CONSEQUENCES OF COWORKER BULLYING: A BYSTANDER PERSPECTIVE

Michele N. Medina

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2017

APPROVED:

Danielle Cooper, Dissertation Chair
Mark A. Davis, Committee Member
Robert Pavur, Committee Member
Lew Taylor, Chair of the Department of Management
Marilyn Wiley, Dean of the College of Business
Victor Prybutok, Vice Provost of the Toulouse Graduate School
Medina, Michele N. *Consequences of Coworker Bullying: A Bystander Perspective.*
Doctor of Philosophy (Business), May 2017, 182 pp., 10 tables, 10 figures, references, 485 titles.

Previous research on workplace bullying primarily focuses on two main actors – the bully and the victim – while neglecting a third actor: the bystander of the bullying. The prevalence of workplace bullying is increasing across organizations, resulting in more employees becoming subjected to the effects of workplace bullying. Furthermore, witnessing coworker-on-coworker bullying is likely to influence the relationships that the bystander has with the two coworkers involved in the bullying episode. Two areas are proposed to investigate their effect on the coworker bystander: coworker interpersonal justice and personal identification with coworkers. Coworker interpersonal justice involves the perceived fairness between coworkers, while personal identification refers to how these bystanders identify with the specific actors of the bullying event. In addition to work-related outcomes, bystanders are affected at a personal level. That is, being exposed to bullying situations causes these bystanders to alter their anxiety levels and their core affect, with core affect being a precursor to moods and emotions.
Copyright 2017

by

Michele N. Medina
ACKNOWLEDGEMENTS

This dissertation would not be complete without the dedication, support, and patience of Dr. Danielle Cooper, my chair. Her advice, suggestions, and mentoring, along with that of the rest of my committee, Drs. Mark Davis and Robert Pavur, resulted in my being able to complete my dissertation. I would also not be at this stage without the sound wisdom of Dr. Lew Taylor. Also, the friendship and advice from Dr. Nolan Gaffney, Dr. Julie Hancock, and Mike Sexton gave me great insight into life beyond the doctoral program and helped me to become a better instructor.

To my fellow colleagues-in-training, your constant support and reassurances during this process will resonate with me for the rest of my days. To all those who came before me and mentored me, and to all those who came after me in the program, thank you for your support, encouragement, and advice during this process.

I do not know where I would be today without the promise I made to my mother as a child to earn a college degree no matter what. It was not her fault that I fell in love with academia – I took the promise I made to her and it became my passion and now my career. I seriously doubt this dissertation would be finished without her unwavering support. I would also like to thank my brother for his reassurances and support throughout my doctoral journey.

Many thanks to my sweet Molly, who always made sure that I got some fresh air, provided great apartment security, and had great patience with me, especially during comps and dissertation data collection. Thank you to the Finnigans who helped me adjust to life in Denton, and provided many good meals and socializing during my time here. Finally, thank you to my grandparents, Norma and Corky, who were always so supportive of my decision to pursue my PhD – I hope to continue making you both proud!
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS................................................................................................................... iii

LIST OF TABLES.............................................................................................................................. vii

LIST OF FIGURES .......................................................................................................................... viii

CHAPTER 1 INTRODUCTION .......................................................................................................... 1

CHAPTER 2 LITERATURE REVIEW .............................................................................................. 7

  Workplace Bullying..................................................................................................................... 7

  Coworker Interpersonal Justice ................................................................................................. 24

  Personal Identification .............................................................................................................. 28

  State Anxiety ............................................................................................................................. 29

  Core Affect ................................................................................................................................. 31

  Empathy .................................................................................................................................... 33

  Sense of Coherence ................................................................................................................... 35

CHAPTER 3 HYPOTHESES DEVELOPMENT ............................................................................ 39

  Direct Effects of Coworker Bullying Observation ................................................................. 40

  Moderating Effects of Empathy .............................................................................................. 46

  Moderating Effects of Sense of Coherence ............................................................................. 49

  Moderating Influences of Bullying Victim Gender ................................................................. 55

CHAPTER 4 METHODS ................................................................................................................. 58

  Pilot Study ................................................................................................................................. 60

  Sample .................................................................................................................................... 60

  Procedure ................................................................................................................................. 61
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>105</td>
</tr>
<tr>
<td>Managerial</td>
<td>108</td>
</tr>
<tr>
<td>Limitations and Future Research</td>
<td>109</td>
</tr>
<tr>
<td>Conclusion</td>
<td>110</td>
</tr>
<tr>
<td>APPENDIX A  RECRUITING FLYER FOR PILOT STUDY</td>
<td>111</td>
</tr>
<tr>
<td>APPENDIX B  IN-LAB INSTRUCTIONS</td>
<td>113</td>
</tr>
<tr>
<td>APPENDIX C  VIDEO TRANSCRIPTS</td>
<td>116</td>
</tr>
<tr>
<td>APPENDIX D  DEBRIEFING STATEMENT</td>
<td>125</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>127</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1  Principal Component Analysis for Pilot Study ............................................................... 68
Table 2  Variable Collection Order for Main Study ................................................................. 71
Table 3  Descriptive Statistics and Correlations for Pilot Study ................................................. 73
Table 4  Regression Results for Pilot Study ............................................................................... 74
Table 5  Descriptive Statistics and Correlations for Main Study ................................................. 79
Table 6  CFA Measurement Model: Structural Equation Modeling (AMOS) Estimates .......... 81
Table 7  Assessment of Construct Validity for Main Study Variables ......................................... 83
Table 8  Regression Results for Main Study ............................................................................. 86
Table 9  Effect Size, Confidence Intervals, and Observed Power for Main Study ................. 95
Table 10  Summary of Hypothesis Testing ............................................................................. 97
LIST OF FIGURES

Figure 1. Direct effect of coworker bullying observed on interpersonal and intrapersonal outcomes. ........................................................................................................................................................................... 39

Figure 2. Moderating effect of empathy on coworker bullying observed and interpersonal and intrapersonal outcomes ........................................................................................................................................................................... 45

Figure 3. Moderating effect of sense of coherence on coworker bullying observed and interpersonal and intrapersonal outcomes ........................................................................................................................................................................... 49

Figure 4. Moderating effect of victim's gender on coworker bullying observed and interpersonal and intrapersonal outcomes ........................................................................................................................................................................... 54

Figure 5. Interaction between coworker interpersonal justice, coworker bullying observed, and empathy ........................................................................................................................................................................... 89

Figure 6. Interaction between personal identification with the bully, coworker bullying observed, and empathy ........................................................................................................................................................................... 89

Figure 7. Interaction between personal identification with the victim, coworker bullying observed, and sense of coherence ........................................................................................................................................................................... 91

Figure 8. Interaction between state anxiety, coworker bullying observed, and sense of coherence. ........................................................................................................................................................................... 91

Figure 9. Interaction between state anxiety, coworker bullying observed, and participant-victim gender match ........................................................................................................................................................................... 93

Figure 10. Interaction between personal identification with the bully, coworker bullying observed, and participant-victim gender match ........................................................................................................................................................................... 93
CHAPTER 1
INTRODUCTION

Workplace bullying is an issue that increasingly more organizations are facing. According to a 2014 Workplace Bullying Institute (WBI) Survey, approximately 36 million American workers were bullied, with 28 million workers witnessing another worker being bullied (Namie, Christensen, & Phillips, 2014). Additionally, based on a 2007 WBI study (Namie, 2007), nearly half of American adults (49.4%) reported being exposed to bullying, either as a target or a witness. Unfortunately, occurrences of workplace bullying are not solely a problem in the United States, as other countries also suffer from workplace bullying. A 1997 study by UNISON found that 66% of all respondents had experienced or witnessed bullying in the United Kingdom. Likewise, another study in England reported that 38% of the 1,100 surveyed workers were bullied, and 42% reported having witnessed another being bullied (Cusack, 2000). In a Spanish public university system with 7,432 respondents, 46% reported experiencing or witnessing workplace bullying (Lopez-Cabarcos & Vasquez-Rodriguez, 2006). Furthermore, Balcerzak (2015) suggests that up to 20% of the workforce may be experiencing or witnessing bullying at any given point in time.

Given the increasing prevalence of workplace bullying, organizational scholars explored the effects of workplace bullying on the targets or victims of workplace bullying, the perpetrators of the bullying act, and those who witness these acts (e.g., Balcerzak, 2015; Einarsen & Raknes, 1997; Einarsen, Hoel, Zapf, & Cooper, 2011; Leymann, 1990). Research on workplace bullying primarily focuses on links between organizational features and individual effects, with both quantitative and qualitative studies concentrating on the targets and perpetrators of bullying (Bloch, 2012). Yet, research into bystanders (also called witnesses or observers) of bullying in
the workplace is sparse (Agevall, 2007; Namie & Lutgen-Sandvik, 2013; Nielsen, Notelaers, & Einarsen, 2011). Moreover, Keashly and Jagatic (2011) note that researchers also need to focus on the witnesses of workplace bullying, who are directly and indirectly connected to those involved.

Bystanders are powerful in aggressive situations, as they can use their influence to build respect or energize aggression (Lutgen-Sandvik, 2013a; Twemlow, Sacco, & Williams, 1996). Yet, simply witnessing the humiliation and degradation of others can be traumatizing (Namie & Namie, 2009). For bystanders, witnessing these bullying acts can lead to a host of physical and psychological issues (Lutgen-Sandvik, Tracy, & Alberts, 2013; Rayner, Hoel, & Cooper, 2002; Vartia, 2001). While previous research contributes to our understanding of the effects of workplace bullying, researchers tend to examine the physiological, psychological, or organizational effects by themselves and primarily the effects on the target of bullying (e.g., Baillien & De Witte, 2009; Baillien, De Cuyper, & De Witte, 2011; Bloch, 2010; Bond, Tuckey, & Dollard, 2010; Hauge, Skogstad, & Einarsen, 2007; Keashly, 1998; Samnani & Singh, 2012).

To address this issue, the present study examines both psychological and organizational issues for those who witness an incidence of bullying. Specifically, I examine how an individual’s exposure to a workplace bullying incident influences both interpersonal attitudes towards coworkers (i.e., interpersonal justice and personal identification) and intrapersonal outcomes (i.e., core affect and state anxiety). Additionally, three moderators are considered to determine their effect on these relationships.

Furthermore, when a newcomer joins an organization, there is an expectation that coworkers will treat each other in a way that conforms to societal standards and that a level of professionalism will be maintained (Korte, 2009; Louis, 1980; Thomas & Anderson, 1998). Yet,
when the newcomer observes one coworker bully another coworker, these psychological contracts are shattered (cf., Parzefall & Salin, 2010), resulting in the newcomer piecing together the social expectations within that organization. Additionally, previous research concludes that coworker relationships are affected by the presence of workplace bullying (cf., Fonner, 2015; Harris, Harvey, & Booth, 2010). Thus, how the newcomer perceives that coworkers treat one another (i.e., interpersonal justice) becomes of importance (Balcerzak, 2015). Moreover, an individual’s personal identifications in the workplace, which involve how one person defines oneself in terms of another, are important to attitudes and behaviors towards coworkers and the organization (Ashforth, Schinoff, & Rogers, 2016). If an individual witnesses a bullying situation, their personal identification with their coworkers (both the perpetrator and the target of bullying) may be influenced.

Prior studies found that bystanders of bullying are also affected psychologically (cf., Chapell et al., 2006; Lutgen-Sandvik, 2006; Vartia, 2001). Beyond affecting emotions and mood (Hansen et al., 2006), a bystander’s core affect may also be altered by witnessing the bullying event. That is, core affect is a key ingredient in both emotions and mood, but does not always need to be directed at a specific object, and is the simplest raw feelings evident in mood and emotions (Russell, 2003; Yik, Russell, & Steiger, 2011). Moreover, an individual’s anxiety level may change as a result of being exposed to potential threatening situations (e.g., Doby & Caplan, 1995). Thus, bystanders’ state anxiety may be altered, as state anxiety involves a slice in time, as opposed to trait anxiety, which is relatively stable over time (Spielberger, 1985).

In addition to these potential outcomes of witnessing a bullying event, some potential moderators may come into play. One such moderator is that of empathy of the bystander, as previous research demonstrates that empathetic bystanders reduce their support of the bullying
behavior (Barlinska, Szuster, & Winiewski, 2013). Another potential moderator is bystanders’ sense of coherence, which involves a person’s ability to perceive and control the environment in order to take proper action (Antonovsky, 1987a). Finally, one other possible moderator is that of the target’s gender, since the bystander may be more affected by the bullying of a person of the same gender versus one of the opposite gender.

Therefore, the purpose of this study is to extend and build upon previous research to determine how witnessing a bullying event affects bystanders’ psychological reactions and attitudes toward their peers. Specifically, I posit that those individuals who witness a bullying event will be negatively affected compared to those who do not witness the bullying event. That is, their interpersonal justice, personal identification with coworkers, and core affect will be lower, while their state anxiety will increase after witnessing the bullying event. The specific research questions addressed in this study are listed as follows. (1) How does witnessing a bullying event influence a bystander’s interpersonal justice and personal identification with coworkers? (2) How does observing a bullying event alter a bystander’s core affect and state anxiety? (3) How does a bystander’s empathy, sense of coherence, and the victim’s gender influence these relationships?

In order to evaluate these relationships, I draw on affective events theory (AET). AET (Weiss & Cropanzano, 1996) posits that organizational events are proximal causes of affective reactions, stating that when things happen to people in work settings, people often react to these events emotionally, causing these affective events to have a direct influence on behaviors and attitudes. Brief and Weiss (2002) delineate five categories of affective workplace events: responses to stressful events or aversive conditions at work, leaders, interpersonal and group characteristics, physical settings, and organizational rewards and punishments. Typical
examples of stressful workplace events include conflicting role demands (Williams, Suls, Alliger, Lerner, & Wan, 1991), cognitive strain (Bodrov, 2000), time pressures (Baber, Mellor, Graham, Noyes, & Tunley, 1996), negotiation with administration (Hart, Wearing, & Headey, 1995), and physically threatening conditions (e.g., nursing patients with a contagious disease; George, Reed, Ballard, Colin, & Fielding, 1993). Thus, stressful workplace events may be interpersonal, emotional, cognitive, or physical (Brief & Weiss, 2002).

In line with AET, an assumption of the present study is that employees who witness an instance of workplace bullying experience an affective event, which, in turn, causes these witnesses to react in a specific way, either by changing their attitude or behavior. Moreover, Michalak and Ashkanasy (2013) identify the relevance of AET to deviant behavior in the workplace. Specifically, AET provides a robust theoretical framework to link workplace environments, events, and emotions. For instance, Bayram, Gursakal, and Bilgel (2009) note that employees’ perceptions of their work environment resulted in negative affective responses, including frustration, leading to counterproductive workplace behaviors, such as personal and organizational aggression.

This study on bystanders of coworker bullying is important both practically and theoretically. From a practical standpoint, workplace bullying is an issue that more organizations are being forced to address. Understanding how bystanders are affected by witnessing their coworkers being bullied allows organizations to address workplace bullying from a perspective other than the bully or the target, since 28 million workers in 2014 witnessed bullying (Namie et al., 2014) and most research investigates the effects of bullying on the target (e.g., Samnani & Singh, 2012). From a theoretical standpoint, the study contributes to existing literature by being the first, to my knowledge, to solely investigate the influence of peer-on-peer
bullying within the workplace on bystanders. Additionally, the application of AET to this study is also the first, to my knowledge, to evaluate the use of AET within a workplace bullying context. Furthermore, this study contributes to the literature by identifying how an individual is affected by witnessing a coworker being bullied, specifically how it affects their core affect and anxiety. Likewise, this study contributes to the justice literature by expanding upon interpersonal justice using a new target for the perceived interpersonal justice between coworkers. Similarly, building on the work of Ashforth et al. (2016), I identify a scale for personal identification with coworkers, thus contributing to the identity literature.

This dissertation is outlined as follows. Chapter 2 includes a literature review of extant literature, with Chapter 3 addressing the theoretical development of hypotheses with the proposed study model. Chapter 4 identifies the data collection techniques and the specific outline for analysis, while Chapter 5 reports the results of both the pilot and the full study. Chapter 6 includes the discussion and implications of the results as well as identifying future research directions.
CHAPTER 2
LITERATURE REVIEW
Workplace Bullying

History and Definition of Workplace Bullying

While it is difficult to pinpoint exactly when workplace bullying began, there are some early descriptions of coercive and destructive behaviors within armies, monasteries, households, and guilds (Tehrani, 2012a). Additionally, some accounts suggest that Roman legions were extremely harsh with their soldiers, disciplining them via floggings, breaking bones, and death sentences, particularly among those in lower ranks (Fields, 2006). With the rise of the industrial revolution and the move away from the cottage industries to labor intensive factories, foundries, and offices, bullying had the opportunity to develop within the workplace (Tehrani, 2012a).

In Scandinavia during the 1970s, Olweus (1978) was the first scholar to examine the phenomenon of school bullying. Smith et al. (1998) provide a summary of research into school bullying in 19 countries and found that while differences in incidences vary, similar negative behaviors are experienced regardless of national context. Up to 50 years ago, fear was a predominant feature of working life, with workplaces being primarily hierarchical and autocratic, exposing workers to demeaning and oppressive behaviors (Snook, 2008). Within the last 30 years, western society has recognized that bulling in the workplace is unacceptable and a cause of distress, illness, and reduced productivity (Vega & Comer, 2005). Carroll Brodsky’s (1976) book, *The Harassed Worker*, introduced the concept of bullying at work in the United States, yet did not receive much attention at the time. It was not until the 1990s, that Heinz Leymann’s work on workplace bullying garnered much attention. Inspired by Leymann and much public interest, large-scale research projects began in Norway (Einarsen & Raknes, 1991; Einarsen,

Workplace bullying, also known as mobbing, ganging up on someone, or psychological terror, involves “hostile and unethical communication, which is directed in a systematic way by one or a few individuals mainly toward one individual” (Leymann, 1990, p. 120). The term bully may be a better description of the perpetrator who behaves aggressively in many situations and possibly towards more than one target, while mobbing is more consistent with the experiences of targets who are systematically exposed to harassment by one or more perpetrators and who may, over time, become severely victimized in this treatment (Balcerzak, 2015; Einarsen et al., 2011); thus, for the purpose of this study, the term bully will be used throughout.

