administration.

*Interpersonal citizenship behaviors.* To measure OCBI, I used an 8-item measure developed by Settoon and Mossholder (2002). A sample item included, “This subordinate compliments coworkers when they succeed at work.” This scale had a Cronbach’s alpha of .92. Interpersonal citizenship behaviors were captured during the third survey administration.

*Coworker abuse.* To measure coworker abuse, I used six items from the scale developed by Tepper (2000). The items were reworded in order to reflect supervisors’ perceptions of the extent to which subordinates engage in abusive behaviors. A sample item included, “This

subordinate makes negative comments about others in the workplace.” This scale had a Cronbach’s alpha of .90. Coworker abuse was collected during the third survey administration.

*Relationship conflict.* To measure relationship conflict, I used a 4-item scale developed by Jehn and Bendersky (2003). A sample item included, “This subordinate has personality conflicts with group members.” This scale demonstrated a Cronbach’s alpha of .94. Relationship conflict was measured during the third survey administration.

### ***Control variables***

Based on previous research, I controlled for two variables that may explain variation in the dependent variables among participants. Locus of control (LOC) is a personality trait that refers to differences in individuals regarding generalized beliefs in internal versus external control of reinforcement (Rotter, 1966). LOC may change the experience of frustration for employees in the workplace (Fox & Spector, 1999). To measure LOC, I used four items from the measure developed by Levenson (1981). A sample item includes, “Whether or not I get to be a leader depends mostly on my ability.” This scale demonstrated a Cronbach’s alpha of .62.

Additionally, I controlled for negative affect (NA). NA is a mood factor that represents a general dimension of distress and unpleasurable engagement that includes mood states such as anger and disgust (Watson, Clark, & Tellegen, 1988). To measure NA, I used a 10-item measure developed by Watson, Clark, and Tellegen (1988). Participants were asked to think about how often they feel certain moods, such as, “irritable,” and “hostile.” The participants will provide responses on a scale from 1 (*very slightly or not at all*) to 5 (*extremely*). This scale had a Cronbach’s alpha of .81. Both control variables were collected during the second survey administration.

LOC and NA may make certain individuals more prone to experiencing frustration. Thus, I controlled for both variables in my analyses. Due to the significant correlations found in Table 1 between the control variables and the variables of interest to this study, I included the control variables in my analyses. I regressed all five dependent variables on both control variables in the congruence and components models. Both control variables were collected during the second survey administration.

### **Analysis Strategy**

The data were analyzed using Mplus 7 (Muthén & Muthén, 2012). The primary analysis strategy that I used to test the hypotheses offered in this dissertation was a structural equation modeling-based latent congruence model (LCM; Cheung, 2009). The LCM utilizes subordinate and supervisor ratings of deviance to create two second-order factors, as shown in Figure 1. The second-order factors, level and incongruence, represent the mean (level) and difference (incongruence) of the two first-order latent variables. Cheung (2009) demonstrated that by specifically constraining the factor loadings from the first-order latent variables to the second-order latent variables, the second-order factors represent the mean and incongruence of the lower-order factors. Considering deviance, the deviance level variable can be defined as a second-order factor with subordinate- and supervisor-rated deviance as first-order factors, with loadings constrained to one. In effect, the deviance level variable equals the mean of subordinate- and supervisor-rated deviance. The deviance incongruence variable can be defined as a second-order factor with subordinate- and supervisor-rated deviance as first order factors, with loadings constrained to -0.5 and 0.5, respectively. Thus, the deviance incongruence variable equals the difference between subordinate- and supervisor-rated deviance (Cheung, 2009). Figure 2 visually illustrates the congruence analysis component of the measurement model.

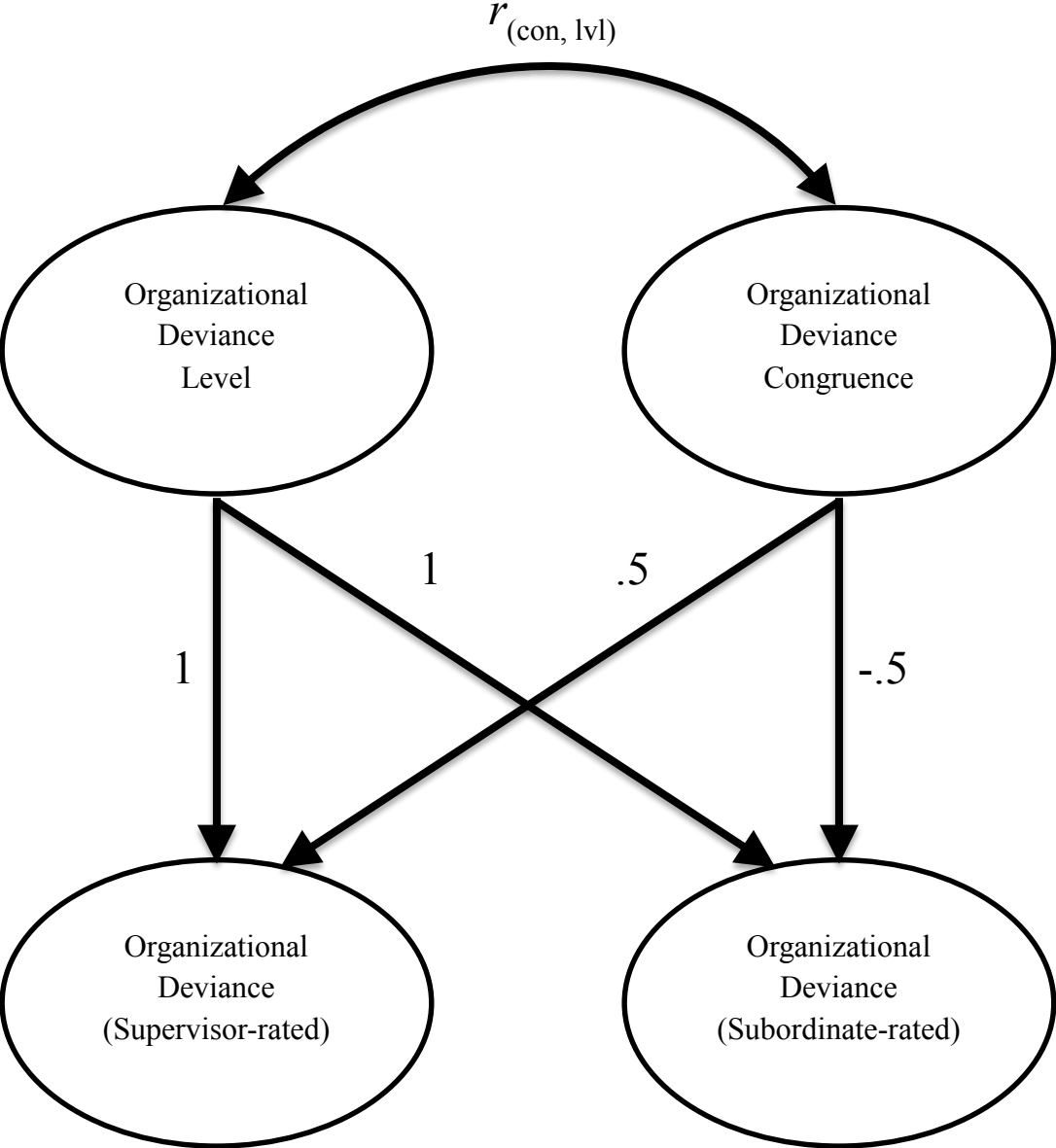
### *Measurement equivalence*

When using the LCM approach to model incongruence, the latent means of the component variables are compared (Cheung, 2009). Thus, prior to comparing subordinate- and supervisor-rated deviance, I tested for measurement equivalence between supervisor and subordinate ratings of deviance. Obtaining measurement equivalence is a prerequisite to evaluating substantive hypotheses between groups (Vandenberg & Lance, 2000). In my case, I compared ratings of organizational deviance across two groups: subordinates and supervisors. Thus, measurement equivalence should be investigated prior to comparing constructs (Cheung, 2009). To test for measurement equivalence, I ran a series of confirmatory factor analyses (CFA). First, I conducted a CFA with no constraints on the subordinate- and supervisor-rated deviance variables. This model forms the configural equivalence model. Following this, I also used CFA to test for metric and scalar equivalence as well. This determines whether the factor loadings and item intercepts for the deviance items vary across subordinate and supervisor groups. This model is labeled as the LCM-1 model.

To examine metric equivalence, I ran the configural model with the loadings for the items constrained to be equal across groups. For example, the factor loading for the second deviance item was constrained to be the same for both subordinates and supervisors. I then compared the metric equivalence model to the configural model and examined the  $\Delta\chi^2$  and degrees of freedom. A non-significant  $\Delta\chi^2$  provides evidence that the loadings are the same across both groups, and metric equivalence has been obtained. Upon finding metric equivalence, I also constrained the item intercepts to be constant across groups to test for scalar equivalence. Similarly, a non-significant  $\Delta\chi^2$  when comparing the scalar equivalence model to the metric equivalence model provides evidence that the item intercepts are the same across both groups, and scalar

equivalence has been obtained. To analyze the data using the LCM, at least partial metric and scalar equivalence should be obtained before comparing the component measures of subordinate- and supervisor-rated deviance (Cheung, 2009).

Figure 2. Congruence Component of Measurement Model.



### ***Latent mean comparisons***

The means for both the level and congruence variable should be examined to determine the average level of the combined subordinate and supervisor ratings of subordinate deviance. I also examined the mean of the incongruence variable. This allowed me to determine which set of ratings of employee deviance were higher on average. Specifically, a positive value for the mean of the incongruence variable indicates that, on average, supervisors produced higher ratings of employee deviance than subordinates. A negative value for the mean of the incongruence variable indicates that subordinates produced higher ratings than supervisors on average. I also examined the correlations between the level and congruence variable to ensure that the variables actually represent unique constructs.

### ***Congruence Analysis***

The LCM-1 model was then extended to a congruence model (LCM-2). In this model, I examined the effects of the level and incongruence of deviance variables on perceived frustration. This model is depicted in Figure 3. First, I examined the extent to which the incongruence variable effects frustration. A significant, positive coefficient indicates support for Hypothesis 1. This effect indicates that as the difference between supervisors and subordinates increases, employee frustration also increases. Following this, I also examined the extent to which the level variable impacts perceived frustration. A significant, positive coefficient indicates support for Hypothesis 2. Additionally, I examined whether the congruence and level variables were directly related to the outcomes.