Workplace bullying further involves repeated actions and practices that are directed against one or more coworkers, unwanted by the target, cause humiliation, offense, and distress, and may interfere with work performance and/or cause an unpleasant work environment (Einarsen & Raknes, 1997). Furthermore, these bullying activities occur frequently (at least once a week) and over a long period of time (at least six months; Leymann, 1996). This definition of bullying specifically excludes temporary conflicts and focuses on a time when the psychosocial situation results in psychiatrically or psychosomatically pathological conditions. In other words,
the difference between “conflict” and “bullying” is not referring to *what* or *how* it is done, but on the *frequency* and *duration* of what is done (Leymann, 1996). Moreover, several researchers (Neumann, 2000; Rayner & Keashly, 2005; Zapf & Einarsen, 2005) suggest that there must be a distance of power, which makes it difficult for the targets to defend themselves from bullying. In a review of the literature, Rayner and Hoel (1997) grouped workplace bullying behaviors into five categories, as listed below:

- Threat to professional status (e.g., belittling opinion, public professional humiliation, and accusation regarding lack of effort);
- Threat to personal standing (e.g., name-calling, insults, intimidation, and devaluing with reference to age);
- Isolation (e.g., preventing access to opportunities, physical or social isolation, and withholding of information);
- Overwork (e.g., undue pressure, impossible deadlines, and unnecessary disruptions);
- Destabilization (e.g., failure to give credit when due, meaningless tasks, removal of responsibility, repeated reminders of mistakes, and setting up to fail).

Researchers identified the difference between interpersonal and organizational bullying. Bullying that is exhibited by one or more persons, directed towards another individual, and perceived and reacted to by the victim (Einarsen et al., 2011) is interpersonal bullying. On the other hand, organizational bullying (or structural mobbing), a depersonalized form of bullying, refers to situations in which organizational practices and procedures are perceived to be oppressive, demeaning, and humiliating, are employed frequently and persistently so that many employees feel victimized by them (Hoel & Beale, 2006; Liefooghe & Mackenzie Davey 2001; Neuberger, 1999). For the purpose of this study, I follow the definition prescribed by Einarsen
and Raknes (1997) and Leymann (1996), in which workplace bullying involves repeated actions and practices directed at one coworker, unwanted by the target, and deliberate, causing humiliation, offense, and distress, and interfering with work performance, causing an unpleasant work environment, occurring frequently, and over a long period of time.

Models of Workplace Bullying

*The Leymann Model*

Leymann (1990, 1993a, 1996) argued strongly against individual factors as antecedents of bullying, especially related to issues of victim personality. Instead, he proposed a situational outlook, where organizational factors relating to leadership, work design, and organizational morale are the main factors. He asserted that four factors are prominent in eliciting bullying behaviors at work (Leymann, 1993a): (1) deficiencies in work design, (2) deficiencies in leadership behavior, (3) the victim’s socially exposed position, and (4) low departmental morale. Leymann (1996) acknowledged that poor conflict management may also be a source of bullying, but only in combination with inadequate organization of work, which was an organizational issue, not an individual issue.

Some researchers explored the work environment hypothesis of Leymann (e.g., Agervold, 2007; Hauge et al., 2007). The evidence indicates that interpersonal conflicts, lack of a friendly and supportive atmosphere, organizational changes (O’Moore, Seigne, McGuire, & Smith, 1998), lack of constructive leadership (Einarsen et al., 1994), poor information flow, lack of discussions about goals and tasks, and an authoritative way of settling differences (Vartia, 1996), as well as organizational changes (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007) increase the amount of workplace bullying.
Predatory Bullying

In the case of predatory bullying, the victim has personally done nothing provocative that may reasonably justify the behavior of the bully. In these cases, the victim is accidentally in a situation where a predator is demonstrating power or is exploiting the weakness of someone who has become a victim by accident (Einarsen et al., 2011). Petty tyranny, originally proposed by Ashforth (1994), implies this type of bullying in which leaders lord their power over others through arbitrariness and self-promotion, the belittling of subordinates, lack of consideration, and the use of an authoritarian style of conflict management.

Einarsen et al. (2011) suggest that there are three types of predatory bullying: exposure to destructive and aggressive leadership style, being singled out as a scapegoat, and the acting out of prejudice. An individual may be singled out and bullied because they belong to a certain outsider group. For example, a study in UK fire brigades revealed an environment in which females, nonwhites, and non-conforming males were bullied to ensure the preservation and dominance of the white male culture (Archer, 1999). Thus, the individual victim of bullying was a coincidental target. Likewise, employees may become bullying victims by being an easy target of frustration and stress caused by other factors (Björkqvist, 1992; Thylefors, 1987). Finally, Allport (1954) describes the process involved in acting out prejudices and, thus, how bullying evolves. In the first phase, prejudicial talk starts, but is restricted to small ‘in-group’ circles and takes place behind the victim’s back. The second phase consists of an individual moving beyond talking and starting to avoid the victim. In the third phase, the victim is openly harassed and discriminated against by being alienated and excluded or subjected to offensive remarks and jokes. In the fourth phase, physical attacks occur, which lead to the final stage, extermination. Although the bullying victim is not literally killed, some do commit suicide (Leymann, 1990);
others are permanently expelled from working life (Leymann, 1996), or at least driven out of their organization (Zapf & Gross, 2001).

**Dispute-Related Bullying**

Dispute-related bullying occurs as a result of the escalation of interpersonal conflicts (Einarsen, 1999; Zapf & Gross, 2001). Although interpersonal struggles and conflicts are a natural part of all human interactions, and should not be considered bullying, there may be a thin line between the disagreements between two parties in an interpersonal conflict and the aggressive behavior in bullying (Einarsen et al., 2011; Zapf & Gross, 2001). The difference between interpersonal conflicts and bullying lies in the frequency and duration of what is done (Leymann, 1996) as well as the ability of both parties to defend themselves in the situation (Zapf, 1999a). In highly escalated conflicts, both parties may deny their opponent any human value, thus opening the door for highly aggressive behaviors. The disadvantaged party may become the victim of bullying (Zapf, 1999b).

Researchers proposed the conflict escalation model of Glasl (1982, 1994) to demonstrate how interpersonal conflicts escalate into bullying (Einarsen et al., 1994; Neuberger, 1999; Zapf & Gross, 2001). In this model, conflicts are inevitable in organizations, and under certain circumstances are fruitful, contributing to innovation, performance, and learning (de Dreu, 1997); however, if allowed to escalate, conflicts may become extremely harmful and destructive to an individual as well as the organization. In the first phase of the conflict escalation model, the parties are interested in a reasonable resolution of conflict about tasks or issues and mainly focus on cooperation to solve problems in a controlled and rational manner; however, this joint effort vanishes as interpersonal tensions rise. In the second phase, the original issue has vanished, while the tension between the parties remain, resulting in ceasing communication and
seeking allies and support from others. Any interaction is dominated by threat as well as openly hostile and aggressive behavior. In the final phase, the confrontation becomes increasingly more destructive until the opponent is completely annihilated. Zapf and Gross (2001) argue that bullying may be seen as a kind of conflict boundary between phases 2 and 3. Although Glasl argues that the latter stages of the model may not be reached in organizations, Einarsen et al. (2011) argue that they are reached in the more extreme cases of bullying, with some victims committing suicide (Leymann, 1990), considering suicide (Einarsen et al., 1994), and/or going to court or refusing to reach a reasonable settlement (Diergarten, 1994).

*Complex Bullying Models*

Recently, Tehrani (2012a) identified more complex models of bullying. In *delegated bullying*, the bully is unaware of the role as they are playing on behalf of someone else, such as their supervisor. In *bystander bullying*, the bully creates a situation in which one person is picked on unfairly and other people stand by and watch helplessly, but may take part of the taunting of the target. *Merry-go-round bullying* is a variant of bystander bullying, in which the bully selects one member of the team at a time to bully, and will eventually bully all team members over time. *Mobbing or gang bullying* involves the target being a team member or manager, in which the other team members band together to bully one individual. In *good guy/bad guy bullying*, two individuals act together to bully one target, with one befriending the target and passing on information to the bad guy who uses the information to refine the bullying behavior. *Subordinate bullying* involves a subordinate deliberately hurting the supervisor by undermining, procrastinating, and withholding information. *Passive aggressive bullying* refers to individuals resisting undertaking any tasks allocated to them and covertly sabotaging or undermining the efforts of their manager or others. Finally, *personality disordered bullying*
involves individuals who engage in repetitive patterns of behavior in their occupations and other relationships due to a personality disorder.

Since the models mentioned above are similar, yet unique, I primarily draw from the predatory bullying model, in which the victim has not done anything provocative to justify the behavior of the bully. Specifically, I use this model in the development of the experimental manipulations, in which victim of the bullying suggests that they have not done anything to warrant being treated in such a manner.

Causes of Bullying

When exploring the nature of bullying, one must investigate how bullying begins. Simmons (2002) suggests that in girls’ development, the central focus is on relationships, with anger and aggression as unacceptable societal standards for girls; thus, girls learn from an early age to be “good girls,” which means to be “nice” and translates to not being aggressive, angry, or combative. Conversely, Levant (1998) and Murray (1999) state that boys are taught to convert vulnerable feelings such as sadness into anger to conform to the expectations of masculine behavior. Therefore, girls’ relationships suffer because they are not permitted to express anger and aggression, while boys’ relationships suffer since they are only allowed to express anger and aggression (Levant, 1998; Murray, 1999; Simmons, 2002). Moreover, school-age bullies, if reinforced by cheering peers, fearful teachers, or ignorant administrators, grow up to become dominating adults, who, as adults, will do what they do best – bully others (Balcerzak, 2015; Namie & Namie, 2009).

Beyond childhood development, the nature of an individual’s employment may also influence workplace bullying. Individuals with high strain jobs, involving high workloads and low job autonomy, are more likely to engage in bullying (Baillien et al., 2011), which suggests
that high stress may predict bullying behaviors (Hoel, Rayner, & Cooper, 1999). Other studies suggest that being a target is correlated with being a perpetrator (Aquino & Lamertz, 2004; Baillien et al., 2011). Job insecurity also predicts workplace bullying (De Cuyper, Baillien, & De Witte, 2009). Within groups, employees who witness bullying behaviors are more likely to engage in bullying for a variety of reasons, including fear (Aquino & Douglas, 2003; D’Cruz & Noronha, 2011; Glomb & Liao, 2003). Moreover, status inconsistency within groups may also facilitate bullying behaviors (Bacharach, Bamberger, & Mundell, 1993; Heames, Harvey, & Treadway, 2006; Vartia, 1996). Other group-level factors influence bullying, including high levels of task conflict (Ayoko, 2007) and high levels of team autonomy (i.e., self-managed teams; Arthur, 2011). Lastly, national culture may also influence workplace bullying (Samnani & Singh, 2012).

The work environment may also contribute to bullying incidences. For example, role conflict and role ambiguity were some of the strongest predictors of workplace bullying in several European countries (Baillien & De Witte, 2009; Baillien, Neyens, & De Witte, 2008; Bowling & Beehr, 2006; Einarsen, Raknes, & Matthiesen, 1994; Hauge et al., 2007; Moreno-Jiménez, Rodríguez-Muñoz, Pastor, Sanz-Vergel, & Garrosa, 2009). Furthermore, Baillien et al. (2008) found that working in high temperatures, crowded work spaces, or in otherwise unpleasant and irritating environments and relying on sharing tools and equipment were all associated with higher risks for bullying to occur. Other organizational contributors to bullying include organizational culture and climate (Salin & Hoel, 2011), leadership style (Einarsen, Aasland, & Skogstad, 2007; Hoel, Glasø, Hetland, Cooper, & Einarsen, 2010; Hauge et al., 2007; Strandmark & Hallberg, 2007), reward systems and compensation (Collinson, 1988; Salin, 2003; Sutela & Lehto, 1998), and organizational change (Baillien & De Witte, 2009; Barling,
Consequences of Bullying

There are several consequences of bullying both to the individual and the organization. For bullied individuals, they can experience numerous effects on physical and mental health along a continuum ranging from increased risk of cardiovascular disease, anxiety, and depression (Kivimaki et al., 2003) to post-traumatic stress disorder (PTSD; Bond et al., 2010; Leymann, 1990; Leymann & Gustafsson, 1996; Matthiesen & Einarsen, 2004; Tehrani, 2004, 2012b), and in extreme cases, suicide (Leymann, 1996). Additionally, a U.S. nationwide study suggests that 94% of targets suffer from severe anxiety, 84% suffer from sleep disruption, 82% have a loss of concentration, and 80% suffer from PTSD (Namie & Namie, 2003). Furthermore, Scott and Strandling (1994) suggest that not only do targets suffer from PTSD, they may also suffer from prolonged duress stress disorder (PDSD), as the symptoms do not result from a single bullying episode, but rather from a series of cumulative bullying events.

For organizations, high absenteeism, higher production costs, higher personnel turnover, and lack of personnel motivation are all consequences of workplace bullying (Johanson, 1987; Leymann, 1996). Moreover, an estimated $5-6 billion is lost annually in the U.S. economy due to bullying (Aziri & Idrizi, 2015). Furthermore, both targets and witnesses of bullying report a more negative work environment than those who were not bullied (Baillien et al., 2008; Einarsen et al., 1994; Hauge et al., 2007; Vartia, 1996), and that the worst work environments are associated with those most severely bullied (Zapf, 1999b).
Overall, extant literature tends to focus on both the intrapersonal and organizational consequences for the bullying target (i.e., Bond et al., 2010; Kivimaki et al., 2003; Leymann, 1990, 1996), while neglecting how the bystanders of the bullying situation are affected. Furthermore, instances of coworker bullying do not occur in a vacuum, as many bullies prefer to have an audience for the demeaning of their coworker (Namie, 2007; Namie & Namie, 2009).

**Bystanders of Bullying**

Bystanders are those who aid and abet the bully via omission and commission; that is, they stand idly by or look away, actively encourage the bully, or join in (Coloroso, 2008; Paul, Omari, & Standen, 2012). Coloroso (2008) also observes that the lack of direct negative consequences, with a potential bounty of prizes, such as elevated status among peers, applause, laughter, and approval for the bullying contribute to the breakdown of the bystanders’ inner controls against such activities as well as a decreased sense of individual responsibility. In cases of school bullying, Olweus (2001a, 2001b) developed “the Bullying Circle” which indicates who these not-so-innocent bystanders are and what they do in a bullying situation. First, there is the follower/henchman, who takes an active part in the bullying, but does not instigate it. Next are the passive bully/bullies, who support the bullying but do not take an active part, and the possible bully/bullies, who like the bullying, but do not engage in it. Next is the disengaged onlooker, the ones who see what happens, but do not intervene in any way. Another bystander is the possible defender, those who dislike the bullying and think they should step in, but do not. Finally, the defender of the target is not a bystander, as they dislike the bullying and assist the target of the bullying.

Moreover, Fried and Fried (2003) distinguish between six different types of witnesses: (1) inactive witnesses are aware of the bullying situations, but avoid them to obstruct the pain;
(2) angry witnesses are annoyed with the targets for not protecting themselves; (3) fearful witnesses confess that it hurts when they watch their classmates being bullied; (4) voyeur witnesses get some sadistic pleasure from watching the bullying; (5) accomplice witnesses engage in the bullying and become an apt audience; and (6) helpful witnesses challenge the bully and the taunting ceases. Fried and Fried (2003) believe that the helpful witnesses are the real heroes in a bullying situation, as most of these situations last approximately 38 seconds, and can best be stopped within 10 seconds of the beginning of the incident (Craig & Pepler, 1995). Moreover, Sjøveit (1992) and Dobson (2000) suggest that if there is no third-party intervention at an early stage, then, as the bullying escalates and the target’s behavior and perception of the situation changes, such intervention later would be much more difficult and less likely to occur.

Recently, Lutgen-Sandvik and Fletcher (2013) presented an updated view of bystander profiles in which there are three main categories: bully allies, target allies, and silent bystanders. Similar to passive bullies, followers, and henchmen described by Olweus (2001a, 2001b) and the accomplice witnesses described by Fried and Fried (2003), the bully allies are those who follow and support the bully. The target allies are those who support or protect the targets (similar to the helpful witnesses; Fried & Fried, 2003), while the silent bystanders are those who attempt to distance themselves from the bulling conflict (like the disengaged onlooker; Olweus, 2001a, 2001b). For the purpose of this study, the focus is on the silent bystander/disengaged onlooker, as these individuals are not necessarily inclined to engage in assisting the bully or the victim (Lutgen-Sandvik & Fletcher, 2013; Olweus, 2001a, 2001b).

Individual Effects of Bullying on Bystanders

Workplace surveys show that bystanders are by far the largest group affected by bullying (Hogh et al, 2009; Lutgen-Sandvik, 2006). As Barling (1996) suggested, bystanders who
witnesses coworker bullying are secondary victims, in that they are not directly violated, but their perceptions, fears, and expectations are changed as a result of being exposed to this type of aggression. Furthermore, in environments where some coworkers are bullied, witnessing bystanders are more likely to experience aggression targeted at them than are non-exposed workers, even if the witnesses feel they are not being directly bullied (Jennifer, Cowie, & Anaiadou, 2003; Lutgen-Sandvik et al., 2013). Witnesses were deeply disturbed by their experiences, saying that the experience took over their entire lives by causing worry both at work and at home, talking about it to family and friends, and spending significant amounts of time figuring out how to deal with or avoid being bullied (Lutgen-Sandvik, 2013b).

Previous research demonstrates that bullying affects bystanders in different ways, including reduced job satisfaction and productivity, increased stress, and impaired well-being (Einarsen, Hoel, Zapf, & Cooper, 2003) and depression (Vartia, 2001; Lutgen-Sandvik, 2006; Niedhammer & Degioanni, 2006). Schneider, Hitlan, Delgado, Anaya, & Estrada (2000) found that being a bystander to others’ harassment experiences was related to a degree of upset at one’s own experience of harassment. Moreover, a study by Hoel, Cooper, and Faragher (2001) indicates that 34% of those who witnessed bullying complained of health problems. Chapell et al. (2006) further suggest that bullying results in negative mental health consequences. Likewise, coworkers who see their colleagues bullied are more stressed and likely to leave their jobs than are those who work in settings without bullying (Rayner et al., 2002; Vartia, 2001). Recently, Lutgen-Sandvik and colleagues (2013) demonstrated that coworkers who witness their colleagues being bullied experience more aggression personally targeted at them than do employees who are not exposed to bullying. Furthermore, as bullying increases, job satisfaction and overall job rating decreases and job-related stress increases for both targets and bystanders.
Additionally, bystanders also suffer in their interpersonal relationships with family members who bring the anxiety home (Hoobler & Brass, 2006; Sperry & Duffy, 2007).

Feelings of not helping the target also manifest themselves in different ways. Witnessing others’ abuse leads to lower motivation, commitment, and efficiency in bystanders, partly due to the anticipation of being targeted and feeling unable to help the target (D’Cruz & Noronha, 2011). Furthermore, bystanders can experience a high level of distress as a result of their feelings of guilt at not supporting the target and fear of standing up to the bully (Tehrani, 2004). Fried and Fried (2003) suggest that those peers who observed bullying and did not act, would have an effect on future self-esteem, as they were acutely aware of their peer’s wounds, yet did not intervene. Unfortunately, it is difficult for the observer of workplace bullying to stay neutral (Neuberger, 1999). Over time, the perceptions of the bullying victim appear to change, gradually turning the situation into one where even observers perceive it as no more than fair treatment of a neurotic and difficult person (Einarsen et al., 1994; Leymann, 1992).

Since bystanders of bullying are greatly affected and secondary victims (Barling, 1996; Hogh et al., 2009; Lutgen-Sandvik, 2006), this study explores both interpersonal and intrapersonal outcomes of witnessing a bullying event. For interpersonal outcomes, the relationship with coworkers and supervisors changes as a result of witnessing a bullying episode (e.g., Einarsen et al., 1994; Leymann, 1992). Similarly, the interpersonal outcomes can be altered by being exposed to a bullying situation (e.g., Lutgen-Sandvik, 2013b). Thus, this study embarks on an investigation of how bystanders are affected by witnessing these bullying events and differs from previous studies in that this study examines both interpersonal outcomes (such as core affect and anxiety) as well as work-related outcomes (e.g., personal identification with coworker and coworker interpersonal justice) simultaneously.
Bullying and Peers

Incidents of bullying do not occur in a vacuum. A 2008 WBI Study (Namie & Namie, 2009), explored coworkers’ in-depth responses to workplace bullying. Survey participants said that 95% of coworkers saw the bullying incident and that 97% were aware of what was occurring. About 36% of coworkers did something positive – limited to offering moral support, while less than 1% of coworkers banded together to stop the bullying. Sadly, in 46% of cases, coworkers abandoned their bullied colleagues, with 15% aggressed against the target, and 16% did nothing. Furthermore, in their observational study, Craig and Pepler (1995) investigated bullying episodes in school playgrounds. They found that peers were involved in approximately 85% of the bullying episodes, reinforced the bullying in 81% of the episodes, were active participants in 48% of the episodes, were more respectful toward the bullies than the targets, and intervened in only 13% of the episodes at which they were present.

Einarsen (1999) suggested that bullying may result from conflicts between equals (e.g., coworkers), if one party becomes disadvantaged during the course of their interaction. Several studies have corroborated this perspective and found that coworkers are the most frequent source of hostile workplace behaviors (e.g., Cortina, Magley, Williams, & Langhout, 2001; Keashly & Neuman, 2004; Keashly & Nowell, 2011; Neuman & Baron, 1997; Richman et al., 1999; Schat, Frone, & Kelloway, 2006). That is, coworkers who become aware that they hold the upper hand are less likely to pursue mutually constructive solutions, thus opening the door for a potential bullying situation (Keashly & Nowell, 2011; Raver & Barling, 2008).

One lingering question regarding witnesses of bullying is why do they not intervene? Coloroso (2008) suggests four reasons for why bystanders do not intervene: (1) fear of being hurt, (2) fear of becoming a new target of the bully, (3) fear of doing something that will make
the situation worse, and (4) not knowing what to do. In sum, Coloroso (2008) believes that bystanders have more excuses than valid reasons for not intervening. Namie and Namie (2003, 2009) discuss other reasons why witnesses do not intervene. One such reason is called the Abilene Paradox (Harvey, 1989), in which a group decides to follow one decision, when no group member believes it to be the best course of action, yet does nothing, and only speaks up long after the decision has been made and backfires. Other possible reasons, according to Namie and Namie (2003, 2009) include groupthink (Janis, 1971, 1982) and cognitive dissonance (Festinger, 1962).

Building on Coloroso’s (2008) suggestions, Bloch (2012) conducted a qualitative study to investigate how bullying among colleagues effected witnesses, and suggested five overarching themes: interpretative schemas of who to blame; witnesses’ emotions; micro-political actions and social place; sympathy etiquette; and denial. For interpretative schemas, bullying is a disturbance in social interaction, in which individuals desire to understand what really happened as well as what other people present believe happened. These schemas manifest themselves in one of three forms: defender, prosecutor, and commuter. In a defender schema, a normalization of the target occurs, in which the witness believes that the target’s actions and behaviors were within the social norms of the workplace. In a prosecutor schema, witnesses view the target as a deviant in terms of the norms of the workplace. Finally, in a commuter schema, a witness switches between views of the target as a deviant and normal. Regarding the prosecutor schema, witnesses transformed their feelings into actions by emphasizing the target’s low social place, by disassociating with the bullying in principle, but instead, used more subtle forms of bullying such as ignoring or gossiping about the target (Bloch, 2010). Regarding sympathy etiquette, witnesses must believe that the target is worthy of sympathy. That is, while witnesses expressed sympathy,
they also believe that the targets should do something to resolve their situation. Finally, the last theme is denial. As Cohen (2001) suggests, denial of responsibility is the most frequently used defense strategy.

Since bystanders are involved in some manner with bullying of their peers (Bloch, 2012; Namie & Namie, 2009), extant literature has neglected how witnessing these episodes at work can influence the work relationships with coworkers and the psychological effects on the bystander. This study investigates these issues by focusing on coworker interpersonal justice, personal identification with coworkers, state anxiety, and core affect.

*Bullying and Gender*

Bullies are women and men who torment women and men of all races and ages, in all workplaces, regardless of the size and type of business (Namie & Namie, 2003). In terms of bully gender, targets mostly identify men as being the bully (Rayner & Cooper, 2003), which may be due to their organizational position. Some professions, such as nursing, experience more peer-on-peer bullying than supervisory bullying (Hutchinson, Vickers, Jackson, & Wilkes, 2006). Additionally, bullies preferred public sites in front of witnesses to humiliate their targets (46%). According to the 2007 WBI Survey (Namie, 2007), male bullies preferred public bullying more than female bullies (57.8% vs. 48.6%), while female bullies prefer to abuse behind closed doors (47.2% vs. 38.3%). Additionally, the majority of bullies are men (60%) and the majority of targets are women (57%); however, men and women target others differently based on gender. Women target other women in 71% of cases, and target other women 2.5 times as frequently as they target men, while male bullies abuse everyone equally, with a slight preference toward bullying other men. Men and women are bullied at about the same rate, which
differs slightly based on professional context, and both suffer similar harmful effects (Price-Spratlen, 1995; Richman, Rospena, Flaherty, & Freels, 2001).

While previous literature examined the issue of bully and victim genders, incorporating the gender of the witness has largely been ignored. Specifically, how does the gender of the victim influence those bystanders of the same or opposite gender? The answer to this question may have implications for how bystanders react to witnessing a bullying situation.

Coworker Interpersonal Justice

Researchers demonstrated that employees are able to distinguish between the fairness of the outcomes they receive (distributive justice; Adams, 1965), the fairness of the procedures that lead to the outcomes (procedural justice; Leventhal, 1980; Thibaut & Walker, 1975), and the treatment in the delivery of the aforementioned procedures (interactional justice; Bies & Moag, 1986). Further research in interactional justice revealed two sub-dimensions, one involving the information delivered in the implementation of the procedures (informational justice) and the other involving the dignity and respect of the interpersonal treatment given to employees, typically by supervisors or other authority figures (interpersonal justice; Greenberg, 1993). Subsequent empirical research lends support for both the four-component (distributive, procedural, informational, and interpersonal) and the three-component (distributive, procedural, interactional) models of organizational justice (Cohen-Charash & Spector, 2001; Colquitt, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Colquitt et al., 2013).

Within the justice literature, two paradigms have emerged: reactive/event and entity. The reactive/event paradigm’s abiding concern is with how people react to specific occurrences that occur within the work environment (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Much of the work in this paradigm is defined by the fact that research participants are responding to a single
event, or a closely-related cluster of events (Cropanzano et al., 2001), including pay cuts (Greenberg, 1990), workplace staffing systems (Gilliland, 1994), selection decisions (Bauer, Maertz, Dolen, & Campion, 1998; Ployhart & Ryan, 1997), and leadership and trust in teams (Liu, Hernandez, & Wang, 2014). Alternatively, the entity paradigm of justice involves research participants appraising some person (e.g., one’s supervisor), group, or the organization as a whole (Cropanzano et al., 2001). The principal concern of this paradigm is with how people navigate interpersonal relationships with fair and unfair social entities (Cropanzano & Byrne, 2000), and that respondents are judging the fairness of people or groups over time and/or across situations (Cropanzano et al., 2001). Limited work can be characterized as entity-based (i.e., Barclay & Kiefer, 2014; Choi, 2008; Hollensbe, Khazanchi, & Masterson, 2008; Konovsky & Pugh, 1994; Moorman, 1991; Rupp & Cropanzano, 2002a; Schminke, Ambrose, & Cropanzano, 2000). Furthermore, Whitman, Caleo, Carpenter, Horner, and Bernerth (2012) noted the lack of studies that focused on “overall” justice (i.e., entity) and reemphasized the call made by Ambrose and Schminke (2001, 2009) that more studies need to explore the effects of “overall” justice to increase the explanatory power of the construct.

Recently, researchers suggested that employees consider the different types of justice and also the agent of the situation that is perceived to be fair or unfair, thus proposing a multifoci model of organizational justice to specify the source of justice (Cropanzano et al., 2001; Lavelle, Rupp, & Brockner, 2007). This multifoci perspective holds that employees are able to judge the type of justice (distributive, procedural, and interactional) of any party, if the employee believes that the entity in question was responsible for (or the source of) the fairness that employees receive (Lavelle et al., 2007; Liao & Rupp, 2005; Rupp & Cropanzano, 2002b; Rupp, Bashshur,
One focus of justice that is relatively unexplored is that of coworkers or peers as a source of justice.

Coworker (or peer) justice, also known as intraunit justice (see Cropanzano, Li, & James, 2007), refers to “how fairly individual employees feel they are treated by those they typically work with on a regular basis who are of roughly equal status” (Lavelle et al., 2007, p. 844). Cropanzano et al. (2007) identify intraunit justice as the treatment the unit gives to an individual. Researchers distinguish between this proposed type of coworker justice and justice climate. Specifically, justice climate involves how one’s group is treated by outsiders, not how the individuals within that group treat each other (i.e., Cropanzano et al., 2007; Liao & Rupp, 2005; Whitman et al., 2012). While this definition by Lavelle et al. (2007) focuses on the direct treatment of coworkers, I explore how justice perceptions are determined by witnessing the treatment of individuals of the same perceived rank. Additionally, a handful of studies suggest that coworkers are a viable source of justice, which warrants further research (e.g., Branscombe, Spears, Ellemer, & Doosje, 2002; Donovan, Drasgow, & Munson, 1998).

Limited research explores this aspect of peer justice. Colella (2001) argued that employees were able to perceive the fairness of the treatment that disabled coworkers received from their organization. Although their study explores support and not justice, Howes, Cropanzano, Grandey, and Mohler (2000) found that employees could distinguish the support received from teammates versus their organization. More recently, researchers examined coworker/peer justice as a unit-level construct. In their review of the literature, Li and Cropanzano (2009) examined the group level effects of justice climate and intraunit justice climate. Additionally, Cropanzano, Li, and Benson (2011) explored peer justice, citizenship behavior, and performance at the team level. Likewise, Li, Cropanzano, and Bagger (2013)
compared team-level peer justice and justice climate. Although peer justice has been explored as a group-level phenomena, these researchers also suggest that it may just as appropriate to study at the individual level.

In their development of the Perceptions of Fair Interpersonal Treatment Scale, Donovan et al. (1998), demonstrated that not only are employees able to distinguish fair treatment by their supervisors or coworkers, but that fair treatment by coworkers influenced several factors, including coworker and work satisfaction. Furthermore, in their meta-analysis of coworkers’ effects on perceptions, attitudes, citizenship behaviors, and performance, Chiaburu and Harrison (2008) explore the influence that coworkers have on one another and call for additional research to understand the social environment at work. Likewise, Forret and Love (2008) concluded that distributive, procedural, and interactional justice perceptions influence coworker perceptions of trust and morale. Furthermore, Simon, Judge, and Halvorsen-Ganepola (2010) suggested that coworker satisfaction varies daily and is positively related to job and life satisfaction. Moreover, Au and Leung (2016) examined interpersonal justice among coworkers and found a positive relationship. Specifically, researchers need to understand better how these perceptions are developed between coworkers illuminates the need for further study of coworker treatment at the individual-level. Regarding AET, Paterson and Cary (2002) applied AET to examine justice perceptions and downsizing, with downsizing being the affective event, and found those employees who received interactional justice from management had more trust in management. Thus, with the affective event for this study being the observation of coworker interactions (with observing coworker bullying as the negative affective event), for the purpose of this study, *coworker interpersonal justice* refers to the perception that a new coworker will be treated fairly by existing coworkers based on observing interactions among the existing coworkers.
Personal Identification

Since the introduction of social identity theory (Tajfel & Turner, 1985) into organizations by Ashforth and Mael (1989), researchers explored its manifestation within the organization (organizational identification; e.g., Ashforth & Mael, 1996; Mael & Ashforth, 1992, 1995; Riketta, 2005), the group (social identification; e.g., Ashforth, Harrison, & Corley, 2008; Fuchs, 2011; Haslam & Ellemers, 2005; Hogg & Terry, 2000; Roccas & Brewer, 2002), and in relationships with others (relational identification; e.g., Ahearne, Haumann, Kraus, & Wieseke, 2013; Aron, Aron, & Smollan, 1992; Ashforth & Sluss, 2006; Cooper, 2013; Cooper & Thatcher, 2010; Mossholder, Richardson, & Settoon, 2011). A new application of identity is that of personal identification, which is defined as “the perceived oneness with another individual, where one defines oneself in terms of the other” (Ashforth et al., 2016, p. 28). Within the organization, Ashforth et al. (2016, p. 34) distinguish three ways in which personal identification manifests itself: threat-focused, opportunity-focused, and closeness-focused. Threat-focused personal identification refers to the compensatory process through which an individual discerns an identity threat by perceiving a sense of oneness with another individual, thus internalizing that person’s identity attributes, and addressing a need for uncertainty reduction. Opportunity-focused personal identification involves the supplemental process by which one addresses an identity opportunity by perceiving a sense of oneness with another person, thus internalizing his or her identity attributes, resulting in fulfilling a need for self-enhancement. Finally, closeness-focused personal identification refers to the process in which close relational partners internalize each other’s identity attributes, thus addressing the need for belonging.

Although not distinguishing between these types of personal identification, some research explored the identification with a target, typically a leader or supervisor. Prior empirical work
suggests that this type of identification is positively associated with affective organizational commitment (Miao, Newman, & Lamb, 2012; Zhu, Wang, Zhen, Liu, & Miao, 2013), job involvement (Halpert, 1990), trust, self-efficacy, motivation, and willingness to sacrifice (Shamir, Zakay, Breinin, & Popper, 1998), and job satisfaction (Hobman, Jackson, Jimmieson, & Martin, 2011) and is negatively related to intent to leave (Miao et al., 2012; Zhu et al., 2013). Identifying with one’s leader was found to mediate the relationships between transformational leadership, job satisfaction, and helping behavior (Chun, Yammarino, Dionne, Sosik, & Moon, 2009), between leader-member exchange and organizational commitment (van Vianen, Shen, & Chuang, 2011), and between transformational leadership and follower dependence (Kark, Shamir, & Chen, 2003).

Although personal identification is linked to organizational outcomes and identification with a supervisor (i.e., Chun et al., 2009; Miao et al., 2012; Zhu et al., 2013), its relation to how an individual identifies with colleagues is unknown. Hence, this study examines how an individual’s personal identification with a coworker (both the bully and the victim) manifests itself after witnessing coworkers interact.