### ***Component Analysis***

Following an examination of the effects of the second-order factors on frustration, I also extended the LCM-2 to the LCM-3 model, in which direct effects from the component measures

to perceived frustration are added, as well as direct effects from the component measures to the outcomes. That is, I examined the extent to which the subordinate and supervisor ratings of deviance directly impact perceived frustration and the outcome variables. The component analysis provides evidence as to which ratings directly predict the mediator and outcome variables. The LCM-3 is depicted in Figure 4.

### ***Outcomes***

Following the congruence and component analysis, I also examined the extent to which perceived frustration impacts each of the outcome variables. First, I determined if an employee's frustration predicts supervisors' ratings of organizational and interpersonal citizenship behaviors. Specifically, I expected frustrated employees to withdraw from these behaviors, which should be reflected in supervisors' ratings of citizenship behaviors being decreased. Finding a significant, negative effect between frustration and citizenship behaviors provides support for Hypotheses 3 and 4.

I also expected frustrated employees to be abusive towards their coworkers. If this is correct, I should find a significant, positive effect for the relationship between frustration and supervisor-rated coworker abuse. This would provide evidence in support of Hypothesis 5. Additionally, I expected that supervisors would view frustrated employees as the center of conflict in their work group. This also would be reflected by a significant, positive coefficient between frustration and coworker abuse. Finding this would provide evidence in support of Hypothesis 6.

Regarding the family domain, I expected to find that frustrated employees experience work-to-family conflict as their frustration from the workplace spills over into the family domain. Thus, I expected to find a significant, positive relationship between frustration and

work-to-family conflict. This would provide support for Hypothesis 7. Finally, I expected frustration to serve as the mediator between the incongruence variable and the outcomes. Thus, I tested the indirect effects for each variable. Estimates of indirect effects can be obtained by multiplying each of the direct effects that comprise the indirect effect. Finding significant indirect effects provides support for Hypothesis 8.

Figure 3. Depiction of LCM-2 structural model.

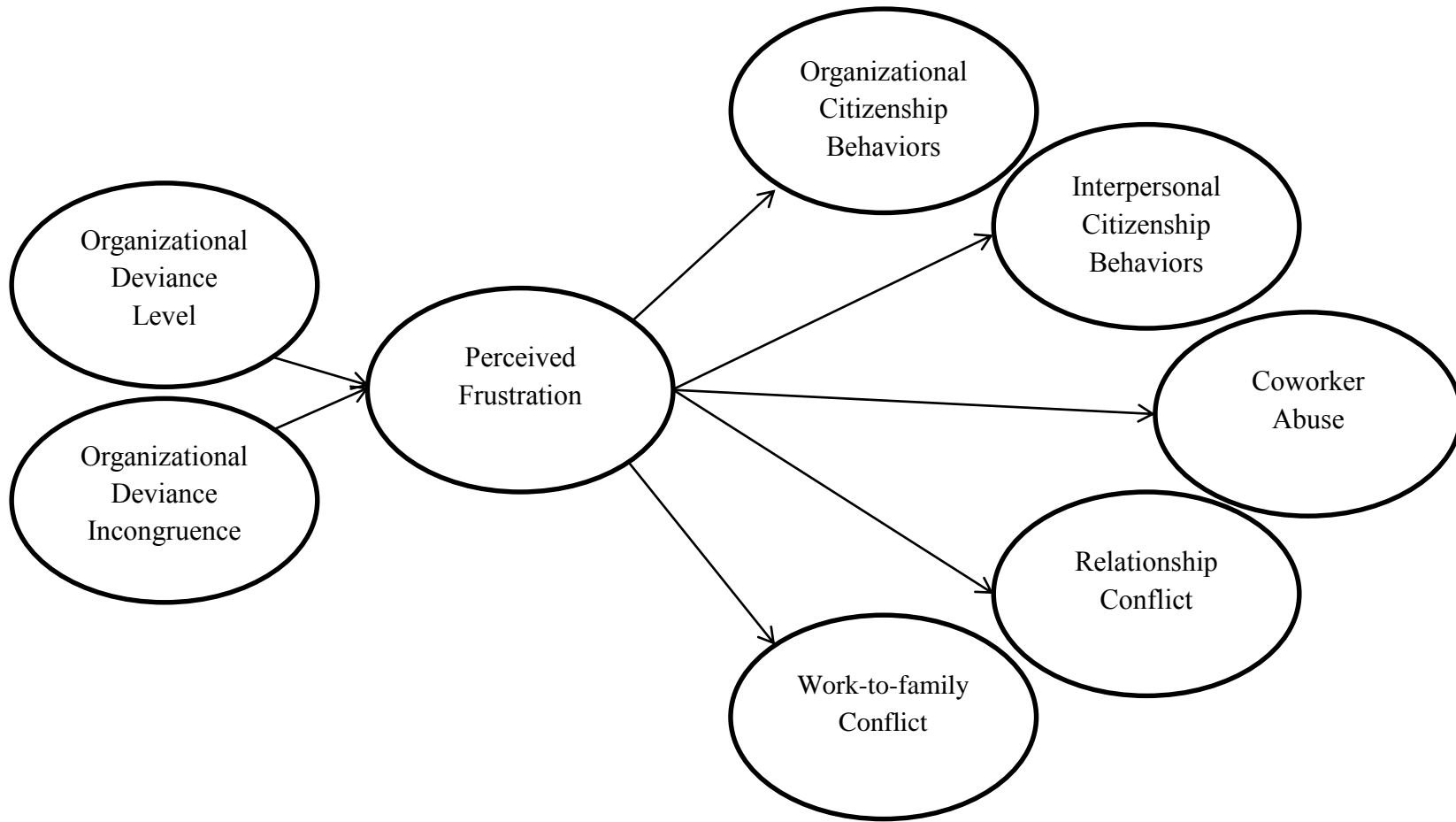
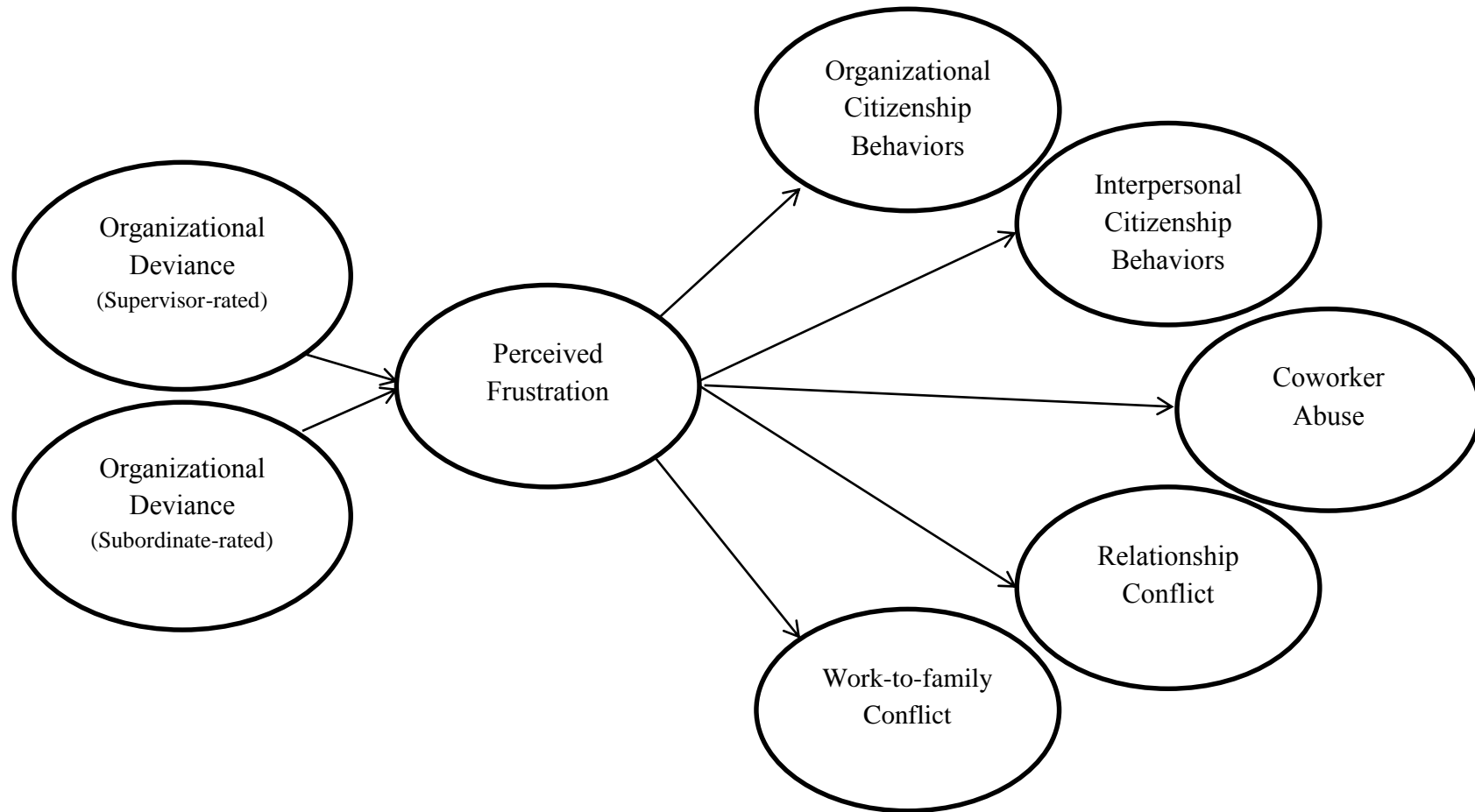


Figure 4. Depiction of LCM-3 structural model.



## CHAPTER 4

### RESULTS

Table 1 illustrates the descriptive statistics of, and correlations among, all study and control variables. Additionally, I included the square root of the average variance explained for each construct on the diagonal of the correlation matrix. This value should be greater in absolute value than all correlations on the same row or column to demonstrate discriminant validity (Fornell & Larcker, 1981). I found evidence for discriminant validity for all constructs except OCBOs. The correlation between OCBO and coworker abuse ( $r = -.61, p < .01$ ) was larger than the square root of the average variance explained ( $\sqrt{AVE_{OCB}} = .55$ ) for OCBOs. Thus, I explored further discriminant validity tests to ensure that each construct represented a unique latent variable.