State Anxiety

Freud (1924) defined anxiety as “something felt,” a specific unpleasant emotional state that includes apprehension, tension, worry, or psychological arousal. Furthermore, Freud (1936, p. 85), in a psychoanalytic perspective, regarded anxiety as the “fundamental phenomenon and the central problem of neurosis.” Moreover, early researchers (Alexander & French, 1948; Freud, 1936) suggested that when aggression cannot be directly expressed to external objects, it is turned back into the self, causing depression, anxiety, and other psychosomatic manifestations. Subsequent research lead to the concepts of state and trait anxiety (Cattell, 1966; Cattell &
Scheier, 1958, 1961, 1963; Hodges & Spielberger, 1969; Spielberger, 1966, 1972a, 1972b, 1977, 1983). According to Spielberger (1985, p. 10), state anxiety refers to “a temporal cross-section in the emotional stream of a person, consisting of subjective feelings of tension, apprehension, nervousness, and worry, and activation or arousal of the autonomic nervous system.” The assumption of state anxiety is that its level of intensity could be measured at a given moment in time and could fluctuate over time as a function of the extent to which a person perceives the environment as dangerous or threatening. On the other hand, trait anxiety involves the “relatively stable individual differences in anxiety-proneness” (Spielberger, 1985, p. 10).

The distinction between state and trait anxieties led to several studies exploring the nature of the two dimensions of anxiety. Trait anxiety has been investigated in relation to emotional valence (Thomsen et al., 2016), addiction (Comeau, Stewart, & Loba, 2001), aversive conditioning (Barrett & Armony, 2009), parent-child relationships (Van der Bruggen, Bogels, & Van Zeilst, 2010), defensive reactions (Perkins, Cooper, Abdelall, Smillie, & Corr, 2010), and active learning (Bell & Kozlowski, 2008). Likewise, state anxiety has also been explored in several areas. For instance, researchers have explored state anxiety in relation to individual’s health, including exercise, rest, and blood pressure (Raglin & Morgan, 1987; Vancampfort et al., 2011), mental health (Brosan, Hoppitt, Shelfer, Sillence, & Mackintosh, 2011; Pico-Alfonso et al., 2006; Spielberger & Reheiser, 2009), addiction (Mehroof & Griffiths, 2010), and maternal health (Lobel et al., 2008; Paul, Downs, Schaefer, Beiler, & Weisman, 2013). Regarding an individual’s performance, state anxiety was examined regarding the performance of students (Diaz, Glass, Arnkoff, & Tanofsky-Kraff, 2001; Suliman & Halabi, 2007), within a task-switching investigation (Derakshan, Smyth, & Eysenck, 2009), musical performance (Kenny, Davis, & Oates, 2004), and learning performance (Chen, Gully, Whiteman, & Kilcullen, 2000).
Within the workplace, Doby and Caplan (1995) suggest that threats to an employee’s reputation influence their state anxiety. Similarly, Mahan et al. (2010) found that work environment stressors helped to explain state anxiety and depression among secondary school teachers. Likewise, Hutri and Lindeman (2002) suggest that organizational crises resulted in state anxiety, as well as influencing trait anxiety, particularly among women.

Following AET, traumatic or affective events at work can cause anxiety (Grandey, Tam, & Brauburger, 2002; Payne & Cooper, 2001). Therefore, in the context of this study, the affective event of interest is witnessing coworker bullying. Since previous research neglects this aspect of bullying, the examination of state anxiety is warranted to determine the effect of witnessing coworker bullying on state anxiety.

Core Affect

Similar to what Thayer (1986) called activation, what Watson and Tellegen (1985) called affect, and what Morris (1989) called feeling or mood, core affect refers to the “most elementary consciously accessible feelings that need not be directed at anything” (Russell & Feldman Barrett, 1999, p. 806). In other words, core affect is “that neurophysiological state consciously accessible as the simplest raw (nonreflective) feelings evident in moods and emotions” (Russell, 2003, p. 148). The term core affect distinguishes it from everyday terms such as emotion and mood, and is a component of emotional episodes, but not all of them (Russell, 2005; Yik et al., 2011). Yik et al. (2011) argue that core affect is not equivalent to mood or emotion, yet is a key ingredient in both. Unlike emotions, core affect does not need to be directed at a specific object, although it can become so; when rapidly changed, directed at an object, and accompanied by certain cognitions, physiological changes, and behaviors, it then becomes an emotion. Core affect is also a piece of mood, in that a mood implies a relatively mild prolonged experience,
with behavioral demeanor, thoughts, and motivation. Yet, core affect is a single feeling at a slice in time, and its duration, intensity, and relation to behavior, thoughts, and motivation are treated as empirical issues. Furthermore, Russell (2009) reiterates what core affect is not judgments about morally good or bad, nor is it affective properties we perceive in objects, events, and features (i.e., perceive objects to be beautiful or ugly).

Core affect varies in how individuals experience it (Barrett, 2009), changes over time (Kuppens, Van Mechelen, Nezlek, Dossche, & Timmermans, 2007), and changes in response to many simultaneous influences, including a single powerful and obvious external event or an internal change that is beyond human ability to detect (Russell, 2009). For example, Kuppens, Champagne, and Tuerlinckx (2012) explored how core affect changes following how people appraise events and how these appraisals change following how they feel in daily life. Their findings suggest that the changes in appraisal approaches to emotion are followed by changes in core affect, which, in turn, change individuals’ bases for judging future events. Other researchers demonstrate that core affect influences individuals beyond emotions and mood, including learning and consciousness (Feldman Barrett & Bliss-Moreau, 2009), vigor (Shirom, 2007), work motivation (Bloom & Colbert, 2011; Seo, Feldman Barrett, & Bartunek, 2004), employee silence (Madrid, Patterson, & Leiva, 2015), employee well-being (Xanthopoulou, Bakker, & Ilies, 2012), and job engagement (Rich, LePine, & Crawford, 2010).

A central tenant of AET is that an individual’s affective disposition interacts with work events and affective reactions (Weiss & Cropanzano, 1996). Additionally, since individuals vary in the manifestation of core affect based on changes over time and events (Barrett, 2009; Kuppens et al., 2007; Russell, 2009), the exploration of core affect in relation to observation of coworker bullying is warranted.
Empathy

Empathy refers to one’s ability to identify what someone else is thinking or feeling, and to respond with an appropriate emotion (Baron-Cohen, 2012, p. 12). Empathy concerns the ability to put oneself in another person’s “shoes” (Lazarus, 1991, 1999). In its most basic form, empathetic processes involves one party being affected by another’s emotional or arousal state (de Waal, 2008). This emotional connectedness starts early in life (Hoffman, 1975; Zahn-Waxler & Radke-Yarrow, 1990), shows neural and physiological correlates (Adolphs, Tranel, Damasio, & Damasio, 1994; Decety & Chaminade 2003; Rimm-Kaufman & Kagan, 1996), and has genetic undertones (Plomin et al, 1993). Psychologists emphasize the importance of perspective-taking regarding empathy. That is, perspective-taking, by itself, is not empathy; rather, perspective-taking combined with emotion constitutes empathy (de Waal, 2008).

Researchers also suggest that empathy occurs on a continuum, with affective and cognitive empathy at its extremes. These components, in which empathetic individuals are not only capable of gauging other’s emotions, but also share those emotions, experiencing them vicariously (Davis, 1980; Hoffman, 1984). Affective empathy (Eisenberg, 2000a, 2000b; Hoffman, 2000) is a basic process and manifests itself in the ability to effortlessly sense and powerfully experience the emotions of others. This type of empathy is based on superficial cues, with simply noticing a situation will trigger it. Cognitive empathy reflects understanding or comprehending another’s state (Davis, 1983; de Waal, 1996), involving the ability to understand the beliefs, feelings, and intentions of others (Decety & Jackson, 2004), thus enabling a person to anticipate the consequences of one’s actions on others, including violent actions. Moreover, research demonstrates that cognitive empathy is an important consideration in reducing negative behavior (Batson et al., 1997; Galinsky, Ku, & Wang, 2005). While empathy is typically
believed to be a response to another person’s suffering, individuals can also experience empathy toward another’s well-being (Nezlek, Feist, Wilson, & Plesko, 2001), such as celebrating and sharing another’s success (Gable, Reis, Impett, & Asher, 2004).

Empathy has been studied extensively in psychology, being linked with altruism, social competence, and decreased aggression (e.g., Eisenberg, 2000a; Eisenberg & Miller, 1987; Miller & Eisenberg, 1988). Within the management literature, empathy has been explored with several factors, including ethics (Chowdhury & Fernando, 2014), group attitudes (Batson et al., 1997), burnout (Miller, Birkholt, Scott, & Stage, 1995; Miller, Stiff, Hartman-Ellis, 1988), employee commitment (Hobson, Kesic, Rosetti, Delunas, & Hobson, 2004), organizational citizenship behaviors (Joireman, Daniels, George-Falvy, & Kamdar, 2006), and employee well-being (Scott, Colquitt, Paddock, & Judge, 2010).

Empathy has also been examined regarding bystanders of various events. In a study of school children, Seo (2008) demonstrated that a lack of empathy resulted in more bullying behaviors and higher levels of victimization. Likewise, in a study of classroom bullying, Salmivalli, Voeten, & Poskiparts (2011) demonstrated that boys bullied more and had less empathy and lower anti-bullying attitudes than girls and that those with less empathy toward victims bullied others more than those with higher empathy. In an experiment exploring empathy and cyberbullying among adolescents, Barlinska et al. (2013) demonstrated that bystanders who are empathetic toward the victims of cyberbullying reduce their support of cyberbullying. Furthermore, Hoffman (1978, 2008) suggested that after a certain point, empathetic bystanders may shift their attention to their own personal distress, leave the victim, or think of other things, which he coined “empathetic overarousal.”
Previous research illustrates that workplace events can lead to empathetic reactions (cf., Kellett, Humphrey, & Sleeth, 2006; Mueller, Pfarrer, & Little, 2014). Accordingly, when an individual witnesses one coworker bullying another, then this individual may demonstrate an empathetic reaction to this negative affective event.

Sense of Coherence

Several theorists and researchers have adopted a salutogenic orientation, which explore the factors that assist an individual to maintain physical and psychological well-being when confronted with stressors (Antonovsky, 1979, 1987a; Kobasa, 1979; Wheeler & Frank, 1988). As a result of research on coping with psychosocial stressors, sense of coherence has been identified as a model for coping (Antonovsky, 1979, 1984, 1987a, 1987b). Sense of coherence (SOC) consists of three dimensions, as identified by Antonovsky (1987a): comprehensibility, manageability, and meaningfulness. Comprehensibility refers to the “extent to which one perceives the stimuli that confront one, deriving from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than noise-chaotic, disordered, random, accidental, and inexplicable” (p. 16-17). Manageability refers to the extent to which “one perceives that resources are at one’s disposal which are adequate to meet the demands posed by the stimuli that bombard one” (p. 17). Lastly, meaningfulness reflects the importance of being involved “as a participant in the processes shaping one’s destiny as well as one’s daily experience” (Antonovsky, 1979, p. 127). Holistically, Antonovsky (1987a, p. 19) defined SOC as a “global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands
posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement.” In other words, SOC involves a stable generalized orientation regarding perceiving and controlling the environment for meaningful and appropriate action (Kivimaki, Feldt, Vahtera, & Nurmi, 2000).

A central tenant of SOC is that the higher the location of individuals on the SOC continuum, the more they will have the capacity to cope with the psychosocial stressors posed by internal and external environments (Antonovsky, 1987b, 1991, 1993). Yet, during an individual’s life, SOC changes as the life stages change. That is, a young child’s SOC will be different than that of an adolescent’s, which is different from an adult’s (Antonovsky, 1987a). Yet, during early adulthood, an individual’s SOC becomes more or less fixed, resulting in a deeply rooted stable dispositional orientation of an individual (Antonovsky, 1987a). Nevertheless, temporary changes in SOC are possible; for example, a person with a strong SOC whose child is killed or a person with a weak SOC who learns they won a prestigious award will both see the world differently for a time and eventually return to their normal level of SOC (Antonovsky, 1987a). Recent research suggests that although SOC is relatively stable over an individual’s life, it does tend to increase with age, with older individuals having a higher SOC than younger adults (Eriksson & Lindstrom, 2005).

Research in SOC relates to perceived health, especially mental health. As Eriksson and Lindstrom (2006) concluded in their review of the literature, SOC is strongly related to perceived health, and has as a main, moderating, or mediating influence in the explanation of health, regardless of age, sex, ethnicity, nationality, or study design. Pallant and Lae (2002) suggest that those individuals with a higher SOC are more likely to react to stressor events with adaptive strategies, which enhances the likelihood of a positive outcome to the situation and reduces the
chance of negative effects on health and well-being. Furthermore, a longitudinal study of SOC implies that SOC is a dispositional characteristics in both males and females and has predictive validity among women (Kivimaki et al., 2000). Likewise, Hittner (2007) found that SOC is relatively comparable for both men and women. Researchers have also explored SOC in a variety of situations, including emotional responses to stress (Antonovsky & Sagy, 2001), post-traumatic stress disorder (Streb, Haller, & Michael, 2014), social support (Langeland & Wahl, 2009), test anxiety (Cohen, Ben-Zur, & Rosenfeld, 2008), caregivers (Andrén & Elmstahl, 2008), and quality of life (Eriksson & Lindstrom, 2007). Within the workplace, researchers examined SOC regarding unemployed individuals (Vastamaki, Moser, & Paul, 2009), one’s current work situation (Vogt, Jenny, & Bauer, 2013), motivation in the job-demands-resources model (Vogt, Hakanen, Jenny, & Bauer, 2016), burnout and engagement (de Beer, Pienaar, & Rothmann, 2013), and overtime work (Ohta, Higuchi, Yamato, Kumashiro, & Sugimura, 2015).

Since affective events result in various affective attitudes (Weiss & Cropanzano, 1996), how an individual copes with these events merits investigation. That is, when an individual witnesses a coworker bullying another coworker, the predisposition of how that individual will cope with being exposed to that negative, affective event is under investigation as part of this study.

Summary

In this chapter, I reviewed extant literature to investigate previous relationships of the major constructs of this study. Specifically, I examined literature related to workplace bullying, coworker interpersonal justice, personal identification, state anxiety, core affect, empathy, and sense of coherence. The main research questions for this study are as follows: (1) How does witnessing a bullying event influence a coworkers’ interpersonal justice and personal
(2) How does observing a bullying event alter a bystander’s core affect and state anxiety? (3) How does a bystander’s empathy, sense of coherence, and the victim’s gender influence these relationships?
CHAPTER 3
HYPOTHESES DEVELOPMENT

In this chapter, I will identify the relationships between observing a coworker bullying incident (CBO) and both interpersonal outcomes (coworker interpersonal justice and personal identification with coworkers) and intrapersonal outcomes (core affect and state anxiety), as well as the moderating effects of empathy, sense of coherence, and victim gender. First, I will begin by identifying the direct relationships between observing the coworker bullying incident and coworker interpersonal justice, personal identification with coworkers, core affect, and state anxiety. I will then delineate how an individual’s empathy and sense of coherence influence these relationships. Finally, I will examine how the bullying victim’s gender could have an influence on these relationships.

Figure 1. Direct effect of coworker bullying observed on interpersonal and intrapersonal outcomes.
Direct Effects of Coworker Bullying Observation

In the following section, I will specify how observing a coworker bullying another coworker will influence both interpersonal and intrapersonal outcomes. Moreover, drawing from AET, I will describe how AET serves as a basis for these hypotheses. A pictorial depiction of these hypotheses is presented in Figure 1.

Interpersonal Outcomes

Coworker Interpersonal Justice. In their framework, Parzefall and Salin (2010) utilize social exchange theory and psychological contracts to investigate the effects of workplace bullying. Specifically, they argue that bullying leads to bystanders perceiving a type of organizational injustice, thus creating negative outcomes beyond the perpetrator-target relationship. Furthermore, exposure to bullying behaviors may create the perception of a psychological contract breach from both the targets and the bystanders, thus placing this perceived contract breach at the center of the bullying experience.

Furthermore, previous research suggests that affective events lead to perceptions of justice or injustice (e.g., Rupp & Paddock, 2010; Weiss & Beal, 2005; Weiss, Suckow, & Cropanzano, 1999). For example, in their study about survivor reactions to reorganization, Kernan and Hanges (2002) found that employee input, victim support, implementation, and communication quality were positively related to interpersonal justice. Additionally, in their study exploring antecedents and outcomes of abusive supervision, Aryee, Chen, Sun, and Debrah (2007) found that abusive supervision was negatively related to subordinate perceptions of interactional justice. Furthermore, Wiesenfeld, Brockner, and Martin (1999) used an experiment to investigate people’s affective reaction after observing another person being laid off in an interpersonally fair or unfair manner and found that negative affective reactions were higher for
those in the unfair condition than for the fair condition. Moreover, in their review of third party reactions to employee mistreatment, Skarlicki and Kulik (2005) suggest that both the characteristics of the bully and the victim (i.e., attitudes and behavior) and attribution of responsibility can influence justice perceptions of the bystander.

As Parzefall and Salin (2010) suggest, the psychological contract breach resulting from witnessing a bullying event may cause bystanders to question the social norms which govern the social relationships within their workplace. Therefore, newcomers may begin to question the potential relationship they can have with their new coworkers if they witness one coworker bullying another. Thus, when negative affective events (such as bullying) occur, employees are more likely to perceive that an injustice occurs and draw conclusions about the participants in the negative event. Hence, if new coworkers observe their senior coworkers treating each other in an unfair manner, then the new coworkers would be less convinced that they, themselves, would be treated with politeness, respect, and dignity.

Hypothesis 1: Observing a coworker bullying incident is negatively related coworker interpersonal justice.

Personal Identification with Coworkers. Balcerzak (2015) suggests a difference between one’s social identity and personal identity. One’s personal identity can be unique to the person who owns it, while their social identity is generally understood as the self in a member of a group. Human nature desires to maintain a positive identity, including a positive social identity (Baron, Byrne, & Branscombe, 2006). Several processes contribute to a social identity. An intragroup comparison refers “to a tendency to judge oneself compared to other members of one’s same group” while intergroup comparisons refer “to the tendency to judge one’s own group from another group” (Balcerzak, 2015, p. 37). The emotional abuse of others and the
affective response to such abuse, may result from one’s personal identity, social identity, intragroup comparisons, and intergroup comparisons.

When an individual joins a new organization, they go through a period of liminality, in which the individual is “betwixt and between” conditions (Garsten, 1999; Gentry, Kennedy, Paul, & Hill, 1995; Tempest, 2007; Turner, 1969), thus causing the individual to ensure a period in which there is an absence of a self-defining connection (Ashforth, 2001, p. 136). This liminal period is defined by the dynamic self-construal process, in which the sense of “who I was” gives way to a sense of “who am I becoming” (Conroy & O’Leary-Kelly, 2014). Previous research on liminality (e.g., Ashforth, 2001; Conroy & O’Leary-Kelly, 2014; Cunha, Guimaraes-Costa, Rego, & Clegg, 2010; Kennett-Hensel, Sneath, & Lacey, 2012; van Gennep, 1960/1908) suggests three phases: separation (detaching from the old sense of self), transition (resolving ambiguity in this intermediate state), and reincorporation (establishing a new sense of self). Of particular interest to this study is the transition stage, with previous research suggesting that during this phase, individuals spend time with identity sensemaking (Maitlis, 2009), thus creating identity narratives that must be socially tested and validated (Ashforth, 2001; Ashforth et al., 2008; Ibarra, 1999; Ibarra & Barbulescu, 2010; Pratt, Rockmann, & Kaufmann, 2006; Sveningsson & Alvesson, 2003). Furthermore, individuals tend to work toward creating a new positive identity (Maitlis, 2009).

In developing this new sense of self, psychologists have argued that individuals identify with others, such as parents and heroes, primarily to develop a sense of self and aspire to cultivate attributes they admire (Ashforth et al., 2016; Berenson, Crawford, Cohen, & Brook, 2005; Cramer, 2006; Josselson, 1992). Thus, in the case of personal identification, Ashforth et al. (2016) distinguished between threat-focused, opportunity-focused, and closeness-focused
manifestations of personal identification. Since the new coworker would desire to develop a new sense of self and obtain belonging among their new peers, the closeness-focused aspect of personal identification would come into play. That is, new coworkers would desire to belong to the set of existing coworkers, thus identifying a particular coworker in which to emulate his or her attitudes, attributes, and values.

While the transition process is ambiguous, given its nature, surprise situations may arise. Specifically, unpleasant surprises may trigger questions in the sensemaking process. These unpleasant surprises may cause newcomers to determine whether their expectations were in error (e.g., “Was I misinformed? Naïve?”), whether and how these surprises should be addressed, and what their implications are in the long run (e.g., “Will there be other surprises? Can I trust them?”; Ashforth, 2001; Weiss, Ilgen, & Sharbaugh, 1982; Wong & Weiner, 1981). Hence, when a newcomer observes their coworker bullying another coworker, this unpleasant surprise causes the new coworker to question their new role among their new coworkers. Therefore, as the new coworkers are exposed to an incident of one worker bullying another, I posit that these new coworkers would have a higher personal identification with the coworker that was bullied in the incident (the victim) rather than the coworker who introduced this negative event into their workplace (the bully). That is, these new coworkers would want to emulate the values and attributes of the coworker who was bullied, resulting in higher personal identification with the bullying victim, while distancing themselves from attitudes and attributes of the coworker who introduced this negative event into their workplace, resulting in lower personal identification with the bully.
Hypothesis 2: Observing a coworker bullying incident is (a) positively related to the personal identification with the victim of the bullying, and (b) negatively related to the personal identification with the coworker who did the bullying.

Intrapersonal Outcomes

State Anxiety. When individuals are exposed to environmental events or characteristics (stressors) that alter the individual’s state of well-being for a prolonged period of time, they react in ways that have negative consequences for the individual and for the organization (Summers, DeCotiis, & DeNisi, 1995). Specifically, traumatic stressors are events that are overwhelming to such a degree that the individual feels unable to function without substantial help from others (Lazarus, 1999). These traumatic events (or affective events, according to AET) threaten to shatter basic cognitive schemas involving fundamental beliefs that the world is benevolent and meaningful and that we, as individuals, are worthy, descent, and capable human beings deserving of other people’s affection and support (Janoff-Bulman, 1989, 1992). Witnessing such a traumatic event, such as their coworker being bullied (Nielsen, 2008), results in increased trait anxiety levels (Glaso, Vie, Holmdal, & Einarsen, 2011; Vie, Glaso, & Einarsen, 2010). Although trait anxiety is relatively stable over time (Spielberger, 1985), the exposure to this negative event would also cause an increase in state anxiety, which can vary at any point in time.

Hypothesis 3: Observing a coworker bullying incident is positively related to state anxiety.

Core Affect. Following AET, witnessing an instance of coworker bullying can lead to a behavioral or attitude reaction (Weiss & Cropanzano, 1996). Moreover, core affect helps to understand job-related cognition and behavior (Seo, Bartunek, & Barrett, 2010; Warr, Bindl, Parker, & Inceoglu, 2014). According to Russell (2009) and Barrett (2009), core affect changes
over time in response to external influences, and is measured at a single slice in time (Yik et al., 2011). Bullying at work creates strong emotions among all those involved, whether they be targets, witnesses, or those accused of bullying (Vartia & Leka, 2011). Indeed, when individuals witness their coworker being bullied by another coworker, this may influence their core affect as these bystanders were subjected to an extraneous event. Although a bystander’s core affect is relatively stable over time, witnessing this negative event may cause their core affect to lessen (cf., Madrid et al., 2015; Timmermans, Van Mechelen, & Nezlek, 2009).

Hypothesis 4: Observing a coworker bullying incident is negatively related to core affect.

Figure 2. Moderating effect of empathy on coworker bullying observed and interpersonal and intrapersonal outcomes.
Moderating Effects of Empathy

In this section, I specify how empathy affects the relationships between coworker bullying observed and both interpersonal and intrapersonal outcomes. The moderating effects of empathy on the relationships between coworker bullying observed and interpersonal and intrapersonal outcomes are displayed in Figure 2.

Empathy and Coworker Interpersonal Justice. Empathetic processes involve one party being affected by another’s emotional or arousal state (de Waal, 2008). Folger asserts that simply witnessing an injustice can produce a *deontic state*, which includes strong emotions, such as resentment and disgust (Folger & Skarlicki, 2008; Folger, Cropanzano, & Goldman, 2005), which, in turn, push individuals’ behavior in certain ways (Cropanzano, Goldman, & Folger, 2003). Likewise, Michalak & Ashkanasy (2013) argue that for an injustice perception to be formed, emotions must have occurred either just before, concurrently, or just after the formation of the perception.

In order for empathy to occur, the coworker must witness their coworker’s emotional response to the bullying event (de Vignemont, 2007). Furthermore, as suggested by Colella (2001), when empathy is present, individuals use their personal assessments to determine if the outcome was fair. Moreover, individuals with high levels of empathy expressed concern for the target’s well-being (Hakansson & Montgomery, 2003), whereas individuals with lower levels of empathy engaged in more bullying behaviors than those with high levels of empathy (Jolliffe & Farrington, 2006). Likewise, in a study of communicating negative news, Patient and Skarlicki (2010) conclude that managers who exhibited high levels of empathy communicated negative news in a manner that was more interpersonally and informationally fair than those who exhibited low levels of empathy.
Hypothesis 5: An individual’s empathy influences the relationship between coworker bullying observation and coworker interpersonal justice, such that individuals with higher levels of empathy positively moderates this relationship, while individuals with low empathy negatively moderates this relationship.

Empathy and Personal Identification with Coworkers. Empathy arises from the ability to put oneself in another person’s position (Lazarus, 1991, 1999) and being affected by another’s emotional or arousal state (de Waal, 2008). Furthermore, previous research suggests that bystanders of coworker bullying would have an empathetic response to witnessing a coworker being bullied (cf., Barlinska et al., 2013). During the transition stage of joining a new organization, the new hires experience a range of emotions (Ashforth, 2001; Cunha et al., 2010), which may be triggered by specific events. Specifically, witnessing their new coworker being bullied triggers an unpleasant surprise and viewing their coworkers’ emotional response to being bullied will affect the new coworker such a way that the new coworker will empathize more with the victim being bullied than with the perpetrator of the bullying. In sum, these unpleasant surprises will trigger an anticipation of closeness with the bullying victim, and less closeness with the bully.

Hypothesis 6: An individual’s empathy influences the relationship between coworker bullying observation and personal identification of the victim of the bullying, such that higher levels of empathy strengthen the relationship between coworker bullying observation and personal identification with the victim; and (b) empathy positively influences the relationship between coworker bullying observation and personal identification with the bully, such that higher levels of empathy weaken the relationship between coworker bullying observation and personal identification with the bully.
Empathy and State Anxiety. After witnessing a traumatic, negative event, an individual’s anxiety level increases (cf., Glaso et al., 2011; Vie et al., 2010). Moreover, witnessing a stressful event may trigger empathy from the observers (Hakansson & Montgomery, 2002). That is, people with high levels of empathy engage more with the individuals involved in the bullying incident (Barlinska et al., 2013; Seo, 2008), thus affecting their emotional or arousal state (de Waal, 2008; Nezlek et al., 2001). This psychological involvement with the bullying actors causes additional stress for the highly empathetic individual (Stebnicki, 2000), which then increases their anxiety levels at a specific point in time.

_Hypothesis 7: An individual’s empathy influences the relationship between coworker bullying observation and state anxiety, such that individuals with higher levels of empathy positively moderates this relationship, while individuals with lower empathy negatively moderates this relationship._

Empathy and Core Affect. In exploring the neurological mechanisms behind empathy, Decety (2011) concludes that core affect and empathy are more strongly related than other mechanisms, such as emotions. Moreover, Lopez-Perez, Carrera, Ambrona, & Oceja (2014) suggest that observing another individual’s suffering evokes personal distress, thus modifying the witness’s core affect. Therefore, when individuals with high empathetic concerns witnesses their coworker being bullied by another coworker, then their core affect is modified by observing the affective, negative event.

_Hypothesis 8: An individual’s empathy influences the relationship between coworker bullying observation and core affect, such that individuals with higher levels of empathy negatively moderates this relationship, while individuals with low empathy positively moderates this relationship._
Figure 3. Moderating effect of sense of coherence on coworker bullying observed and interpersonal and intrapersonal outcomes.

Moderating Effects of Sense of Coherence

This section describes the moderating effects of sense of coherence on the relationships between coworker bullying observed and both interpersonal and intrapersonal outcomes. A graphical depiction of these relationships is found in Figure 3.

Sense of Coherence and Coworker Interpersonal Justice. Lind (1997) argues that people’s judgments of fair or unfair treatment are based on the patterning of everyday social interactions. Furthermore, individual dispositions may act as vulnerability factors inasmuch as
such individual variables are likely to affect appraisal and coping processes (Cox & Ferguson, 1991; Lazarus & Folkman, 1984; Spector, Zapf, Chen, & Frese, 2000). Thus, when one coworker bullies another, the witness of the bullying event is subjected to an affective event in which the witness must then cognitively process and decide how to react (Janson, Carney, Hazler, & Oh, 2009; Nielsen, Matthiesen, & Einarsen, 2008; Oh & Hazler, 2009). This event then causes the normal pattern of daily work-life to become unpredictable and challenging, and forces the witness to cope with the implications of these events (van der Hal-van Raalte, van Ijzendoorn, & Bakermans-Kranenburg, 2008). Furthermore, individuals with a high SOC are able to deal with work-related traumatic events better than those who have a low SOC (Streb et al., 2014).

In relationships with others, individuals strive to maintain a clear and consistent picture of themselves, thus creating an important SOC which helps them to organize their experiences, anticipate future events, and guide their behavior (Swann, 1983). After witnessing a bullying event between coworkers, the new coworker will perceive that there may not be as much anticipated politeness and fairness between coworkers as previously thought, thus causing the new coworker to use their SOC to guide their behavior and anticipate future events. Thus, those individuals with higher SOC will be able to organize their thoughts in such a way that these individuals will be able to process and cope with witnessing such an event, while those with lower SOC will have more difficulty processing the event. Specifically, an individual with a higher SOC who is better able to process an affective event would be able to determine whether or not the affective event was justified, in that these individuals would be better equipped to conclude that the people involved in the affective event acted justly or unjustly.
Hypothesis 9: An individual’s sense of coherence influences the relationship between coworker bullying observation and coworker interpersonal justice, such that higher levels of sense of coherence positively moderates this relationship, while individuals with low level of sense of coherence negatively moderates this relationship.

Sense of Coherence and Personal Identification with Coworkers. Because individuals with a high SOC are able to perceive and control the environment for meaningful and appropriate action (Kivimaki et al., 2000), their personal identification with the coworkers involved in the bullying incident would be influenced. Furthermore, as demonstrated by Luyckx, Schwartz, Goossens, and Pollock (2008) in their study of emerging adults, those individuals who had high levels of SOC were able to identify as being more of an adult than those with a low SOC. Their delineation using SOC to determine how individuals perceive themselves as an adult versus a teenager implies that individuals are able to distinguish how they identify with one person or another, given contextual boundaries (in the case of their study, this boundary was employment). Additionally, those with a higher SOC are better able to cope with the stressors imposed as a result of witnessing the bullying episode (Antonovsky 1987b, 1991, 1993), thus resulting in being able to identify more with one or the other participant in the bullying event. That is, those new coworkers who have a high SOC and witness the bullying event would be able to react to the unpleasant surprise during the transition stage faster than those with low SOC, in that they would be able to determine quickly whether their original expectations were in error and decide how the surprise should be addressed (i.e., answering the “Was I misinformed? Naïve?” question; Ashforth, 2001; Weiss et al., 1982; Wong & Weiner, 1981). This determination would assist the new coworkers in addressing their original expectations, specifically that the coworker demonstrating the tasks would have traits that they admire and
aspire to cultivate (e.g., Ashforth et al., 2016; Berenson et al., 2005; Cramer, 2006; Josselson, 1992), causing the new coworkers to have a firmer sense of closeness with the victim of the bullying than with the bully.

*Hypothesis 10a:* An individual’s sense of coherence influences the relationship between coworker bullying observation and personal identification with the victim, such that a higher sense of coherence positively moderates this relationship, while individuals with low sense of coherence negatively moderates this relationship.

*Hypothesis 10b:* An individual’s sense of coherence influences the relationship between coworker bullying observation and personal identification with the bully, such that a high sense of coherence negatively moderates this relationship, while individuals with low sense of coherence positively moderates this relationship.

Sense of Coherence and State Anxiety. Individuals with high levels of SOC are typically better psychologically equipped to handle stressful events (Antonovsky, 1987b, 1991, 1993), with Pallant and Lae (2002) suggesting that these individuals are more likely to react to stressful events with adaptive strategies. Thus, these high SOC individuals, once witnessing a coworker bullying event, would be more likely to handle the implications of the bullying, thus controlling their anxiety levels at that point in time.

*Hypothesis 11:* An individual’s sense of coherence influences the relationship between coworker bullying observation and state anxiety, such that higher levels of sense of coherence negatively moderates this relationship, while individuals with low sense of coherence positively moderates this relationship.

Sense of Coherence and Core Affect. In line with AET, Brief and Weiss (2002) identify that stressful events can trigger affective responses. In this case, the stressful event relates to
witnessing a coworker bullying another coworker. Individuals with higher levels of SOC are psychologically better equipped to cope with these stressful events than those with lower levels of SOC (Antonovsky, 1987b, 1991, 1993). Furthermore, because those with high SOC are able to cope better, and since core affect can vary as a result of external events (Russell, 2009), I propose that those with high SOC will be able to cognitively process the coworker bullying event in such a way that their SOC is able to weaken the negative relationship (i.e., the negative relationship would not be as strong) between witnessing the coworker bullying event and their core affect.

*Hypothesis 12: An individual’s sense of coherence influences the relationship between coworker bullying observation and core affect, such that higher levels of sense of coherence positively influences this relationship, while individuals with low sense of coherence negatively influences this relationship.*
Figure 4. Moderating effect of victim's gender on coworker bullying observed and interpersonal and intrapersonal outcomes.
Moderating Influences of Bullying Victim Gender

This section describes how the victim’s gender results in variation in bystander responses. A graphical representation is found in Figure 4. Both men and women are bullies, and target both the same and opposite gender and suffered the effects of bullying (Namie & Namie, 2003; Rayner & Cooper, 2003). For instance, men in a traditionally women-dominated field (e.g., nursing) were bullied more than their female counterparts (Eriksen & Einarsen, 2004). In their study of 5,679 victims from 30 different samples, Zapf, Escartín, Einarsen, Hoel, and Vartia (2011) identified that 61% were women and 39% were men. Men seem to be overrepresented as the bullies in most studies (cf., Meschkutat, Stackelbeck, & Langenhoff, 2002), and women tend to bully other women and men tend to bully other men (Einarsen & Skostad, 1996; Hoel et al., 2001; Leymann 1993a, 1993b; Meschkutat et al., 2002). Moreover, as demonstrated in the 2007 WBI study (Namie, 2007), women targeted other women more often than they targeted men, while men seemed to bully everyone equally.

The effects of the victim’s gender in these bullying events on bystanders are largely unexplored. For instance, Mulder, Pouwelse, Lodewijks, and Bolman (2014) examined bystanders’ helping behavior and found that men attributed the bullying situation to the victim, whereas women did not. Furthermore, as Salin (2011) found, the gender of the target, the gender of the bully, and the gender of the bystander all played a role in evaluating whether a negative behavior was perceived as bullying, with men evaluating the situation as an individual problem more so than women. In examining the difference between work-related outcomes and personal outcomes, there are differences in how the victim’s gender affects bystanders. In an experiment among students, Baldry (2004) concludes that boys blamed the victims less when the bullying occurred among other boys rather than girls, and that the girls blame the victim less when the
bullying occurred among girls rather than boys. Niedhammer and Degioanni (2006) found that observing bullying was a risk factor for depressive symptoms among women more so than men.