#### *Confirmatory Factor Analyses*

I utilized structural equation modeling to further test for discriminant validity. A series of nested CFAs can be used to examine the discriminant validity of a group of constructs. Specifically, combining constructs that appear theoretically similar in alternative models, and comparing the alternatives to the hypothesized model allows researchers to investigate whether alternative models fit the data as well as the hypothesized model. The chi-square difference test can then be used to compare the chi-square statistics and degrees of freedom for each model. In relation to the alternative models, the hypothesized model should produce a lower chi-square statistics. This provides evidence that the hypothesized model is the best representation of the

data when considering the alternatives. Thus, I compared the CFA of the hypothesized measurement model to a number of alternatives. I particularly wanted to compare the hypothesized model to a model where variables rated by the same party were collapsed, variables rated during the same time were collapsed, and a model where theoretically similar variables were collapsed as well. The results of the CFAs are presented in Table 2.

As can be seen in Table 2, the hypothesized model ( $\chi^2 = 2485.47$ ,  $df = 961$ ,  $CFI = .74$ ,  $TLI = .72$ ,  $RMSEA = .09$ ,  $p < .01$ ), was the best fitting model when compared to the alternatives. Through each iteration, as the measurement model was further collapsed, the fit became noticeably worse. Compared to the hypothesized model, a 7-factor model with both sets of deviance ratings loading on a single factor fit the data significantly worse ( $\chi^2 = 2728.74$ ,  $df = 968$ ,  $CFI = .69$ ,  $TLI = .67$ ,  $RMSEA = .09$ ,  $\Delta\chi^2 = 243.27$ ,  $\Delta df = 7$ ,  $p < .01$ ). Following this, I compared the hypothesized model to a 5-factor model ( $\chi^2 = 3382.68$ ,  $df = 979$ ,  $CFI = .58$ ,  $TLI = .56$ ,  $RMSEA = .11$ ,  $\Delta\chi^2 = 897.21$ ,  $\Delta df = 18$ ,  $p < .01$ ) where all supervisor outcomes loaded on the same factor. This model fit the data significantly worse than the hypothesized model. Next, I compared the hypothesized model to a 3-factor model ( $\chi^2 = 3745.08$ ,  $df = 986$ ,  $CFI = .52$ ,  $TLI = .50$ ,  $RMSEA = .11$ ,  $\Delta\chi^2 = 1259.61$ ,  $\Delta df = 25$ ,  $p < .01$ ) where all items collected at the same time loaded on a factor. Finally, I compared the hypothesized model to a two-factor model ( $\chi^2 = 4065.79$ ,  $df = 988$ ,  $CFI = .47$ ,  $TLI = .44$ ,  $RMSEA = .12$ ,  $\Delta\chi^2 = 1580.32$ ,  $\Delta df = 27$ ,  $p < .01$ ) where all items rated by the same party (e.g., supervisor, subordinate) loaded on a single factor. However, it is important to note that the fit statistics for the hypothesized model fell outside of the acceptable ranges (i.e.,  $CFI > .95$ ,  $RMSEA < .08$ ).

**Table 1**  
**Means, Standard Deviations, and Correlations**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Organizational deviance <sup>†</sup>	1.23	.30	(.52)									
2. Organizational deviance <sup>‡</sup>	1.99	.47	.13	(.61)								
3. Frustration <sup>†</sup>	2.72	.81	.11	.06	(.75)							
4. Organizational citizenship behaviors <sup>‡</sup>	3.61	.48	-.14 <sup>*</sup>	-.47 <sup>***</sup>	-.00	(.55)						
5. Interpersonal citizenship behaviors <sup>‡</sup>	3.44	.52	-.05	-.32 <sup>***</sup>	-.08	.45 <sup>***</sup>	(.76)					
6. Coworker abuse <sup>‡</sup>	2.41	.59	.01	.31 <sup>***</sup>	.08	-.61 <sup>***</sup>	-.58 <sup>***</sup>	(.78)				
7. Relationship conflict <sup>‡</sup>	2.27	.68	-.05	.27 <sup>***</sup>	-.04	-.49 <sup>***</sup>	-.59 <sup>***</sup>	.70 <sup>***</sup>	(.90)			
8. Work-to-family conflict <sup>†</sup>	2.48	.64	-.01	.13	.14 <sup>*</sup>	-.15 <sup>*</sup>	-.17 <sup>*</sup>	.12	.08	(.74)		
9. Negative affect <sup>†</sup>	1.37	.40	.04	.12	.26 <sup>***</sup>	-.17 <sup>*</sup>	-.07	.13	.11	.08		
10. Locus of control <sup>†</sup>	3.30	.68	-.00	-.07	-.14 <sup>*</sup>	.08	.02	-.09	.05	-.05	-.10	

Note: Listwise  $N = 215$ . <sup>\*</sup>  $p < .05$ ; <sup>\*\*</sup>  $p < .01$ ; <sup>\*\*\*</sup>  $p < .001$ . <sup>†</sup> indicates an employee-rated variable. <sup>‡</sup> indicates a supervisor-rated variable.

**Table 2**  
**Confirmatory Factor Analyses**

Model	$\chi^2$	<i>df</i>	$\Delta \chi^2$	$\Delta df$	RMSEA	TLI	CFI	SRMR
8-factor (hypothesized)	2485.47	961			.09	.72	.74	.08
7-factor (deviance collapsed)	2728.74	968	243.27*	7	.09	.67	.69	.09
5-factor (supervisor outcomes collapsed)	3382.68	979	897.21*	18	.11	.56	.58	.09
3-factor (collapsed by time)	3745.08	986	1259.61*	25	.11	.50	.52	.10
2-factor (collapsed by rater)	4065.79	988	1580.32*	27	.12	.44	.47	.11
Independence	6789.38	1035	4303.91*	74				

Note: Listwise  $N = 215$ . Change in chi-square is relative to the hypothesized model. RMSEA = root mean squared error of approximation; TLI = Tucker-Lewis index; CFI = comparative fit index; SRMR = standardized root mean square residual. \*  $p < .001$ .

### *Measurement Equivalence*

Having found that the hypothesized model fit the data better than each of the alternatives, the next step in latent congruence modeling is to examine whether appropriate measurement equivalence can be demonstrated for the variables which will be compared. In this dissertation, supervisors' and subordinates' ratings of employee deviance were compared. Thus, it is appropriate to demonstrate metric and scalar equivalence prior to examining the LCM-2 and LCM-3 models (Cheung, 2009). Upon finding measurement equivalence, the results of congruence analysis can then be interpreted unambiguously (Vandenberg & Lance, 2000). I tested for measurement equivalence across the supervisor and subordinate ratings of employee deviance. The results are presented in Table 3. Measurement equivalence can be tested using a series of nested CFAs. The baseline CFA requires the two latent variables that are being compared to be associated with the same set of items. That is, the organizational deviance items rated by the supervisor loaded on one latent variable, while the organizational deviance items rated by the subordinate loaded on a second latent variable. The eight organizational deviance items are used for each latent variable, though the first set of eight items includes the deviance items rated by the supervisor and the second set of eight items includes the deviance items rated by the subordinate. This is the configural model. Establishing configural equivalence provides evidence that the two sets of raters rated the same variable conceptually. Following this, I tested for metric equivalence by comparing the configural model to a model where similar items across raters are constrained to be equal. In other words, the loading for the second item of the deviance scale rated by subordinates would be constrained to equal the loading for the second item of the deviance scale rated by supervisors. Evidence of metric equivalence implies that the relationship between the items and the latent variables are not different across groups. Metric equivalence is

established if the chi-square difference test is not significant when comparing the configural model to the metric model.

Upon establishing metric equivalence, the next step is to establish scalar equivalence which provides evidence that the item intercepts are similar across groups. Similar to metric equivalence, similar items across raters are required to be equivalent for the measures to have demonstrated scalar equivalence. Scalar equivalence is tested by constraining the item intercepts for similar items to be the equal across raters. Finding scalar equivalence ensures that similar items calibrate equally across raters. Thus, providing evidence of scalar equivalence suggests that each item relates to the latent variable similarly across raters and similar items have the same origin. Finally, a non-significant chi-square difference test when comparing the metric and scalar models provides evidence for scalar equivalence.

As can be seen in Table 3, the deviance scale in the current study violates the chi-square difference test for both metric and scalar equivalence. The configural model ( $\chi^2 = 353.42$ ,  $df = 103$ , CFI = .74, TLI = .70, RMSEA = .11), which is a baseline CFA model with both sets of deviance items, fit the data significantly better than the metric model ( $\chi^2 = 416.14$ ,  $df = 110$ , CFI = .68, TLI = .65, RMSEA = .11,  $\Delta\chi^2 = 62.72$ ,  $\Delta df = 7$ ,  $p < .01$ ), where the item loadings are constrained to be equal across raters. This suggests that the items have a different relationship with the latent variable when being compared across raters. Additionally, I also found a significant chi-square difference test when comparing the metric ( $\chi^2 = 416.14$ ,  $df = 110$ , CFI = .68, TLI = .65, RMSEA = .11) and scalar ( $\chi^2 = 534.44$ ,  $df = 117$ , CFI = .56, TLI = .55, RMSEA = .13,  $\Delta\chi^2 = 118.30$ ,  $\Delta df = 7$ ,  $p < .01$ ) models. This suggests that the items do not calibrate equally across raters. Findings of invariant measures, which I have found in this dissertation, suggest that the comparison of latent means that is to follow may not compare solely substantive differences

**Table 3**  
**Measurement Equivalence Tests for Deviance**

	$\chi^2$	<i>df</i>	$\Delta \chi^2$	$\Delta df$	RMSEA	TLI	CFI	SRMR
Configural equivalence	353.42	103			.11	.70	.74	.09
Metric equivalence	416.14	110	62.72*	7	.11	.65	.68	.12
Scalar equivalence	534.44	117	118.30*	7	.13	.55	.56	.15

Note: Listwise  $N = 215$ . RMSEA = root mean squared error of approximation; TLI = Tucker-Lewis index; CFI = comparative fit index; SRMR = standardized root mean square residual. \*  $p < .001$ .

in the constructs of interest. That is, differences found by comparing the latent means of the deviance ratings in the current study may be confounded by differences in the scale and origin of the latent means that exist across groups.