Due to in-group/out-group effects (Brewer, 1979; Tajfel, 1974), which state that individuals discriminate against others who do not belong to their group (i.e., gender), the observers of coworker bullying will differ in their views of the incident based on the victim’s gender. Regarding interpersonal outcomes (coworker interpersonal justice and personal identification with coworkers), individuals having the same gender as the victim will be more affected by witnessing the coworker bullying incident. Specifically, previous research demonstrates that individuals tend to socialize with individuals of the same gender (e.g., Ely, Ibarra, & Kolb, 2011; Mehra, Kilduff, & Brass, 1998). That is, women tend to identify and establish friendships with other women, and men with other men. Thus, when witnessing a coworker bullying incident, women participants will identify more with the female victims than with the male victims, as well as believing they would be treated better by the women coworkers than their male counterparts, and vice versa for men. Likewise, individuals of the same gender as the victim will be more affected on intrapersonal outcomes (core affect and state anxiety) then if the victim were of the opposite gender. Specifically, researchers suggest that there is a gender bias regarding affective outcomes (Czopp & Monteith, 2003; Prawat & Nickerson, 1985) and that women are more likely to recount incidents with an affective response than men (Elderkin-Thompson & Waitzkin, 1999). That is, women who view women being bullied would have higher state anxiety and core affect than men who view women being bullied, and vice versa for men.

*Hypothesis 13: The gender of the bullying victim influences the relationship between coworker bullying observation and (a) coworker interpersonal justice and (b) personal identification with coworkers.*
identification, such that individuals that are the same gender as the bullying victim are more affected than those of the opposite gender, and the relationship between coworker bullying observation and the intrapersonal outcomes (c) state anxiety and (d) core affect, such that individuals that are the same gender as the bullying victim are more affected than those of the opposite gender.

Summary and Conclusions

In this chapter, I examined how an individual witnessing coworker bullying influences both the interpersonal and intrapersonal outcomes. Using AET, I described how witnessing a coworker bullying incident would cause an individual to have lower coworker interpersonal justice, lower personal identification with the bully, lower core affect and higher personal identification with the victim, and higher levels of state anxiety. Furthermore, I describe how both empathy and sense of coherence would influence these relationships. Empathy strengthens the relationship between coworker bullying observed and coworker interpersonal justice, personal identification with the victim, state anxiety, and core affect, while weakening the relationship with personal identification with the bully. Sense of coherence strengthens the link between coworker bullying observed and coworker interpersonal justice and personal identification with the bully, while weakening the relationship with personal identification with the victim, state anxiety, and core affect. Finally, I posit that the bullying victim’s gender will also moderate the relationship between coworker bullying observed and both interpersonal and intrapersonal outcomes, in that these relationships will be stronger for bystanders who are of the same gender as the victim.
CHAPTER 4

METHODS

The purpose of this study is to examine the effects of witnessing a bullying event at work. In order to accomplish this, an experiment was designed to create the experience of observing bullying in a workplace situation. The use of experiments in bullying studies is not new. Ojala and Nesdale (2004) implemented an experimental design to assess children’s attitudes toward bullying. Similarly, Boulton (2013) examined teenagers’ fear of becoming a bullying victim by utilizing an experiment in which the target’s reputation was manipulated. Likewise, Rock and Baird (2012) investigated via an experimental approach children’s strategies as bystanders in various bullying situations. Based on these studies, the use of an experimental approach to evaluate bystanders of coworker bullying is appropriate.

Experiments have inherent advantages and disadvantages. Some of these advantages include the ability to derive causal inferences, control of the experimental environment – particularly the random assignment of subjects to conditions, and exploration of the phenomena of interest in greater detail (Campbell & Stanley, 1963; Kirk, 2012; McConahay, 1973; McDermott, 2002). Despite these advantages, there are also inherent disadvantages, including artificiality of the lab environment not being able to elicit the desired effects, the unrepresentative nature of the subject pool, and the generalizability of the findings outside of the lab (Campbell & Stanley, 1963; Kirk, 2012; McConahay, 1973; McDermott, 2002). In the present study, the advantages of an experiment outweigh the disadvantages, particularly in regard to the ability to explore the phenomenon in more detail. Since the perspective of bystanders in coworker bullying is under-explored in the literature, by using an experimental approach, I am able to investigate the how witnessing a bullying event among peers would influence the
bystanders perceptions of coworker interpersonal justice, personal identification with coworkers, state anxiety, and core affect, leading me to be able to derive causal inferences of the relationships proposed and tested in this study. Additionally, the random assignment of participants to treatment groups allows me to ensure that any differences in the outcomes arises from the treatments, and not potential confounding factors (e.g., Dunning, 2008). Furthermore, the listed disadvantage of the unrepresentative nature of the subject pool is not necessarily accurate, as 28 million American workers witnessed their coworker being bullied in 2014 (Namie et al., 2014), indicating that this type of bullying is prevalent in numerous workplaces.

Furthermore, one of the main concerns regarding experiments is that of mundane realism and experimental realism. Mundane realism involves the reality that participants would encounter the experimental situation in the real world, while experimental realism involves the likelihood that the experimental situation is believable to the participants to achieve the desired effects (McDermott, 2002). Experimental realism is critical to the success of the experiment, while mundane realism is not (McDermott, 2002). To address experimental realism, I first tested the experimental process through a pilot study. I then identified what improvements should be made to the main study, as well as designing and implementing a manipulation check to ensure that the treatments had the desired effect. Additionally, by utilizing an experimental approach, I am able to control to what the participants are exposed, thus allowing me to subject all participants to a workplace scenario, with coworker interactions. This approach allows me to determine how these participant-bystanders interpret and internalize the coworker interaction, and subsequently determine its effect on their coworker interpersonal justice, personal identification with their coworkers, state anxiety, and core affect.
I conducted a pilot study to assess and refine the instruments and collection process. Then, I incorporated the changes to the main study. In the main study, I test the relationships on a larger sample. Below, I first begin by describing the task and procedure used in the experiment and identify the analytical procedures used to verify and test the described model. I then outline the statistical procedure used to test the specific hypotheses.

Pilot Study

A pilot study was conducted in June 2016. Feedback from this experiment was utilized to adjust the survey instruments and the experimental procedure. Thus, the purpose of the pilot was to refine the instrument and process, not access the accuracy of the model (Trochim & Donnelly, 2008). Participants were asked to complete a study consisting of three waves. The first and third waves consisted of an online survey administered via Qualtrics, while the second wave involved an in-person lab session.

Sample

Students in 3 upper-level undergraduate business classes with a total enrollment of 191 at a large southwestern university in the United States were offered the opportunity to participate in the pilot study in exchange for extra credit offered by their instructors and a chance to win one $25 Amazon gift card. A total of 56 students completed the first wave, with 42 students completing both the in-lab session, and the final online survey, for a total of 42 subjects who completed all three tasks (response rate 22%). Their ages ranged from 18 to 34, with an average age of 24.38 years (SD = 5.88). The sample included 17 males (40.5%), and 25 females (59.5%). The participants were 14.3% African American, 9.5% Asian, 50% Caucasian, 21.4% Hispanic/Latino, 2.4% two or more races, and 2.4% other ethnicity. The students were classified as 4.8% sophomore, 23.8% junior, and 71.4% seniors.
Procedure

Students in each of these three classes received a recruiting flyer (see Appendix A) that reinforced the cover story. Subjects were told that the purpose of the research study was to determine the effectiveness of a proposed training program and how exposure to a certain situation encourages certain reactions. If students chose to participate in the study, they completed an initial online questionnaire to capture demographic information and individual difference variables. Upon completing this questionnaire, subjects were then asked to select their top three preferred time to complete the in-lab portion of the study.

Following completion of the pre-lab questionnaire, subjects were notified via email their scheduled lab time and given directions to the lab. There were four experimental scenarios, so no two subjects had the same scenario in any lab session. Upon arriving at the lab, students signed into a logbook to receive extra credit and were directed to their work station. At the computer station, which was loaded with the proper experimental scenario, students were given instructions that they would need, provided headphones, and told that they could use the cloth napkin that was next to the keyboard to practice. They were also told that they would need to move to another station in the course of the study, and that the computer would direct them to do so. They were then told where to find the lab attendant should they have any questions or technical issues with the computer.

Task

The participants in the study were told that they were evaluating some training videos for a local restaurant to ensure consistency and accuracy across newly hired employees (see Appendix B). The subjects were also told to imagine that they had just been hired by this restaurant to work as a busser (a person who cleans and sets tables). They were then asked to
view two training videos using hired actors (cf., Bupp & Richard, 2016; Cohen, Nisbett, Bowdle, & Schwarz, 1996; see Appendix C for video transcripts) to learn how to perform two place settings (lunch and dinner) and two napkin designs. After watching both videos, participants were then asked to take a few minutes to practice; once they were ready, the lab attendant had them select one station in which they were to perform the lunch place setting with the corresponding napkin design, and to notify the attendant when they finished it. The lab attendant then recorded the accuracy of the participants’ place setting and napkin design, and then instructed the participant to perform the dinner place setting with the corresponding napkin design. Once the participant finished, the lab attendant instructed the participant to return to the computer to complete the survey, and then recorded the accuracy of the dinner place setting.

After participants finished the in-lab session, they were again asked to provide their email address to receive the link to the final portion of the study. The participants were then emailed with the link a week after completing the in-lab session, and asked a series of questions about what they recall from the in-lab portion and other individual differences. At the conclusion of this online session, participants were shown a debriefing statement and contact information for the researcher if they had any additional questions or concerns (see Appendix D).

**Independent Variable**

*Workplace bullying observed manipulation*

To expose participants to a bullying situation, a series of videos were recorded depicting either a bullying incident or a neutral exchange between coworkers. These videos were recorded by actors using the same script. The use of actors and videos provides consistent viewings across all participants (cf., Bupp & Richard, 2016). In both videos, one coworker is looking directly at the camera, demonstrating, and narrating the steps to create either a lunch place
setting, a dinner place setting, a rose napkin design, or a French pleat napkin design. When the coworker completes the lunch place setting and is moving onto the dinner place setting, their coworker appears. In the bullying condition, the incoming coworker verbally assaults the other coworker, while in the control condition, he apologizes for interrupting and looks forward to seeing the coworker later. Likewise, for the napkin designs, when the coworker is finished demonstrating the rose napkin design and moving to the French pleat, the coworker appears. Similar to the place setting manipulations, in the bullying condition, the incoming coworker verbally assaults and demeans the coworkers, whereas in the control condition, the coworker expresses gratitude that the other coworker is making a video for the napkin foldings as he “had a lot of trouble doing those.”

The manipulation check for workplace bullying was derived from the Experience of Negative Behaviors at Work scale (Rayner et al., 2002), which consisted of 24 items and 4 relevant items from the School Bullying Bystander Survey (Hazler, Hoover, & Oliver, 1991), which were ranked on a scale from 1-5, with 1 = strongly disagree and 5 = strongly agree. The 7 items relevant to the study from these scales were then used to determine if the participants understood the manipulations. If an average score of over 4 was achieved, then the responses were retained in the study.

Moderating Variables

Empathy

Empathy was measured using the eight items from Chowdhury and Fernando (2014). These items were subjected to a principal components analysis with varimax rotation before the analysis was conducted. For the analysis, a total of three items were retained, and had a
Cronbach’s alpha of 0.84. A sample item includes “Other people’s misfortunes do not usually disturb me a great deal” (reverse-coded).

**Sense of coherence**

The items for sense of coherence were derived from Antonovsky (1987a). The long form of the sense of coherence scale contains 29 items, but due to time constrains and the possibility of fatigue, the short-form consisting of 13 items was selected. The short-form has been found to be reliable and valid (Antonovsky, 1993; Eriksson & Lindstrom, 2005). Before the analysis, these items were subjected to a principal component analysis using varimax rotation. This resulted in a three items being retained for the analysis, which had a Cronbach’s alpha of 0.75. A sample item includes the following: “Do you have the feeling that you are in an unfamiliar situation and don’t know what to do?” (1-very often to 7-very seldom or never, reverse-coded).

**Bullying victim gender manipulation**

To determine the effect of victim gender on bystanders, the victim of the bullying was manipulated in the videos. The gender of the bully remained constant throughout all videos (male), while the gender of the victim (the coworker demonstrating and narrating the videos) was varied across all conditions. Participants either watched the sequence of videos with either the male bully and male coworker or the sequence of videos with the male bully and female coworker. At the end of the in-lab session, participants were asked if they remembered the gender of the bully and the coworker.

**Dependent Variables**

**Coworker interpersonal justice**

Coworker interpersonal justice was measured using items from two sources. There were five items adapted to fit this study from Colquitt (2001) and four items adapted from the Fair
Interpersonal Treatment Scale (Donovan et al., 1998). These nine items were subjected to a principal components analysis with varimax rotation, resulting in a total of five items being retained for the analysis. The Cronbach’s alpha for these five items was 0.95, with a sample item being “My future coworkers will treat me with respect.”

**Personal identification with coworkers**

Personal identification was measured using various sources. Based on scales identified by Ashforth et al. (2016), items included six items from Mael and Ashforth (1992), eight items from Kark et al. (2003), two items from Fuchs (2011), four items from Halpert (1990), and five items from Shamir et al. (1998). Based on the definition of personal identification, a target for the definition is required; as such, these items were directed towards both the bully and the victim (or the demonstrating coworker and the interrupting coworker in the control scenario). That is, these items were modified to incorporate whether they referred to the bully or the victim. Due to this modification, these items were subjected to a principal components analysis with varimax rotation, which resulted in 11 items being used for the analysis. For personal identification with the victim, the Cronbach’s alpha was 0.94; for personal identification with the bully, the Cronbach’s alpha was 0.97. A sample item includes “It is important for me to see myself as a coworker of [Bully/Victim].”

**Core affect**

The core affect variable was measured using 12 adjective pairs from the Swedish Core Affect Scale (SCAS) from Västfjäll, Friman, Gärling, & Kleiner (2002). Furthermore, Västfjäll and Gärling (2007) identified the rating format used for this construct (rating format B was used). These 12 items were subjected to a principal component analysis using varimax rotation,
resulting in four items that were retained for the analysis. These four items had a Cronbach’s alpha of 0.91. A sample item includes “Indifferent/Engaged.”

*State anxiety*

State anxiety was measured using the 20 items from Spielberger (1983). These 20 items were subjected to a principal components analysis, which resulted in six items being retained for the analysis. The Cronbach’s alpha for these six items was 0.93. A sample item includes “I felt strained.” Table 1 lists the results of the principal components analysis for the items in the pilot study.

Control Variables

The following variables were gathered to use as controls for the analysis. Demographics, including age, gender, ethnicity, years in workforce, and current job tenure were collected. Additionally, since the cover story focuses on working in a restaurant, participants’ prior restaurant experience was also collected. To keep in line with the cover story, training satisfaction was collected using 12 items from Holgado-Tello, Moscoso, Garcia, and Chaves (2006). Additionally, personality characteristics were also recorded, including the Big Five (short-form, 10 items from Gosling, Rentfrow, & Swann, 2003), core self-evaluations (12 items from Judge, Erez, Bono, & Thoresen, 2003), and the dark triad (12 items from Jonason & Webster, 2010). These personality measures are included as research suggests that personality may influence individuals’ attitudes and behaviors in a bullying situation (Samnani & Singh, 2012; Tani, Greenman, Schneider, & Fregoso, 2003). Since some scholars have identified that personal identification may overlap with coworker respect and trust (Ashforth et al., 2016; Humberd & Rouse, 2016; Shamir, 1995), both of these were collected. Coworker respect consisted of 3 items from Rosen, Stiehl, Mittal, and Leana (2011) and coworker trust consisted
of 12 items from Cook and Wall (1980). Moreover, since the study evaluates witnessing a bullying situation, participants’ prior experience with bullying was also captured, measured using 6 items from Jennifer et al. (2003). Similarly, participants’ fear of being bullied was captured, as this fear may increase their anxiety (Slee, 1994; Swearer, Song, Cary, Eagle, & Mickelson, 2001), and was measured using 4 items from Boulton (2013). In addition, since state anxiety is only one side of an individual’s anxiety level, trait anxiety was also recorded using 20 items from Spielberger (1983). Finally, the impact of witnessing the bullying event was also recorded using 15 items from Horowitz, Wilner, and Alvarez (1979).