### ***Latent Mean Comparisons***

The next step in my analyses was to compare the latent means of the deviance ratings across groups. Hypothesis 1 suggests that deviance incongruence would be positively related to subsequent employee frustration. Specifically, I hypothesized that employees would become frustrated in situations where the supervisors' rating of the focal employee's deviance was higher than the self-rating the employee provided of his or her own deviance. Thus, it is appropriate to determine whether supervisors provided higher ratings of deviance than subordinates on average. The estimated latent means and standard deviations for subordinate and supervisor ratings, as well as the level (mean) and incongruence (difference between supervisor and subordinate ratings) are presented in Table 4. As can be seen, supervisors ( $M = 1.84, s.d. = .31$ ) provided higher ratings of deviance than subordinates ( $M = 1.27, s.d. = .10$ ) on average. It is interesting to note that the correlation between supervisor and subordinate ratings of deviance is very low. This suggests that the variations in deviance ratings provided by supervisors were not associated with subordinate ratings. Due to the constraints on the higher-order factor of level, the mean of the level variable can be obtained using the following formula:

$$M_l = (M_{s1} + M_{s2})/2,$$

where  $M_l$  is the mean of the level variable,  $M_{s1}$  is the mean of the supervisors' deviance ratings, and  $M_{s2}$  is the mean of the subordinates' self-ratings of deviance. Additionally, the mean of the incongruence variable can be obtained with the following formula:

$$M_c = (M_{s1} - M_{s2}),$$

where  $M_c$  is the mean of the incongruence variable,  $M_{s1}$  is the mean of the supervisors' deviance ratings, and  $M_{s2}$  is the mean of the subordinates' self-ratings of deviance. It is noteworthy to recognize the positive value for the mean of the incongruence variable ( $M = .57, s.d. = .33$ ). This again provides evidence that, on average, supervisors provided higher ratings of deviance than did subordinates. Finally, the level and incongruence variables were correlated ( $r = .04, p < .01$ ), which suggests that as the overall average of deviance increased for a dyad, the incongruence in deviance ratings for that dyad also increased.

### ***Analysis of LCM-2***

The LCM-1 (measurement equivalence model) was extended to model congruence analysis (LCM-2), which allowed me to examine whether the level of, and the incongruence between, supervisors' and subordinates' ratings of deviance predicted employee frustration and subsequent work outcomes. This model will allow for testing all of the hypothesized relationships in this dissertation. The model being tested in the LCM-2 is akin to the conceptual model presented in Figure 3. First, I examined the effects of level and incongruence on frustration, to test Hypotheses 1 and 2. Second, I examined the effects of frustration on each of the outcomes, to test Hypotheses 3 through 7. Third, I examined the indirect effects from incongruence to each of the outcomes, through frustration, to test Hypothesis 8. Finally, I also examined the direct effects from level and congruence to each of the outcomes. The results of the LCM-2 model are presented in Table 5. I also included the effects from the control variables to each of the outcomes, all of which were nonsignificant. Due to negative residual variances, I constrained the residual variances for the second frustration item and third WFC item to small positive values (i.e., .10).

The relationship between organizational deviance incongruence and frustration was hypothesized to be positive, suggesting that the more incongruent perceptions about an

**Table 4**  
**Descriptive Statistics for Latent Deviance Variables**

	<u>Subordinate</u>		<u>Supervisor</u>		$r_{(sub,sup)}$	<u>Level</u>		<u>Incongruence</u>		$r_{(lvl,con)}$
	Mean	Standard Deviation	Mean	Standard Deviation		Mean	Standard Deviation	Mean	Standard Deviation	
Organizational Deviance	1.27	.10	1.84	.31	.01	1.56	.16	.57	.33	.04*

Note: Listwise  $N = 215$ . \*  $p < .001$ .

employee's deviance between an employee and his or her supervisor are, the more frustrated the employee will become. The coefficient for this portion of the structural model ( $b = .04, s.e. = .27$ ) was positive, but not significant. Thus, Hypothesis 1 was not supported. Additionally, I hypothesized that the average level of deviance ratings for a supervisor-subordinate dyad would be positively related to employee frustration. Similarly to congruence, the corresponding coefficient for this relationship ( $b = .27, s.e. = .58$ ) was positive, but not significant. Thus, Hypothesis 2 was not supported. Next, I examined whether frustration was related to each of the outcome variables. An examination of the associated coefficients will provide tests for Hypotheses 3-8.

First, I inspected whether frustration was related to supervisors' ratings of employees' citizenship behaviors directed at the organization and others within the organization. The associated coefficients for OCBOs ( $b = .04, s.e. = .04$ ) and OCBIIs ( $b = -.05, s.e. = .05$ ) were both insignificant. Thus, Hypotheses 3 and 4 were not supported. Following this, I examined whether employee frustration was related to negative outcomes rated by the supervisor, namely coworker abuse and relationship conflict. Again, I found an insignificant coefficient for the relationship between frustration and coworker abuse ( $b = .02, s.e. = .05$ ). Therefore, Hypothesis 5 was not supported. The coefficient for the relationship between frustration and relationship conflict ( $b = -.09, s.e. = .06$ ) was not significant. This provides evidence that Hypothesis 6 was not supported. Finally, I investigated whether employee frustration significantly impacted employees' work-to-family conflict. The corresponding coefficient ( $b = .05, s.e. = .06$ ) was not significant. Thus, Hypothesis 7 was not supported.

To test Hypothesis 8, that frustration serves as the mediator between deviance incongruence and the outcome variables, I examined the indirect effects. The indirect effects are

**Table 5**  
**Results of LCM-2**

	Frustration	Level	Incongruence	NA	LOC
Frustration		.27 (.58)	.04 (.27)		
Organizational citizenship behaviors	.04 (.04)	-1.32** (.41)	.07 (.15)	-.10 (.09)	.04 (.06)
Interpersonal citizenship behaviors	-.05 (.05)	-.83* (.40)	-.02 (.18)	-.03 (.11)	-.03 (.07)
Coworker abuse	.02 (.05)	.87* (.44)	.10 (.19)	.11 (.12)	-.04 (.07)
Relationship conflict	-.09 (.06)	.53 (.45)	.22 (.21)	.22 (.14)	.10 (.08)
Work-to-family conflict	.05 (.03)	.14 (.45)	-.01 (.21)	.01 (.13)	-.06 (.08)

Note: Listwise  $N = 215$ . Estimates are unstandardized regression coefficients. Estimated standard errors of the coefficients appear in parentheses. \*  $p < .05$ ; \*\*  $p < .01$ .

presented in Table 6. As can be seen, all of the indirect effects were zero and nonsignificant. This was expected as the relationships between deviance incongruence and frustration, as well as those between frustration and the outcomes, were all nonsignificant. This provides evidence that Hypothesis 8 was not supported. Therefore, frustration does not serve as the mediating mechanism between deviance incongruence and employee outcomes. Upon examination of the indirect effects, and the hypothesized direct effects, I also included the direct effects from the level and incongruence variables to each of the outcomes. While I found that frustration does not serve as the mediator between these variables, I wanted to determine whether level and incongruence directly impacted important work outcomes. The direct effects are presented in Table 5. As can be seen there, three of the direct effects from level to outcomes were significant. I found significant coefficients from level to OCBs ( $b = -1.32, s.e. = .41, p < .01$ ), from level to ICBs ( $b = -.83, s.e. = .40, p < .05$ ), and from level to coworker abuse ( $b = .87, s.e. = .44, p < .05$ ). Although my original hypotheses were not supported, it is noteworthy that deviance level was significantly related to a few of the outcomes.

### ***Analysis of LCM-3***

The final step in my analysis was to examine the LCM-3 model, where the direct effects from incongruence and level were replaced with direct effects from supervisor- and subordinate-rated deviance to frustration and each of the outcomes. Cheung (2009) suggests doing this as a way to determine which sets of ratings are more influential in the congruence analysis. The results from the LCM-3 are presented in Table 7. Once again, I included the effects from the control variables to each of the outcomes and found no significant results. Further, I again constrained the residual variances for the same frustration and WFC items to small positive values (i.e., .10).

**Table 6**  
**Results of Tests of Indirect Effects**

Path	Estimate	<i>S.E.</i>	<i>p</i> -value
Deviance incongruence → Frustration → OCBO	.00	.011	.898
Deviance incongruence → Frustration → OCBI	-.00	.015	.898
Deviance incongruence → Frustration → Coworker abuse	.00	.005	.906
Deviance incongruence → Frustration → Relationship conflict	-.00	.024	.898
Deviance incongruence → Frustration → WFC	.00	.013	.899

Note: Listwise  $N = 215$ . OCBO = Organizational citizenship behaviors. OCBI = Interpersonal citizenship behaviors. WFC = Work-to-family conflict.

Examining the direct effects from the supervisor and subordinate ratings, I found one significant relationship for subordinate ratings, and four significant relationships for supervisor ratings. Specifically, I found subordinates' self-ratings of deviance to be negatively related to OCBs ( $b = -.74, s.e. = .32, p < .05$ ). Additionally, I found significant ratings between supervisors' ratings of employee deviance and OCBs ( $b = -.59, s.e. = .14, p < .01$ ), ICBs ( $b = -.43, s.e. = .12, p < .01$ ), coworker abuse ( $b = .54, s.e. = .13, p < .01$ ), and relationship conflict ( $b = .49, s.e. = .13, p < .01$ ). These results provide evidence that supervisors' ratings of employee deviance were more influential in predicting the selected outcomes than were subordinates' self-ratings of deviance.

**Table 7**  
**Results of LCM-3**

	<u>Deviance</u>				
	Frustration	Subordinate	Supervisor	NA	LOC
Frustration		.10 (.54)	.17 (.15)		
Organizational citizenship behaviors	.04 (.04)	-.74* (.32)	-.59** (.14)	-.10 (.09)	.04 (.06)
Interpersonal citizenship behaviors	-.05 (.05)	-.40 (.36)	-.43** (.12)	-.03 (.11)	-.03 (.07)
Coworker abuse	.02 (.05)	.33 (.39)	.54** (.13)	.11 (.12)	-.04 (.07)
Relationship conflict	-.09 (.06)	.04 (.41)	.49** (.13)	.22 (.14)	.10 (.08)
Work-to-family conflict	.05 (.06)	.08 (.42)	.06 (.11)	.01 (.13)	-.06 (.08)

Note: Listwise  $N = 215$ . Estimates are unstandardized regression coefficients. Estimated standard errors of the coefficients appear in parentheses. \*  $p < .05$ ; \*\*  $p < .001$ .

## CHAPTER 5

### DISCUSSION

This dissertation sought to examine the impact of deviance perceptions on outcomes such as employee frustration and behavioral outcomes relating to both the work and family domains. In this chapter I will discuss both theoretical and managerial implications of the current research, recognize limitations that should be considered in light of this study, and provide suggestions for future research efforts. I will first discuss the objectives of this dissertation and explain the research questions studied. I will then discuss the results that were found, followed by a discussion of the implications for theory and managers. Finally, I will discuss the limitations to the current research and discuss suggestions for how future research might overcome these limitations and extend the current research.

This dissertation sought to examine whether supervisors' and subordinates' perceptions predicted employee frustration. Additionally, I suggested frustration leads to a host of work and family outcomes. The hope of this research was to extend the organizational deviance literature by suggesting deviance perceptions may serve as predictors in the workplace. Until now, deviance has been positioned as only an outcome in the literature (e.g., Fox & Spector, 1999). However, the current research provides theoretical rationale demonstrating that deviance may, in some instances, serve as an antecedent in organizational research. I also contribute to the frustration-aggression theory by investigating whether incongruent perceptions in dyadic relationships may spur affective frustration and subsequent aggressive responses. Further, the

outcomes assessed in this dissertation provide an empirical test of how incongruent dyadic perceptions may lead to displaced aggression in both the work and family domains. Finally, this dissertation applies latent congruence modeling (Cheung, 2009) as a feasible way to study shared perceptions within dyadic research.

Using a multiple-wave survey administration, I tested a series of eight hypotheses to investigate the relationships between the variables of interest in this study. Prior to the current research, deviance has only been examined as an outcome in organizational research. Thus, I investigate whether organizational deviance perceptions serve as an antecedent to employee frustration. Based on the frustration-aggression theory I suggest that frustration is associated with both positive and negative workplace outcomes, as well as spillover in to the family domain. I also investigated the indirect effects to make conclusions based on the current research.

### **Deviance Perceptions and Employee Outcomes**

In this study, I did not find evidence that deviance perceptions influenced employee frustration. I examined two circumstances where I expected perceptions of deviance would be positively related to frustration. First, I expected disagreement regarding employee deviance between supervisors and their subordinates to be positively related to frustration. Second, I expected that the average level of deviance perceptions reported by the supervisor-subordinate dyad also would be positively related to employee frustration. Unfortunately, neither of these direct effects between the interaction of deviance perceptions and employee frustration were significant.

Perhaps one suggestion for why the results were insignificant results is the reduced power due to using a listwise deletion procedure. Thus, by utilizing a larger sample and retesting the hypothesized effects, significant results may be produced. Further, in the current study

employees' perceived frustration was measured approximately six weeks following the measurement of deviance perceptions. While employee frustration may have occurred due the interaction between deviance perceptions, it is very likely that the resulting frustration occurred more immediately. Additionally, the frustration measure used was a general frustration measure that may not have captured the direct frustration employees might experience toward their immediate supervisors. Finally, there is a possibility that the subordinates were somewhat unaware of the perceptions held by their supervisors regarding the employees' deviance. In organizational settings, one caveat to obtaining valuable information from employees is having to ensure anonymity. Thus, there is no practical way to provide an employee's supervisor's perceptions of the employee's deviance back to the employee. In the future, it would be beneficial to determine the extent to which employees are able to know the level of deviance perceived by the supervisor. By comparing this type of rating to the actual rating provided by the supervisor, we could investigate the extent to which employees are able to understand their supervisor's perceptions.

In this research, frustration was predicted to serve as the mediator between perceptions of deviance and employee behaviors. Based on the frustration-aggression theory, rather than a direct relationship between interacting deviance perceptions and employee outcomes, I suspected that employees would experience frustration in the workplace before "acting out." Unfortunately, my findings did not support this prediction. I found no significant relationships between employee frustration and the outcome variables. Similarly to the issue of timing mentioned above, it is plausible that the six week delay between measuring frustration and outcomes, may be hindering the ability to find significant results. Specifically, employee behavioral actions

brought about by frustration experienced in the workplace may occur soon after the frustration is experienced.

In addition to testing the direct effects of incongruence and level on frustration, and frustration on each of the outcomes, I also tested the indirect effects by multiplying the components of each indirect effect to determine the overall effect from incongruence to each outcome, mediated by frustration. Unfortunately, almost all of the indirect effects were estimated to be zero. This was due to the low values of the direct effects. This provides evidence that perceived frustration did not serve as the mediator between incongruent deviance perceptions and employee outcomes in the current study. Perceived frustration in the workplace was not found to be related to any of the outcome variables, nor deviance perceptions. The timing of the measurement of frustration is therefore critical when studying frustration-aggression theory. Following this, I examined the direct effects from the incongruence and level variables to each of the work and family outcomes. None of the effects associated with the incongruence variable were significant, though three of the five effects associated with the level variable were significant. Specifically, as the level of deviance reported by the supervisor-subordinate dyad increased, employees engaged in fewer organizational and interpersonal citizenship behaviors, and were more abusive towards their coworkers. Thus, there is evidence that for the current research the level of deviance reported by the dyad was more influential than incongruence in predicting the variables of interest. However, the findings associated with the level variable are likely driven by the relationships between the supervisor-ratings of deviance and supervisor-rated outcomes. As noted below, the relationships may be inflated due to the common rating source.

Finally, following Cheung's (2009) recommendation. I supplemented the LCM-2 model by also running the LCM-3 model which replaces the effects from level and incongruence with direct effects from supervisor- and subordinate-rated deviance to each of the outcome variables. Subordinates' self-ratings of deviance were negatively related to organizational citizenship behaviors. The other four effects were nonsignificant. Also, the supervisors' ratings of deviance were significantly related to all of the supervisor-rated outcome variables. That is, as supervisors provided higher levels of deviance, subordinates engaged in fewer organizational and interpersonal citizenship behaviors, and were both more abusive towards, and were more likely to cause conflict among, their coworkers. One suggestion for these significant findings may be common rater bias. That is, the significant findings associated with supervisors/ ratings of deviance may be due to having a single rater for both variables. This provides assurance that the study was designed in such a way that allowed me to investigate substantive relationships between the variables of interest. That is, I designed the study so that I would be unable to capitalize on significant relationships that may be biased by using a common rater or method by using multiple raters over multiple time periods.

### **Theoretical Implications**

The theoretical implications of the current study primarily revolve around deviance perceptions and the frustration-aggression theory. First, this dissertation demonstrates the utility of understanding perceptions held by both parties in the employment relationship. Using the latent congruence model, I demonstrated that results could be highly biased by solely considering only supervisor (or subordinate) perceptions (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Specifically, when using only supervisor ratings, I found significant relationships to all supervisor-rated outcome variables. The significant relationships found across time exhibit the

strength of bias that can exist when examining relationships between variables collected from a single source. Further, when using the average level of deviance provided by the dyad, I found similar significant results to the supervisor-rated outcome variables. These results were probably driven by the same common source issues found in the relationships when using only supervisor ratings of deviance.

An alternative implication may be that the interaction between perceptions of deviance held by supervisors and subordinates may not be valuable in predicting workplace outcomes. That is, specifically assessing individually-held deviance perceptions may be more beneficial than expected prior to analyzing the data for this dissertation. It may be that outcomes rated by the supervisors, such as citizenship behaviors and conflict are influenced by only supervisor ratings. In addition to the variables being rated by a common source, the supervisor's perceptions of subordinate outcomes may only be influenced by that supervisor's perceptions of the employee's deviance. In other words, the driver of supervisors' outcome ratings may be their own perceptions of employee deviance, due to theoretically supported relationships rather than for solely common source reasons. Supervisors' perceptions of employee behaviors may be driven by their perceptions of deviance regardless of the employees' own behaviors.

Regarding subordinate-rated outcomes, including both employee frustration and WFC, there may be a number of reasons for the results found in the current study. First, the employees who participated in the current study were not given any indication as to the level of deviance that was provided by their respective supervisors. Thus, one possibility for the insignificant findings is that employee frustration may not have been driven by incongruent deviance perceptions since subordinates were only aware of their self-reported deviance. Due to the required anonymity associated with the data collection used in this study, I was not allowed to

give subordinates any information regarding their supervisors' reports, or vice versa.

Additionally, in the current study most employees working within the departments surveyed worked very closely with several other members in the organization. The work completed by the departments allowed for teams to work consistently over time with a small group of members within the department. The groups also worked consistently for the same supervisor. Further, upon analyzing the data collected, it appears that neither employees nor supervisors were satisfied with the organization as a whole. Thus, one rationale for the findings is that the supervisors may have been covering for their employees by providing very low ratings of employee deviance. Very low ratings provided by supervisors combined with little variation found in subordinates' self-ratings may be the source of the insignificant findings found in the current research.

Due to the idiosyncrasies associated with the data set, including the relationship dynamics and the potential for covering up negative behaviors, the relationships investigated may warrant further investigation. The relationships found in the current study may not replicate in other samples. In addition to the characteristics of the sample being unique, the relationship dynamics within the organization also make the current findings less generalizable to other samples. All of the reasons mentioned above provide evidence that replication in an independent sample may be warranted. While the theoretical implications hold validity based on the findings of this study, such implications should be viewed in light of the unique characteristics of the sample.

### **Managerial Implications**

The findings of this dissertation have several implications for managers regarding employee frustration and behaviors in the workplace. First, it should be recognized that there is

the potential for bias in ratings. Organizations interested in implementing survey research to further understand the dynamic relationships between workplace behaviors and performance outcomes should implement safeguards in their surveys to combat bias. For example, in the current study, the significant relationships were mostly found between supervisor ratings and supervisor outcomes. While the results may illustrate significant, valid relationships, there is also the potential that bias due to the common source may be the basis of the relationships (making the relationships artificial). Unfortunately, it may be hard to completely eliminate such biases. One recommendation would be to inform managers that without honest ratings, the survey research becomes ineffective. In this study, it may have been that supervisors were inflating favorable ratings, and deflating negative ratings, for their own subordinates in order to make their crew look better. Thus, obtaining honest ratings is crucial to analyzing the hypothesized relationships. However, this may not be enough to obtain fully honest ratings. Another recommendation would be to use short, succinct measures to decrease supervisors' fatigue.