Improvements for Main Study

Upon completion of the pilot study, I identified four issues to address before moving forward with the main study. First, although mentioned in the cover story, participants will be reminded that the two individuals in the videos are coworkers, and not manager – subordinate. Second, the Test Anxiety scale (Sarason, 1977) will be included to control for potential confounding effects as test anxiety may influence state anxiety. Third, the manipulation check items will be refined to include an option to indicate that bullying was not present. Finally, for the full study, some of the scales will be shifted to the post-lab questionnaire to ensure that the participants do not remain in the lab too long or guess what the purpose of the study is.
Table 1

Principal Component Analysis for Pilot Study

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core4</td>
<td>.002</td>
<td>-.072</td>
<td>-.026</td>
<td>.023</td>
<td><strong>.873</strong></td>
<td>.062</td>
<td>-.053</td>
</tr>
<tr>
<td>Core6</td>
<td>-.099</td>
<td>-.047</td>
<td>-.182</td>
<td>.083</td>
<td><strong>.857</strong></td>
<td>-.006</td>
<td>.048</td>
</tr>
<tr>
<td>Core7</td>
<td>.015</td>
<td>.048</td>
<td>-.102</td>
<td>.126</td>
<td><strong>.861</strong></td>
<td>-.136</td>
<td>-.025</td>
</tr>
<tr>
<td>Core8</td>
<td>-.069</td>
<td>-.016</td>
<td>-.230</td>
<td>.036</td>
<td><strong>.872</strong></td>
<td>-.117</td>
<td>-.008</td>
</tr>
<tr>
<td>Emp5</td>
<td>.247</td>
<td>-.205</td>
<td>.197</td>
<td>-.293</td>
<td>-.007</td>
<td><strong>.786</strong></td>
<td>.148</td>
</tr>
<tr>
<td>Emp6</td>
<td>.380</td>
<td>.014</td>
<td>.161</td>
<td>-.206</td>
<td>-.095</td>
<td><strong>.768</strong></td>
<td>-.089</td>
</tr>
<tr>
<td>Emp7</td>
<td>.356</td>
<td>-.155</td>
<td>.047</td>
<td>-.070</td>
<td>-.110</td>
<td><strong>.653</strong></td>
<td>.004</td>
</tr>
<tr>
<td>SOC6</td>
<td>-.057</td>
<td>-.181</td>
<td>.230</td>
<td>.093</td>
<td>-.052</td>
<td>-.215</td>
<td><strong>.772</strong></td>
</tr>
<tr>
<td>SOC10</td>
<td>.091</td>
<td>-.024</td>
<td>-.137</td>
<td>-.109</td>
<td>-.039</td>
<td>.145</td>
<td><strong>.839</strong></td>
</tr>
<tr>
<td>SOC12</td>
<td>.000</td>
<td>.079</td>
<td>-.263</td>
<td>-.155</td>
<td>.035</td>
<td>.055</td>
<td><strong>.791</strong></td>
</tr>
<tr>
<td>CWIJ2</td>
<td>-.219</td>
<td>-.057</td>
<td>-.236</td>
<td><strong>.879</strong></td>
<td>.055</td>
<td>-.154</td>
<td>.080</td>
</tr>
<tr>
<td>CWIJ3</td>
<td>-.169</td>
<td>-.023</td>
<td>-.236</td>
<td><strong>.890</strong></td>
<td>.021</td>
<td>-.182</td>
<td>-.004</td>
</tr>
<tr>
<td>CWIJ4</td>
<td>-.131</td>
<td>-.101</td>
<td>-.202</td>
<td><strong>.898</strong></td>
<td>.088</td>
<td>-.123</td>
<td>-.158</td>
</tr>
<tr>
<td>CWIJ5</td>
<td>-.161</td>
<td>-.250</td>
<td>-.322</td>
<td><strong>.788</strong></td>
<td>.010</td>
<td>.042</td>
<td>-.123</td>
</tr>
<tr>
<td>CWIJ6</td>
<td>-.190</td>
<td>-.197</td>
<td>-.243</td>
<td><strong>.748</strong></td>
<td>.201</td>
<td>-.129</td>
<td>-.044</td>
</tr>
<tr>
<td>PIBully8</td>
<td><strong>.867</strong></td>
<td>.117</td>
<td>.108</td>
<td>-.250</td>
<td>-.107</td>
<td>.027</td>
<td>-.079</td>
</tr>
<tr>
<td>PIBully9</td>
<td><strong>.886</strong></td>
<td>.064</td>
<td>.089</td>
<td>-.140</td>
<td>-.076</td>
<td>.126</td>
<td>-.068</td>
</tr>
<tr>
<td>PIBully10</td>
<td><strong>.867</strong></td>
<td>-.092</td>
<td>.089</td>
<td>-.166</td>
<td>-.151</td>
<td>.028</td>
<td>-.162</td>
</tr>
<tr>
<td>PIBully11</td>
<td><strong>.832</strong></td>
<td>.025</td>
<td>.217</td>
<td>-.153</td>
<td>-.116</td>
<td>.143</td>
<td>-.052</td>
</tr>
<tr>
<td>PIBully12</td>
<td><strong>.785</strong></td>
<td>.042</td>
<td>.081</td>
<td>-.122</td>
<td>-.160</td>
<td>.225</td>
<td>-.080</td>
</tr>
<tr>
<td>PIBully13</td>
<td><strong>.813</strong></td>
<td>-.067</td>
<td>.025</td>
<td>-.037</td>
<td>.036</td>
<td>.239</td>
<td>-.035</td>
</tr>
<tr>
<td>PIBully16</td>
<td><strong>.855</strong></td>
<td>-.081</td>
<td>-.074</td>
<td>.053</td>
<td>.188</td>
<td>.068</td>
<td>-.025</td>
</tr>
<tr>
<td>PIBully20</td>
<td><strong>.792</strong></td>
<td>-.090</td>
<td>-.061</td>
<td>.113</td>
<td>.086</td>
<td>.076</td>
<td>-.066</td>
</tr>
<tr>
<td>PIBully23</td>
<td><strong>.910</strong></td>
<td>-.015</td>
<td>.150</td>
<td>-.079</td>
<td>.004</td>
<td>.101</td>
<td>-.003</td>
</tr>
<tr>
<td>PIBully24</td>
<td><strong>.884</strong></td>
<td>.013</td>
<td>.142</td>
<td>-.210</td>
<td>-.037</td>
<td>-.001</td>
<td>.103</td>
</tr>
<tr>
<td>PIBully25</td>
<td><strong>.887</strong></td>
<td>-.001</td>
<td>.269</td>
<td>-.135</td>
<td>.018</td>
<td>-.028</td>
<td>.044</td>
</tr>
<tr>
<td>PIVict8</td>
<td>-.010</td>
<td><strong>.785</strong></td>
<td>-.178</td>
<td>.003</td>
<td>-.065</td>
<td>-.325</td>
<td>-.062</td>
</tr>
<tr>
<td>PIVict9</td>
<td>-.051</td>
<td><strong>.852</strong></td>
<td>-.247</td>
<td>-.105</td>
<td>-.113</td>
<td>-.104</td>
<td>.010</td>
</tr>
<tr>
<td>PIVict10</td>
<td>-.010</td>
<td><strong>.731</strong></td>
<td>.271</td>
<td>-.053</td>
<td>.212</td>
<td>.021</td>
<td>.295</td>
</tr>
<tr>
<td>PIVict11</td>
<td>.044</td>
<td><strong>.830</strong></td>
<td>-.021</td>
<td>-.229</td>
<td>-.114</td>
<td>-.022</td>
<td>-.077</td>
</tr>
<tr>
<td>PIVict12</td>
<td>.161</td>
<td><strong>.807</strong></td>
<td>.236</td>
<td>-.098</td>
<td>.025</td>
<td>-.200</td>
<td>.049</td>
</tr>
<tr>
<td>PIVict13</td>
<td>.021</td>
<td><strong>.796</strong></td>
<td>-.134</td>
<td>-.052</td>
<td>.146</td>
<td>.060</td>
<td>-.109</td>
</tr>
<tr>
<td>PIVict16</td>
<td>.098</td>
<td><strong>.681</strong></td>
<td>.035</td>
<td>.188</td>
<td>.127</td>
<td>-.325</td>
<td>-.019</td>
</tr>
<tr>
<td>PIVict20</td>
<td>-.043</td>
<td><strong>.808</strong></td>
<td>-.108</td>
<td>.018</td>
<td>-.068</td>
<td>.131</td>
<td>.180</td>
</tr>
<tr>
<td>PIVict23</td>
<td>-.215</td>
<td><strong>.813</strong></td>
<td>.072</td>
<td>-.046</td>
<td>-.086</td>
<td>.118</td>
<td>-.165</td>
</tr>
<tr>
<td>PIVict24</td>
<td>-.118</td>
<td><strong>.795</strong></td>
<td>.234</td>
<td>-.130</td>
<td>-.083</td>
<td>-.049</td>
<td>-.093</td>
</tr>
<tr>
<td>PIVict25</td>
<td>.006</td>
<td><strong>.888</strong></td>
<td>-.024</td>
<td>-.098</td>
<td>-.040</td>
<td>.033</td>
<td>-.033</td>
</tr>
<tr>
<td>StAnx4</td>
<td>.161</td>
<td>-.193</td>
<td><strong>.670</strong></td>
<td>-.160</td>
<td>-.102</td>
<td>.344</td>
<td>-.098</td>
</tr>
<tr>
<td>StAnx5</td>
<td>.102</td>
<td>.064</td>
<td><strong>.826</strong></td>
<td>-.154</td>
<td>-.110</td>
<td>.234</td>
<td>.011</td>
</tr>
<tr>
<td>StAnx10</td>
<td>.220</td>
<td>-.019</td>
<td><strong>.820</strong></td>
<td>-.188</td>
<td>-.263</td>
<td>.060</td>
<td>.073</td>
</tr>
<tr>
<td>StAnx11</td>
<td>.055</td>
<td>-.044</td>
<td><strong>.778</strong></td>
<td>-.214</td>
<td>.004</td>
<td>-.055</td>
<td>-.201</td>
</tr>
<tr>
<td>StAnx15</td>
<td>.100</td>
<td>.065</td>
<td><strong>.884</strong></td>
<td>-.261</td>
<td>-.077</td>
<td>-.045</td>
<td>-.079</td>
</tr>
<tr>
<td>StAnx16</td>
<td>.226</td>
<td>.055</td>
<td><strong>.789</strong></td>
<td>-.270</td>
<td>-.246</td>
<td>.031</td>
<td>.060</td>
</tr>
</tbody>
</table>
Main Study

Sample and Procedure

Students in 5 upper-level undergraduate business classes with a total enrollment of 555 at a large southwestern university in the United States were given the opportunity to participate in the main study for extra credit offered by their instructors and a chance to win one $25 Amazon gift card. A total of 406 students completed the pre-lab questionnaire (first wave), 326 completed the in-lab portion (second wave), and 315 completed the post-lab questionnaire (third wave), for a total of 315 subjects who completed all three portions of the study (response rate 56.8%). The use of undergraduates in experiments is consistent with previous research (e.g., Cuddy, Wilmuth, Yap, and Carney, 2015; Wagner, Barnes, Lim, & Ferris, 2012). Participants’ ages ranged from 18 to 55 years, with the average age of 23.53 (SD = 5.87). The participants included 143 males (45.4%) and 172 females (54.6%), with ethnicities consisting of 17.5% African American, 12.1% Asian, 42.5% Caucasian, 20.3% Hispanic/Latino, 5.4% two or more races, and 2.2% other ethnicity. The students were classified as 9.8% sophomores, 50.2% juniors, and 40% seniors. Regarding the procedure and task, the same procedure and task as outlined above for the pilot study was used in the main study, with the improvements identified in the pilot study.

Measures

For the workplace bullying observed manipulation (independent variable), the same videos as used in the pilot study were used in the main study. For the moderating variable of bullying victim gender manipulation, the same manipulations as used in the pilot were also used in the main study. For the scales involved in the moderating and dependent variables, all of the items were collected as stated in the pilot study.
For the moderating and dependent variables, all items were first subjected to a principal components analysis using varimax rotation, which resulted in items being removed if they cross-loaded onto items belonging to a different scale. Empathy had three items retained after the principal components analysis, with a Cronbach’s alpha of 0.79, and a sample item of “I am often quite touched by things that I see happen.” Sense of coherence had a total of six items after the principal components analysis, with a Cronbach’s alpha of 0.78, and a sample item of “How often do you have feelings that you’re not sure you can keep under control?” Regarding the dependent variables, coworker interpersonal justice had eight items retained, with a Cronbach’s alpha of 0.94, and a sample item of “In general, my new coworkers will treat me with dignity.” For personal identification with the victim, a total of 12 items were retained for the analysis, with a Cronbach’s alpha of 0.95, and a sample item of “I highly identify with [Victim].” For personal identification with the bully, 12 items were retained, with a Cronbach’s alpha of 0.96, and a sample item of “I am proud to work alongside [Bully].” For state anxiety, 10 items were used after the principal components analysis, with a Cronbach’s alpha of 0.93, and a sample item of “I felt confused.” For core affect, seven items were retained, with a Cronbach’s alpha of 0.93, and a sample item of “Displeased – Pleased.” Finally, the control variables used in the pilot study were also used in the main study, with the addition of the Test Anxiety scale (Sarason, 1977) as part of the pre-lab questionnaire (see Table 2 to view the variables collected in each wave). Regression analysis was used to test the hypotheses.
### Table 2

Variable Collection Order for Main Study

<table>
<thead>
<tr>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Lab Online</td>
<td>In-Lab</td>
<td>Post-Lab Online</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td>Manipulations via Video</td>
<td>Coworker Respect</td>
</tr>
<tr>
<td><strong>Sense of Coherence</strong></td>
<td>Training Satisfaction</td>
<td>Coworker Trust</td>
</tr>
<tr>
<td><strong>Test Anxiety</strong></td>
<td><strong>Core Affect</strong></td>
<td>Trait Anxiety</td>
</tr>
<tr>
<td><strong>Big 5 Personality Traits</strong></td>
<td><strong>State Anxiety</strong></td>
<td>Impact of Event</td>
</tr>
<tr>
<td><strong>Core Self Evaluations</strong></td>
<td><strong>Personal Identification with the Bully</strong></td>
<td>Fear of Being Bullied</td>
</tr>
<tr>
<td><strong>Dark Triad Personality</strong></td>
<td><strong>Personal Identification with the Victim</strong></td>
<td>Intention to Help</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td><strong>Coworker Interpersonal Justice</strong></td>
<td>Prior Bullying Experience</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td><strong>Manipulation Check</strong></td>
<td>Debriefing Statement</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student Classification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Job Tenure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time in Workforce</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restaurant Experience</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Bold* indicates dependent variable, *Italics* indicates moderating variable
CHAPTER 5

DATA ANALYSIS AND RESULTS

As previously described, the overall purpose of this study is to understand better the effects of witnessing a bullying event. This chapter reports the data analysis and the results of hypotheses testing.

Pilot Study

As the purpose of the pilot was to refine the instrument and process, not access the accuracy of the model (Trochim & Donnelly, 2008), these findings are reported as a preliminary exercise in testing the hypotheses. Furthermore, none of the control variables were examined in order to focus on the direct and interaction effects.

The correlations and descriptive statistics are found in Table 3. Next, a between-participants multivariate analysis of variance (MANOVA) was conducted using all five dependent variables. The coworker bullying observation main effect was significant using Wilk’s criterion, $F(5, 36) = 5.38, p < 0.01, \eta^2 = 0.428$. Follow-up univariate analysis of variance (ANOVA) tests indicated that this effect was evident for three of the five dependent variables: coworker interpersonal justice, $F(1, 40) = 13.45, p < 0.01, \eta^2 = 0.252$, personal identification with the bully, $F(1, 40) = 12.85, p < 0.01, \eta^2 = 0.243$, and state anxiety, $F(1, 40) = 4.34, p < 0.05, \eta^2 = 0.137$. 
Table 3

Descriptive Statistics and Correlations for Pilot Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coworker Bullying Observed</td>
<td>0.50</td>
<td>0.5</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Participant &amp; Victim Gender Match</td>
<td>0.43</td>
<td>0.5</td>
<td>-0.19</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Coworker Interpersonal Justice</td>
<td>4.87</td>
<td>1.58</td>
<td>-0.50**</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Personal Identification with Victim</td>
<td>2.73</td>
<td>0.82</td>
<td>0.28</td>
<td>0.09</td>
<td>-0.19</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Personal Identification with Bully</td>
<td>3.16</td>
<td>1.11</td>
<td>0.49**</td>
<td>-0.07</td>
<td>-0.34*</td>
<td>-0.02</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. State Anxiety</td>
<td>2.23</td>
<td>0.88</td>
<td>0.37*</td>
<td>0.03</td>
<td>-0.53**</td>
<td>0.02</td>
<td>0.31*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Core Affect</td>
<td>6.27</td>
<td>1.73</td>
<td>-0.10</td>
<td>-0.22</td>
<td>0.21</td>
<td>-0.03</td>
<td>-0.10</td>
<td>-0.32*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Empathy</td>
<td>2.75</td>
<td>1.19</td>
<td>-0.15</td>
<td>-0.14</td>
<td>-0.39*</td>
<td>-0.18</td>
<td>0.49**</td>
<td>0.34*</td>
<td>-0.17</td>
<td>-</td>
</tr>
<tr>
<td>9. Sense of Coherence</td>
<td>4.83</td>
<td>1.27</td>
<td>0.28</td>
<td>0.30</td>
<td>-0.10</td>
<td>-0.04</td>
<td>0.03</td>
<td>-0.08</td>
<td>-0.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

N = 42, * p < 0.05, two tailed. ** p < 0.01, two tailed. Coworker Bullying Observed coded as 0 = "bullying not observed" and 1 = "bullying observed." Participant & Victim Gender is coded as a dummy variable, where 0 = "gender did not match" and 1 = "genders matched"
### Table 4

Regression Results for Pilot Study

<table>
<thead>
<tr>
<th></th>
<th>Coworker Interpersonal Justice</th>
<th>PI with Victim</th>
<th>PI with Bully</th>
<th>State Anxiety</th>
<th>Core Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Coworker Bullying Observed (CBO)</td>
<td>-0.50**</td>
<td>0.47**</td>
<td>-0.47**</td>
<td>0.28*</td>
<td>0.36**</td>
</tr>
<tr>
<td>Participant &amp; Victim Gender Matched</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.1</td>
<td>0.02</td>
<td>0.05</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.32**</td>
<td>-0.18</td>
<td>-0.21</td>
<td>0.19</td>
<td>0.43**</td>
</tr>
<tr>
<td>Sense of Coherence</td>
<td>0.04</td>
<td>-0.16</td>
<td>-0.10</td>
<td>0.01</td>
<td>-0.11</td>
</tr>
<tr>
<td>CBO X Gender Matched</td>
<td>0.02</td>
<td>0.18</td>
<td>-0.25</td>
<td>0.01</td>
<td>0.21</td>
</tr>
<tr>
<td>CBO X Empathy</td>
<td>-0.17</td>
<td>-0.44</td>
<td>0.33</td>
<td>0.32</td>
<td>-0.16</td>
</tr>
<tr>
<td>CBO X Sense of Coherence</td>
<td>0.25</td>
<td>-0.10</td>
<td>-0.11</td>
<td>-0.46*</td>
<td>0.55*</td>
</tr>
<tr>
<td>R Square</td>
<td>0.25**</td>
<td>0.36**</td>
<td>0.62**</td>
<td>0.08*</td>
<td>0.15</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.23**</td>
<td>0.29**</td>
<td>0.26**</td>
<td>0.06*</td>
<td>0.06</td>
</tr>
</tbody>
</table>

N = 42, *p < 0.10, **p < 0.05. Standard coefficients shown.
In order to test the hypotheses, regression analysis was used to evaluate the direct and interaction effects. Table 4 summarizes these findings. Based on these findings, Hypothesis 1 which states that coworker bullying observed is negatively related to coworker interpersonal justice is supported ($\beta = -0.47, p < 0.05$). Hypothesis 2a which stated a positive relationship between coworker bullying observed and personal identification with the victim was not supported ($\beta = 0.23, ns$), while Hypothesis 2b, which stated a negative relationship between coworker bullying observed and personal identification with the bully was supported ($\beta = 0.62, p < 0.05$). Hypothesis 3, which posited a positive relationship between coworker bullying observed and state anxiety was not supported, in that the finding was positive, but not significant at the $p < 0.05$ level ($\beta = 0.38, p < 0.10$). Hypothesis 4, which proposed a negative relationship between coworker bullying observed and core affect, was not supported ($\beta = -0.21, ns$). All the hypotheses using empathy as a moderator between coworker bullying observed and coworker interpersonal justice (H5; $\beta = -0.17, ns$), personal identification with the victim (H6a; $\beta = -0.44, ns$), personal identification with the bully (H6b; $\beta = 0.33, ns$), state anxiety (H7; $\beta = 0.32, ns$), and core affect (H8; $\beta = -0.16, ns$) were not supported. Likewise, the hypotheses using SOC as a moderator with coworker bullying observed and coworker interpersonal justice (H9; $\beta = 0.25, ns$), personal identification with the victim (H10a; $\beta = -0.10, ns$), and personal identification with the bully (H10b; $\beta = -0.11, ns$) were not significant. Hypothesis 11 which posited a moderating effect of SOC on the relationship between coworker bullying observed and state anxiety was significant at the $p < 0.10$ level ($\beta = 0.38$). Similarly, Hypothesis 12, which proposed a moderating effect of SOC on the relationship between coworker bullying observed and core affect was moderately significant ($\beta = 0.55, p < 0.10$), yet the model was not significant. Finally, the hypotheses that proposed a moderating gender effect between coworker bullying observed
and interpersonal outcomes (H13a, coworker interpersonal justice, β = 0.02, ns; H13b, personal identification with the victim, β = 0.18, ns) were not supported. Likewise, those hypotheses which proposed a moderating effect of gender between coworker bullying observed and intrapersonal outcomes (H13c, state anxiety, β = 0.01, ns; H13d, core affect, β = 0.21, ns) were also not supported.