Regarding the findings of the current study, managers should pay attention to employee deviance. Employee deviance (based on both supervisor and subordinates ratings) was found to be negatively related to positive organizational behaviors. Until this point, deviance has been positioned as an outcome, suggesting that deviance does not serve as a predictor. This dissertation provides preliminary evidence that perceptions of deviance may predict other employee behaviors. Additionally, I found supervisors' perception of employee deviance to significantly predict their ratings of employees' OCBI, relationship conflict, and coworker abuse. This again provides evidence that deviance should not only be regarded as an outcome, and that deviance scholars should also investigate outcomes of deviance perceptions. Finally, anonymity remains a major concern in survey-based research. During the current data collection, animosity

existed between the researchers and the participants due to anonymity concerns. Regardless of the explanations for how the data would be treated, the participants did not trust that their responses would be anonymous. Thus, subordinates also may have deflated their deviance ratings since the participants had concerns that their individual ratings would be reported to the organization.

### **Limitations**

While implications for both scholars and managers can be derived from the findings of the current study, the implications should be understood in light of a number of limitations also associated with this dissertation. Perhaps the most significant limitation in the current study is the inability to control the environment and, in turn, establish true causality. I designed the dissertation study in such a way that I would be able to reduce some of the ambiguity regarding the direction of causality between the variables of interest. Specifically, I built in six week periods to allow the independent variables to be collected prior to the mediator, which was collected prior to the outcomes.

Another major concern based on the findings of the current study is the timing that was used between the measurement of each set of variables. First, the appropriate amount of time between a frustrating event and the affective state of frustration the employee experiences remains unknown. In this dissertation, I chose to allow six weeks between the survey administrations. I argue that after several weeks of experiencing incongruent perceptions within the dyad, the employee will experience an affective state of frustration. However, it is plausible that employees may experience frustration much sooner than six weeks. The amount of time passing between frustrating events and employee frustration could also vary from soon after the event to weeks after the event. Considering incongruent deviance perceptions, the amount of

time required for frustration to be experienced may covary with the extent to which employees are informed of incongruent perceptions. That is, if an employee was given a copy of his or her supervisor's ratings of the employee's deviance, and those were incongruent with the self-ratings of deviance, employee frustration may occur very quickly. However, if the employee has no knowledge of the ratings and is only able to indirectly infer the supervisor's perceptions of deviance, employee frustration may take longer to occur. Further, the current study inquired about general frustration associated with the job. A more targeted frustration measure may capture employee frustration due to incongruent perceptions more effectively. I also asked employees to think about frustration without providing a direct referent regarding time. That is, I did not ask employees to think about a given time period regarding their frustration. Such a measure may more accurately reflect the conceptual experience of frustration that is of interest to the current study.

Regarding the outcome variables of interest in this dissertation, I specifically focused on displaced aggression and indirect retaliation. The outcome variables were either indirect retaliation against the supervisor (e.g., reduced organizational and interpersonal citizenship behaviors), or displaced aggression targeted at coworkers (e.g., coworker abuse and relationship conflict). Based on the frustration-aggression theory, I argued that due to being at a power disadvantage the employee would retaliate indirectly against the supervisor rather than retaliating with direct behaviors such as verbal or physical abuse. However, there is also an opportunity for employees to retaliate aggressively against their supervisors if the employees are significantly frustrated. This type of aggression will more likely take the form of verbal abuse, as this is less extreme than physical abuse. In this context, direct retaliation would be less likely due to the close-knit relationship between supervisors and their crews. On the other hand, in occupations

where employees work autonomously, a larger number of employees report to a single supervisor, and little interaction exists between supervisors and their direct reports, direct retaliation may become more evident.

Finally, in the current study I assumed that employees' goals would be unfulfilled due to frustration in the workplace. Dollard and colleagues (1939) originally asserted that when goal attainment was blocked, individuals would become frustrated. In my dissertation, rather than actually measuring whether goals were unfulfilled, I used incongruent deviance perceptions as a proxy, arguing that due to being in disagreement with their supervisor about their deviance, employees would not be able to obtain their goals, and in turn become frustrated. Using an actual measure of goal fulfillment may have produced different results.

### **Future Directions**

Notwithstanding that unfortunately most of the hypotheses presented in the current dissertation were not supported, a number of fruitful avenues for future research exist. First, I suggest that the data be re-analyzed using an alternative approach to handling missing data. In the current study I used a listwise deletion procedure, which also has been used in countless studies published in the management literature (e.g., Richter, Hirst, van Knippenberg, & Baer, 2012; Swider, Boswell, & Zimmerman, 2011). However, recent studies on organizational research methods have demonstrated the benefits of using alternative methods for estimating missing data, such as multiple imputation and full information maximum likelihood (FIML; Newman, 2014). Newman (2014) demonstrates that listwise procedures may produce biased estimates and limit the generalizability of results to only those who choose to complete entire surveys. In the dataset used in this study, using FIML may increase the sample size by approximately 30% by using the information provided by respondents who may have data

missing at either the item- or construct-level on some variables. A second suggestion is to fully replicate this study using an independent sample. This action will allow for increased generalizability and provide evidence as to whether the results found in this dissertation may have been sample specific due to the idiosyncrasies in the dataset.

Berkowitz (1989) argued that researchers studying the frustration-aggression theory should consider individual emotion in the process. Unfortunately, direct results have yet to be produced as to what length of time should be built into one's research design between frustrating events and the experienced frustration. Future research might benefit by considering the lapse of time that should occur, perhaps studying different degrees of transgressions experienced, and differing lapses of time. For example, a diary study might be used to understand whether employees experience frustration on a more immediate, or frequent, basis in the workplace. The lack of significant results in the current study may be due to the amount of time that occurred between each wave of measurement. Diary studies have been used to understand how work demands impact daily emotions of employees (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2012). Similarly, diaries may allow researchers to examine frustration in the workplace that may be experienced on a daily basis due to occurrences of incongruent perceptions with their supervisor.

Another area that may benefit from future investigation is directly measuring interruptions to goal attainment. In the current study, I used incongruence and level as a proxy for goal attainment. In other words, I argued that when deviance perceptions were higher and/or incongruent employee would be unable to accomplish their goals. Employees' goals may range from obtaining higher performance ratings to being promoted, receiving a raise, or being

transferred to a different location or department. Truly testing the frustration-aggression theory would require explicitly capturing the extent to which such goal attainment was interrupted.

Considering the idiosyncrasies associated with the current data, team member evaluations may also provide interesting results. The employee data used in this dissertation included a majority of employees who worked in teams or with crews who were relatively stable over the period of the data collection. Thus, team member evaluations of employee deviance may provide interesting and more accurate results than employees' self-ratings. Since employees were required to self-disclose the deviant behaviors they engaged in, social desirability was likely present which may have resulted in inaccurate self-ratings. Additionally, frustration may serve as a moderator rather than a mediator. Reviewing the results, frustration did not serve as a mediator. It may be interesting to determine whether there is an interaction between frustration and both level and incongruence. That is, if employees experience high levels of deviance, or an incongruence in deviance perceptions in relation to their immediate supervisor, and are also frustrated, some of the outcomes may increase or decrease dramatically.

The current dissertation specifically focused on indirect retaliation, highlighting the displaced aggression tenet of the frustration-aggression theory (Dollard et al., 1939; Miller, 1941). Future research might examine whether direct retaliation occurs in the workplace. For example, rather than reducing one's citizenship behaviors to indirectly retaliate against the supervisor, he or she may prefer to stay true to his or her self-concept. Thus, employees might respond aggressively rather than try to change who they are and what they do at work. Such a situation might consist of an employee retaliating by being verbally aggressive to demonstrate his or her frustration with the incongruent perceptions held by the supervisor. Additionally, within certain industries and/or types of firms, this type of behavior might be more acceptable.

For example, verbal aggression toward the supervisor may be more acceptable when engaged in by family members working in family-owned firms. In that case, firm ownership might moderate the relationships predicted in the current study.

## **Conclusion**

This dissertation sought to extend the frustration-aggression theory to dyadic relationships by considering both supervisor and subordinate perceptions of a key employee characteristic. Although I did not find support for my entire model, the current research demonstrates the value of considering both parties of the employment relationship when studying employee attitudes and behaviors. Using latent congruence modeling, I found that the interaction between supervisor and subordinate perceptions of employee deviance (level of deviance reported by the dyad) was significantly related to a number of critical workplace outcomes. Further, using this type of analysis in future research designs provides a promising opportunity to more fully understand the employment relationship.

## REFERENCES

- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Psychology*, *53*, 27-51. doi:10.1146/annurev.psych.53.100901.135231
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, *24*, 452-471. doi: 10.5465/AMR.1999.2202131
- Aquino, K., Lewis, M. U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior*, *20*, 1073-1091. doi: 10.1002/(SICI)1099-1379(199912)20:7<1073::AID-JOB943>3.0.CO;2-7
- Averill, J. R. (1982). *Anger and aggression: An essay for emotion*. New York, NY: Springer-Verlag.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*, 349-360. doi: 10.1037/0021-9010.85.3.349
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, *16*, 78-117. doi: 10.1177/0049124187016001004
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, *106*, 59-73. doi: 10.1037/0033-2909.106.1.59
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: a review and meta-analysis. *Journal of Applied Psychology*, *92*, 410-424. doi: 10.1037/0021-9010.92.2.410
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, *17*, 303-316. doi: 10.1177/0049124189017003004
- Buss, A. H. (1963). Physical aggression in relation to different frustrations. *The Journal of Abnormal and Social Psychology*, *67*, 1-7. doi: 10.1037/h0040505
- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, *56*, 249-276. doi: 10.1006/jvbe.1999.1713

- Cheung, G. W. (2009). Introducing the latent congruence model for improving the assessment of similarity, agreement, and fit in organizational research. *Organizational Research Methods, 12*, 6-33. doi: 10.1177/1094428107308914
- Christian, M. S., & Ellis, A. P. (2011). Examining the effects of sleep deprivation on workplace deviance: A self-regulatory perspective. *Academy of Management Journal, 54*, 913-934. doi: 10.5465/amj.2010.0179
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd Edition). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Coffin, B. (2003). Breaking the silence on white collar crime. *Risk Management, 50*.
- Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press. doi: 10.1037/10022-000
- Dupré, K. E., Inness, M., Connelly, C. E., Barling, J., & Hopton, C. (2006). Workplace aggression in teenage part-time employees. *Journal of Applied Psychology, 91*, 987-997. doi: 10.1037/0021-9010.91.5.987
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology, 87*, 565-573. doi: 10.1037/0021-9010.87.3.565
- Evan, W. (1965). Conflict and performance in R&D organizations. *Industrial Management Review, 7*, 37-46.
- Folger, R., & Baron, R. A. (1996). Violence and hostility at work: A model of reactions to perceived injustice. In G. R. VandenBos & E. Bulatao (Eds.). *Violence on the job: Identifying risks and developing solutions* (pp.51-85). Washington, DC: American Psychological Association. doi: 10.1037/10215-002
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50. doi: 10.2307/3151312
- Fox, S., & Spector, P. E. (1999). A model of work frustration-aggression. *Journal of Organizational Behavior, 20*, 915-931. doi: 10.1002/(SICI)1099-1379(199911)20:6<915::AID-JOB918>3.0.CO;2-6
- Frone, M. R. (2003). Work-family balance. In J. C. Quick, & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 143-162). Washington, DC: American Psychological Association.
- Gladstein, D. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly, 29*, 499-517. doi: 10.2307/2392936

- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76-88. doi: 10.5465/AMR.1985.4277352
- Grzywacz, J. G., Almeida, D. M., & McDonald, D. A. (2002). Work–Family Spillover and Daily Reports of Work and Family Stress in the Adult Labor Force. *Family Relations*, 51, 28-36. doi: 10.1111/j.1741-3729.2002.00028.x
- Harris, K. J., Harvey, P., & Booth, S. L. (2010). Who abuses their coworkers? An examination of personality and situational variables. *The Journal of Social Psychology*, 150, 608-627. doi: 10.1080/00224540903365489
- Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., Leblanc, M. M., & Sivanathan, N. (2007). Predicting workplace aggression: a meta-analysis. *Journal of Applied Psychology*, 92, 228-238. doi: 10.1037/0021-9010.92.1.228
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York, NY: Harcourt, Brace & World.
- Hoobler, J. M., & Brass, D. J. (2006). Abusive supervision and family undermining as displaced aggression. *Journal of Applied Psychology*, 91, 1125-1133. doi: 10.1037/0021-9010.91.5.1125
- Jehn, K. A., & Bendersky, C. (2003). Intragroup conflict in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior*, 25, 187-242. doi: 10.1016/S0191-3085(03)25005-X
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44, 238-251. doi: 10.2307/3069453
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly*, 44, 741-763. doi: 10.2307/2667054
- Jermier, J. M., Knights, D. E., & Nord, W. R. (1994). *Resistance and power in organizations*. London: Routledge.
- Kulik, J. A., & Brown, R. (1979). Frustration, attribution of blame, and aggression. *Journal of Experimental Social Psychology*, 15, 183-194. doi: 10.1016/0022-1031(79)90029-5
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: a critical review and meta-analysis. *Journal of Applied Psychology*, 87, 52-65. doi: 10.1037/0021-9010.87.1.52

- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research with the locus of control construct, 1*, 15-63. New York: Academic Press.
- Lian, H., Lance Ferris, D., & Brown, D. J. (2012). Does taking the good with the bad make things worse? How abusive supervision and leader–member exchange interact to impact need satisfaction and organizational deviance. *Organizational Behavior and Human Decision Processes, 117*, 41-52. doi: 10.1016/j.obhdp.2011.10.003
- Marcus-Newhall, A., Pedersen, W. C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: a meta-analytic review. *Journal of Personality and Social Psychology, 78*, 670-689. doi: 10.1037/0022-3514.78.4.670
- Matthews, R. A., Kath, L. M., & Barnes-Farrell, J. L. (2010). A short, valid, predictive measure of work–family conflict: Item selection and scale validation. *Journal of Occupational Health Psychology, 15*, 75-90. doi: 10.1037/a0017443
- Miller, N. E. (1941). The frustration-aggression hypothesis. *Psychological Review, 48*, 337-342.
- Miller, N., & Marcus-Newhall, A. (1997). A conceptual analysis of displaced aggression. In R. Ben-Ari & Y. Rich (Eds.). *Enhancing education in heterogeneous schools* (pp. 69-108). Ramat-Gan, Israel: Bar-Ilan University Press.
- Miller, N., Pedersen, W. C., Earleywine, M., & Pollock, V. E. (2003). A theoretical model of triggered displaced aggression. *Personality and Social Psychology Review, 7*, 75-97. doi: 10.1207/S15327957PSPR0701\_5
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology, 92*, 1159-1168. doi: 10.1037/0021-9010.92.4.1159
- Mitchell, M. S., & Ambrose, M. L. (2012). Employees' behavioral reactions to supervisor aggression: An examination of individual and situational factors. *Journal of Applied Psychology, 97*, 1148-1170. doi: 10.1037/a0029452
- Muthén, B. O., & Muthén, L. K. (2012). Mplus 7 base program. Muthén & Muthén: Los Angeles, CA.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management, 24*, 391-419. doi: 10.1016/S0149-2063(99)80066-X
- Newman, D. A. (2014). Missing data five practical guidelines. *Organizational Research Methods, 17*, 372-411. doi: 10.1177/1094428114548590
- O'Boyle Jr, E. H., Forsyth, D. R., Banks, G. C., & McDaniel, M. A. (2012). A meta-analysis of the dark triad and work behavior: A social exchange perspective. *Journal of Applied Psychology, 97*, 557-579. doi: 10.1037/a0025679

- O'Neill, T. A., Lewis, R. J., & Carswell, J. J. (2011). Employee personality, justice perceptions, and the prediction of workplace deviance. *Personality and Individual Differences, 51*, 595-600. doi: 10.1016/j.paid.2011.05.025
- Oh, I. S., Lee, K., Ashton, M. C., & de Vries, R. E. (2011). Are Dishonest Extraverts More Harmful than Dishonest Introverts? The Interaction Effects of Honesty-Humility and Extraversion in Predicting Workplace Deviance. *Applied Psychology, 60*, 496-516. doi: 10.1111/j.1464-0597.2011.00445.x
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/DC Heath and Com.
- Organ, D. W. (1990). The motivational basis of organization citizenship behavior. *Research in Organizational Behavior, 12*, 43-72.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance, 10*, 85-97. doi: 10.1207/s15327043hup1002\_2
- Pastore, N. (1952). The role of arbitrariness in the frustration-aggression hypothesis. *The Journal of Abnormal and Social Psychology, 47*, 728-731.
- Pelled, L. H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science, 6*, 615-631. doi: 10.1287/orsc.7.6.615
- Perlow, R., & Latham, L. L. (1993). Relationship of client abuse with locus of control and gender: a longitudinal study in mental retardation facilities. *Journal of Applied Psychology, 78*, 831-834. doi: 10.1037/0021-9010.78.5.831
- Peters, L. H., & O'Connor, E. J. (1980). Situational constraints and work outcomes: The influences of a frequently overlooked construct. *Academy of Management Review, 5*, 391-397. doi: 10.5465/AMR.1980.4288856
- Peters, L. H., O'Connor, E. J., & Rudolf, C. J. (1980). The behavioral and affective consequences of performance-relevant situational variables. *Organizational Behavior and Human Performance, 25*, 79-96. doi: 10.1016/0030-5073(80)90026-4
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903. doi: 10.1037/0021-9010.88.5.879
- Richter, A. W., Hirst, G., Van Knippenberg, D., & Baer, M. (2012). Creative self-efficacy and individual creativity in team contexts: Cross-level interactions with team informational resources. *Journal of Applied Psychology, 97*, 1282-1290. doi: 10.1037/a0029359
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*, 555-572. doi: 10.2307/256693

- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied*, 80, 1-28. doi: 10.1037/h0092976
- Royal, M. & Agnew, T. (2011). Workplace Frustration is the Silent Killer According to New Book 'The Enemy of Engagement'. *Bullish on Books*. Retrieved from <http://www.cnbc.com/id/45080681#>.
- Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person-and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology*, 87, 255-267. doi: 10.1037/0021-9010.87.2.255
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82, 434-443. doi: 10.1037/0021-9010.82.3.434
- Soper, D.S. (2014). A-priori Sample Size Calculator for Structural Equation Models [Software]. Available from <http://www.danielsoper.com/statcalc>
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, 3, 356-367. doi: 10.1037/1076-8998.3.4.356
- Storms, P. L., & Spector, P. E. (1987). Relationships of organizational frustration with reported behavioural reactions: The moderating effect of locus of control. *Journal of Occupational Psychology*, 60, 227-234. doi: 10.1111/j.2044-8325.1987.tb00255.x
- Swider, B. W., Boswell, W. R., & Zimmerman, R. D. (2011). Examining the job search–turnover relationship: The role of embeddedness, job satisfaction, and available alternatives. *Journal of Applied Psychology*, 96, 432-. doi: 10.1037/a0021676
- Tedeschi, J. T., & Norman, N. M. (1985). A social psychological interpretation of displaced aggression. *Advances in Group Processes*, 2, 29–56.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178-190. doi: 10.2307/1556375
- Thau, S., Bennett, R. J., Mitchell, M. S., & Marrs, M. B. (2009). How management style moderates the relationship between abusive supervision and workplace deviance: An uncertainty management theory perspective. *Organizational Behavior and Human Decision Processes*, 108, 79-92. doi: 10.1016/j.obhdp.2008.06.003
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3, 4-70. doi: 10.1177/109442810031002

- Wall, V., & Nolan, L. (1986). Perceptions of inequality, satisfaction, and conflict in task oriented groups. *Human Relations*, *39*, 1033–1052. doi: 10.1177/001872678603901106
- Wang, W., Mao, J., Wu, W., & Liu, J. (2012). Abusive supervision and workplace deviance: The mediating role of interactional justice and the moderating role of power distance. *Asia Pacific Journal of Human Resources*, *50*, 43-60. doi: 10.1111/j.1744-7941.2011.00004.x
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070. doi: 10.1037/0022-3514.54.6.1063
- Westland, J.C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, *9*, 476-487. doi: 10.1016/j.elerap.2010.07.003
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*, 601-617. doi: 10.1177/014920639101700305
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2012). A diary study on the happy worker: How job resources relate to positive emotions and personal resources. *European Journal of Work and Organizational Psychology*, *21*, 489-517. doi: 10.1080/1359432X.2011.584386
- Zillmann, D. (1978). Attribution and misattribution of excitatory reactions. *New directions in attribution research: Vol. 2*, Hillsdale, NJ: Erlbaum.

## Appendix A

### Scale Items

#### Organizational Deviance Scale

##### Citation:

Aquino, K., Lewis, M., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior*, 20, 1073-1091.

##### Instructions:

**Please indicate the extent to which you have engaged in the following behaviors during the past 6 months by placing a number in the blank in front of each item using the scale provided below.**

##### Response scale:

**Never**                      **Rarely**                      **Sometimes**                      **Occasionally**                      **Often**  
1-----2-----3-----4-----5

##### Items:

- \_\_\_\_\_ Intentionally arrived late for work.
- \_\_\_\_\_ Called in sick when I was not really ill.
- \_\_\_\_\_ Took undeserved breaks to avoid work.
- \_\_\_\_\_ Made unauthorized use of organizational property.
- \_\_\_\_\_ Left work early without permission.
- \_\_\_\_\_ Lied about the number of hours I worked.
- \_\_\_\_\_ Worked on a personal matter on the job instead of working for my employer.
- \_\_\_\_\_ Purposely ignored my supervisor's instructions.

**Frustration Scale**

Citation:

Peters, L. H., O'Connor, E. J., & Rudolf, C. J. (1980). The behavioral and affective consequences of performance-relevant situational variables. *Organizational Behavior and Human Performance*, 25, 79-96.

Instructions:

Please indicate your level of agreement with the following statements regarding your organization by placing a number in the blank in front of each item using the scale provided below.

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5

Items:

- \_\_\_\_\_ Trying to get this job done is a very frustrating experience.
- \_\_\_\_\_ Being frustrated comes with this job.
- \_\_\_\_\_ Overall, I experience very little frustration on this job. *\*Recode\**

**Organizational Citizenship Behaviors (OCBO) Scale**

Citation:

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601-617.

Instructions:

**Using the scale below, please indicate your level of agreement with the following statements regarding each subordinate by placing a number in the cell under the subordinate's name.**

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5-----

Items:

- \_\_\_\_\_ This individual's attendance at work is above the norm.
- \_\_\_\_\_ This individual gives advance notice when unable to come to work.
- \_\_\_\_\_ This individual takes undeserved work breaks. *\*Recode\**
- \_\_\_\_\_ This individual spends a great deal of time with personal phone conversations. *\*Recode\**
- \_\_\_\_\_ This individual complains about insignificant things at work. *\*Recode\**
- \_\_\_\_\_ This individual adheres to informal rules devised to maintain order.

**Interpersonal Citizenship Behaviors (OCBI) Scale**

Citation:

Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person-and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology*, 87, 255-267.

Instructions:

**Using the scale below, please indicate your level of agreement with the following statements regarding each subordinate by placing a number in the cell under the subordinate's name.**

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5-----

Items:

- \_\_\_\_\_ This subordinate listens to coworkers when they have to get something off their chest.
- \_\_\_\_\_ This subordinate takes time to listen to coworkers' problems and worries.
- \_\_\_\_\_ This subordinate takes a personal interest in coworkers.
- \_\_\_\_\_ This subordinate shows concern and courtesy toward coworkers, even under the most trying business situations.
- \_\_\_\_\_ This subordinate makes an extra effort to understand coworkers' problems.
- \_\_\_\_\_ This subordinate always goes out of the way to make newer employees feel welcome in the work group.
- \_\_\_\_\_ This subordinate tries to cheer up coworkers who are having a bad day.
- \_\_\_\_\_ This subordinate compliments coworkers when they succeed at work.

**Coworker Abuse Scale**

Citation:

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178-190.

Instructions:

**Using the scale below, please indicate your level of agreement with the following statements regarding each subordinate by placing a number in the cell under the subordinate's name.**

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5-----

Items:

- \_\_\_\_\_ This subordinate expresses anger at others in the workplace when s/he is mad for another reason.
- \_\_\_\_\_ This subordinate makes negative comments about others in the workplace.
- \_\_\_\_\_ This subordinate breaks promises s/he makes to others in the workplace.
- \_\_\_\_\_ This subordinate gives others the silent treatment in the workplace.
- \_\_\_\_\_ This subordinate puts others down in front of others in the workplace.
- \_\_\_\_\_ This subordinate is rude to others in the workplace.

**Relationship Conflict Scale**

Citation:

Jehn, K.A., & Bendersky, C. (2003). Intragroup conflict in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior*, 25, 187-242.

Instructions:

**Using the scale below, please indicate your level of agreement with the following statements regarding each subordinate by placing a number in the cell under the subordinate's name.**

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5

Items:

- \_\_\_\_\_ This subordinate has emotional conflicts with group members.
- \_\_\_\_\_ This subordinate has personality conflicts with group members.
- \_\_\_\_\_ This subordinate causes friction among group members.
- \_\_\_\_\_ This subordinate is at the source of tension among group members.

**Work-to-Family Conflict Scale**

Citation:

Matthews, R. A., Kath, L. M., & Barnes-Farrell, J. L. (2010). A short, valid, predictive measure of work–family conflict: Item selection and scale validation. *Journal of Occupational Health Psychology, 15*, 75-90.

Instructions:

**Please indicate your level of agreement with the following statements regarding your job by placing a number in the blank in front of each item using the scale provided below.**

Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5

Items:

- \_\_\_\_\_ I have to miss family activities due to the amount of time I must spend on work responsibilities.
- \_\_\_\_\_ I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
- \_\_\_\_\_ The behaviors I perform that make me effective at work do not help me to be a better parent and spouse.

## Locus of Control Scale

### Citation:

Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research with the locus of control construct, 1*, pp. 15-63. New York: Academic Press.

### Instructions:

**Please indicate your level of agreement with the following statements regarding your immediate supervisor by placing a number in the blank in front of each item using the scale provided below.**

### Response scale:

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1-----	2-----	3-----	4-----	5

### Items:

- \_\_\_\_\_ Whether or not I get to be a leader depends mostly on my ability.
- \_\_\_\_\_ Whether or not I get into a car accident depends mostly on how good of a driver I am.
- \_\_\_\_\_ When I make plans, I am almost certain to make them work.
- \_\_\_\_\_ How many friends I have depends on how nice of a person I am.

**Negative Affect Scale**

**Citation:**

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.

**Instructions:**

**Using the scale below, please indicate how often you generally feel....**

<b>Very Slightly or not at all</b>	<b>A little</b>	<b>Moderately</b>	<b>Quite a bit</b>	<b>Extremely</b>
1-----	2-----	3-----	4-----	5-----
_____ Irritable	_____ Upset	_____ Scared	_____ Afraid	_____ Guilty
_____ Distressed	_____ Nervous	_____ Hostile	_____ Ashamed	_____ Jittery

## Appendix B

### IRB Approval

February 27, 2014

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

Wayne Crawford  
Dept. of Management and Marketing  
College of Commerce & Business Admin.  
Box 870225

Re: IRB # 14-OR-057, "An Examination of Communication between Supervisors and Subordinates"

Dear Mr. Crawford:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of informed consent. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on February 25, 2015. If your research will continue beyond this date, please complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, please complete the Modification of an Approved Protocol form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

## Informed Consent

You are being invited to take part in a research study which examines relationships between supervisors and their subordinates. This study is being conducted by Wayne Crawford, a doctoral student in the Management Department of the University of Alabama, and Dr. K. Michele Kacmar, a faculty member in the Management Department of the University of Alabama. During this study, you will be asked various questions regarding your relationship with both your supervisor and your organization. The entire procedure should take approximately 20-30 minutes.

This study does not involve any more risks than those encountered in everyday life, nor are there any direct individual benefits associated with taking part in the research. The primary benefit of this research is organizational and scientific. The knowledge gained by conducting this study will further our overall understanding of relationships between supervisors and subordinates.

You must be 19 years of age in order to participate. You do not have to take part in this research project if you do not want to. You can stop participating at any time. If you do not want to participate, or are uncomfortable doing so, you are free to stop/leave the study at any time. Data collected during the course of this study will be de-identified so that you will have complete confidentiality. Your name will be converted to numerical data by the research team. Hence, all data is completely confidential. We are only interested in aggregate data, and any report of these data will involve the reporting of the aggregate data.

If you have any questions or concerns about this research project please contact Wayne Crawford at [wscrawford@crimson.ua.edu](mailto:wscrawford@crimson.ua.edu). If you have any questions or concerns about your rights as a research participant, please contact Tanta Myles, the University Research Compliance Officer at 205-348-8461 and toll free at 877-820-3066. You may also ask questions, make a suggestion, or file complaints and concerns through the IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants that is available online there, or you may ask the researchers for a copy of it. You may also email us at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 2-26-14  
EXPIRATION DATE: 2-25-18

### **Debriefing**

We have conducted this study within the confines of the City of Tuscaloosa municipality. While not initially illustrated, the purpose of this study is to specifically examine the current state of affairs within the City of Tuscaloosa. To do this, we have asked the supervisors and subordinates within your department to each fill out surveys based on his/her experience with his/her supervisor/subordinates. We will specifically analyze the relationship between supervisors and subordinates to determine what impact (if any) that has on certain employee outcomes (e.g., job satisfaction, employee performance, etc.).

We believe this is a crucial relationship in the more broad employment relationship, and hope to illustrate that through this data collection. While we care about the specific supervisor-subordinate relations, we will not be reporting on any one particular relationship between a specific supervisor and his/her subordinates.

Data collected during the course of this study will be de-identified so that you will have complete confidentiality. Your name will be converted to numerical data by the research team. All data is completely confidential. We are only interested in aggregate data, and any report of these data will involve the reporting of the aggregate data.

However, if for any reason you feel uncomfortable with the information that you have provided, you can request that your data be withdrawn. If you do so, your information will be completely deleted and no penalty will be experienced. To take this course of action, please contact Wayne Crawford at [wscrawford@crimson.ua.edu](mailto:wscrawford@crimson.ua.edu). Please provide your name and department, and state that you would like your information to be removed from the study. Upon receipt of this, the principal investigator will manually remove all information that you have provided.

**UA IRB Approved Document**  
**Approval date:** 2-26-14  
**Expiration date:** 2-25-15