The results of the pilot data suggests that the videos designed to depict bullying or neutral interactions were effective. Feedback from the participants regarding those who viewed the neutral interaction is as follows:

- “I think the video should be a little more professional and not have the other worker always come in to the video while filming.”
- “I would recommend showing the video while being able to follow along to make sure you will be able to remember the correct placements of the dinnerware.”
- “Take more time in discussing the reason behind what you’re doing and go over it some more. Might be difficult for some who don’t know what a fork salad is or wine glasses.”

For those who witnessed the bullying interaction, their feedback was distinctly different, as shown below:

- “Amanda would not be conducting the training if she was incompetent. Thomas should be reprimanded for his unprofessional behavior and interruption of the training video.”
- “This video should be addressed by the owner. The owner should then confront the bullying situation and find a solution.”
- “The individual conducing the training video was doing a great job until the coworker entered the room and started to bully him and talk down to him. After the bullying took
place, there was a noticeable difference in the trainer’s energy level, enthusiasm, and attitude towards the task at hand.”

- “If I was to be present while the girl got bullied, I would have assaulted Thomas! That’s for sure.”

While participants had the option to leave feedback, the above points indicate that those who viewed the neutral interaction primarily commented on the quality and specifics found in the video, while those who viewed the bullying interaction commented on the treatment of the bullied coworker.

Although only two of the hypothesized relationships were supported, many of them were in the hypothesized direction, only lacking statistical significance. The lack of significant findings may primarily be due to the small sample size (N = 42). Furthermore, the results of the pilot study suggest that the process of the experiment, from pre-lab questionnaire, in-lab session, and post-lab questionnaire, was effective in obtaining the desired effects. Additionally, given these comments as well as the results of the MANOVA analysis, experimental realism was achieved in the pilot study, providing an indication that experimental realism will also be established in the main study.
Main Study

Preliminary Analyses

Table 5 displays the descriptive statistics and correlations for the main study variables. The retained items from the principal components analysis were further subjected to a confirmatory factor analysis (CFA) using IBM SPSS AMOS to evaluate the items to ensure that each item loaded onto its own factor. The results of this analysis are displayed in Table 6. Overall, the results of the CFA indicate a relatively good fit ($X^2 = 1791.41$, $df = 1434$, $p < 0.01$, $RMR = 0.07$, $SRMR = 0.04$, $GFI = 0.85$, $AGFI = 0.82$, $CFI = 0.97$, $RMSEA = 0.03$; Hu & Bentler, 1999). Convergent and discriminant validities were assessed using composite reliability (CR), average variance extracted (AVE), maximum shared variance (MSV), and average shared variance (ASV). As displayed in Table 7, the thresholds for CR (greater than 0.70), MSV (MSV < AVE), and ASV (ASV < AVE) are all satisfied (Hair, Black, Babin, & Anderson, 2010), thus suggesting that reliability and discriminant validity are established. Regarding AVE, there are some concerns regarding convergent validity for sense of coherence due to the AVE being below 0.50. While some of the items could be removed in order to increase AVE, I chose to retain the items in order to not compromise the integrity of the scales. As noted by Malhotra and Dash (2011), AVE is more of a conservative measure of convergent validity than CR, in which researchers may conclude that convergent validity is established based on CRs alone. Additionally, the CRs are acceptable as they are all above 0.70 (Fornell & Larcker, 1981). Therefore, holistically, there is evidence for acceptable internal consistency, convergent, discriminant, and construct validity for the scale items used in this study.
Table 5

Descriptive Statistics and Correlations for Main Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coworker Bullying Observed</td>
<td>0.50</td>
<td>0.50</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Participant &amp; Victim Gender Match</td>
<td>0.54</td>
<td>0.50</td>
<td>0.05</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Coworker Interpersonal Justice</td>
<td>2.73</td>
<td>0.63</td>
<td>-0.27***</td>
<td>-0.14*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Personal Identification with Victim</td>
<td>2.61</td>
<td>0.70</td>
<td>0.11*</td>
<td>-0.03</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Personal Identification with Bully</td>
<td>1.41</td>
<td>0.58</td>
<td>-0.19***</td>
<td>-0.10</td>
<td>-0.07</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. State Anxiety</td>
<td>1.96</td>
<td>0.40</td>
<td>-0.10</td>
<td>-0.10</td>
<td>0.36**</td>
<td>0.05</td>
<td>0.28**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Core Affect</td>
<td>2.54</td>
<td>0.67</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.17**</td>
<td>0.33**</td>
<td>-0.13*</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Empathy</td>
<td>3.53</td>
<td>0.77</td>
<td>0.01</td>
<td>-0.09</td>
<td>0.13*</td>
<td>0.25**</td>
<td>0.04</td>
<td>0.08</td>
<td>0.26**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sense of Coherence</td>
<td>1.62</td>
<td>0.64</td>
<td>-0.06</td>
<td>-0.03</td>
<td>0.12*</td>
<td>-0.15**</td>
<td>-0.05</td>
<td>-0.44**</td>
<td>-0.01</td>
<td>-0.28**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Participant Gender</td>
<td>1.55</td>
<td>0.50</td>
<td>0.05</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.10</td>
<td>-0.02</td>
<td>0.19**</td>
<td>0.07</td>
<td>0.26**</td>
<td>-0.26**</td>
<td></td>
</tr>
<tr>
<td>11. Extraversion</td>
<td>4.06</td>
<td>1.48</td>
<td>-0.10</td>
<td>0.07</td>
<td>-0.07</td>
<td>0.00</td>
<td>0.06</td>
<td>-0.13*</td>
<td>0.03</td>
<td>-0.04</td>
<td>0.20**</td>
<td>-0.05</td>
</tr>
<tr>
<td>12. Emotional Stability</td>
<td>4.71</td>
<td>1.35</td>
<td>0.05</td>
<td>0.04</td>
<td>-0.05</td>
<td>-0.14*</td>
<td>-0.14*</td>
<td>-0.35**</td>
<td>0.03</td>
<td>-0.12*</td>
<td>0.57**</td>
<td>-0.21**</td>
</tr>
<tr>
<td>13. Openness to Experience</td>
<td>5.19</td>
<td>1.15</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.05</td>
<td>-0.08</td>
<td>0.03</td>
<td>-0.13*</td>
<td>0.03</td>
<td>0.17**</td>
<td>0.15**</td>
<td>-0.01</td>
</tr>
<tr>
<td>14. Dark Triad</td>
<td>2.46</td>
<td>0.73</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.05</td>
<td>-0.02</td>
<td>-0.19**</td>
<td>-0.16**</td>
<td>-0.15**</td>
<td>-0.12*</td>
</tr>
<tr>
<td>15. Coworker Respect</td>
<td>2.86</td>
<td>0.87</td>
<td>-0.66***</td>
<td>-0.07</td>
<td>0.30**</td>
<td>-0.02</td>
<td>0.16**</td>
<td>0.01</td>
<td>0.09</td>
<td>0.03</td>
<td>0.13*</td>
<td>-0.10</td>
</tr>
<tr>
<td>16. Coworker Trust</td>
<td>3.57</td>
<td>1.02</td>
<td>0.54**</td>
<td>0.09</td>
<td>-0.22**</td>
<td>-0.13*</td>
<td>-0.10</td>
<td>0.06</td>
<td>-0.14*</td>
<td>-0.09</td>
<td>-0.10</td>
<td>-0.01</td>
</tr>
<tr>
<td>17. Test Anxiety</td>
<td>3.39</td>
<td>0.61</td>
<td>0.03</td>
<td>0.02</td>
<td>0.03</td>
<td>0.24**</td>
<td>0.08</td>
<td>0.22**</td>
<td>0.05</td>
<td>0.12*</td>
<td>-0.29**</td>
<td>0.17**</td>
</tr>
<tr>
<td>18.Trait Anxiety</td>
<td>2.03</td>
<td>0.51</td>
<td>0.02</td>
<td>-0.11</td>
<td>-0.06</td>
<td>0.06</td>
<td>0.11</td>
<td>0.38**</td>
<td>-0.02</td>
<td>0.06</td>
<td>-0.60**</td>
<td>0.10</td>
</tr>
<tr>
<td>19. Fear of Being Bullied</td>
<td>3.17</td>
<td>0.66</td>
<td>0.07</td>
<td>-0.04</td>
<td>-0.04</td>
<td>0.15**</td>
<td>0.06</td>
<td>0.11*</td>
<td>0.13*</td>
<td>0.14*</td>
<td>-0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>20. Intention to Help</td>
<td>2.86</td>
<td>0.97</td>
<td>0.04</td>
<td>-0.12*</td>
<td>0.01</td>
<td>0.23**</td>
<td>0.07</td>
<td>0.02</td>
<td>0.07</td>
<td>0.16**</td>
<td>-0.02</td>
<td>0.16**</td>
</tr>
</tbody>
</table>

*(table continues)*
<table>
<thead>
<tr>
<th>Variable</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coworker Bullying Observed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Participant &amp; Victim Gender Match</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Coworker Interpersonal Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Personal Identification with Victim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Personal Identification with Bully</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. State Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Core Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sense of Coherence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Participant Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Extraversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Emotional Stability</td>
<td>0.22**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Openness to Experience</td>
<td>0.31**</td>
<td>0.25**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Dark Triad</td>
<td>0.11*</td>
<td>-0.04</td>
<td>-0.08</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Coworker Respect</td>
<td>0.07</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.08</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Coworker Trust</td>
<td>-0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.09</td>
<td>-0.70**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Test Anxiety</td>
<td>-0.03</td>
<td>-0.35**</td>
<td>-0.08</td>
<td>-0.04</td>
<td>0.02</td>
<td>0.01</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Trait Anxiety</td>
<td>-0.26**</td>
<td>-0.52**</td>
<td>-0.25**</td>
<td>0.05</td>
<td>-0.09</td>
<td>0.06</td>
<td>0.34**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>19. Fear of Being Bullied</td>
<td>-0.16**</td>
<td>-0.10</td>
<td>-0.11*</td>
<td>-0.02</td>
<td>-0.09</td>
<td>0.06</td>
<td>0.17**</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>20. Intention to Help</td>
<td>0.12*</td>
<td>-0.09</td>
<td>0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.02</td>
<td>0.26**</td>
<td>0.01</td>
<td>0.05</td>
</tr>
</tbody>
</table>

N = 315, * p < 0.05, two tailed. ** p < 0.01, two tailed. Coworker Bullying Observed coded as 0 = "bullying not observed" and 1 = "bullying observed." Participant & Victim Gender is coded as a dummy variable, where 0 = "gender did not match" and 1 = "genders matched." Participant gender is coded as 1 = male, 2 = female.
### Table 6

CFA Measurement Model: Structural Equation Modeling (AMOS) Estimates

<table>
<thead>
<tr>
<th>Coworker Interpersonal Justice</th>
<th>Std. λ Estimate</th>
<th>T-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall, my new coworkers will treat me in a polite manner.</td>
<td>0.64</td>
<td>6.66</td>
</tr>
<tr>
<td>2. In general, my new coworkers will treat me with dignity.</td>
<td>0.71</td>
<td>6.81</td>
</tr>
<tr>
<td>3. In general, my new coworkers will treat me with respect.</td>
<td>0.72</td>
<td>7.02</td>
</tr>
<tr>
<td>4. Overall, my new coworkers will refrain from improper remarks or comments.</td>
<td>0.60</td>
<td>7.38</td>
</tr>
<tr>
<td>5. In general, my new coworkers will treat me in a professional manner.</td>
<td>0.60</td>
<td>7.10</td>
</tr>
<tr>
<td>6. My new coworkers help each other out.</td>
<td>0.54</td>
<td>6.72</td>
</tr>
<tr>
<td>7. My new coworkers put each other down. (R)</td>
<td>0.37</td>
<td>λ set to 1</td>
</tr>
<tr>
<td>8. My new coworkers treat each other with respect.</td>
<td>0.53</td>
<td>6.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Identification with the Victim</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am proud to tell others that [victim] works with me.</td>
<td>0.68</td>
<td>λ set to 1</td>
</tr>
<tr>
<td>2. I highly identify with [victim].</td>
<td>0.69</td>
<td>12.59</td>
</tr>
<tr>
<td>3. [Victim] is a role model for me.</td>
<td>0.76</td>
<td>12.07</td>
</tr>
<tr>
<td>4. The values of [victim] are similar to my values.</td>
<td>0.79</td>
<td>12.53</td>
</tr>
<tr>
<td>5. I consider [victim] as a symbol of success and achievement.</td>
<td>0.77</td>
<td>12.65</td>
</tr>
<tr>
<td>6. I share the same goals and values as [victim].</td>
<td>0.83</td>
<td>13.22</td>
</tr>
<tr>
<td>7. I have the same beliefs about my job as [victim] does.</td>
<td>0.78</td>
<td>12.64</td>
</tr>
<tr>
<td>8. I want to accomplish the same work goals as [victim].</td>
<td>0.75</td>
<td>12.32</td>
</tr>
<tr>
<td>9. I have complete faith in [victim].</td>
<td>0.72</td>
<td>11.87</td>
</tr>
<tr>
<td>10. I am proud to be working alongside [victim].</td>
<td>0.78</td>
<td>14.48</td>
</tr>
<tr>
<td>11. I trust [victim]'s judgment and decisions completely.</td>
<td>0.77</td>
<td>12.45</td>
</tr>
<tr>
<td>12. [Victim] represents values that are important to me.</td>
<td>0.84</td>
<td>13.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Identification with the Bully</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am proud to tell others that [bully] works with me.</td>
<td>0.49</td>
<td>λ set to 1</td>
</tr>
<tr>
<td>2. I highly identify with [bully].</td>
<td>0.64</td>
<td>10.24</td>
</tr>
<tr>
<td>3. [Bully] is a role model for me.</td>
<td>0.68</td>
<td>9.54</td>
</tr>
<tr>
<td>4. The values of [bully] are similar to my values.</td>
<td>0.67</td>
<td>9.98</td>
</tr>
<tr>
<td>5. I consider [bully] as a symbol of success and achievement.</td>
<td>0.62</td>
<td>9.36</td>
</tr>
<tr>
<td>6. I share the same goals and values as [bully].</td>
<td>0.73</td>
<td>9.24</td>
</tr>
<tr>
<td>7. I have the same beliefs about my job as [bully] does.</td>
<td>0.68</td>
<td>9.65</td>
</tr>
<tr>
<td>8. I want to accomplish the same work goals as [bully].</td>
<td>0.63</td>
<td>8.45</td>
</tr>
<tr>
<td>9. I have complete faith in [bully].</td>
<td>0.54</td>
<td>9.05</td>
</tr>
<tr>
<td>10. I am proud to be working alongside [bully].</td>
<td>0.60</td>
<td>11.43</td>
</tr>
<tr>
<td>11. I trust [bully]'s judgment and decisions completely.</td>
<td>0.62</td>
<td>9.87</td>
</tr>
<tr>
<td>12. [Bully] represents values that are important to me.</td>
<td>0.67</td>
<td>10.31</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 6 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Std. λ Estimate</th>
<th>T-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Anxiety</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I felt calm. (R)</td>
<td>0.54</td>
<td>7.78</td>
</tr>
<tr>
<td>2. I felt secure. (R)</td>
<td>0.56</td>
<td>7.89</td>
</tr>
<tr>
<td>3. I felt at ease. (R)</td>
<td>0.60</td>
<td>8.27</td>
</tr>
<tr>
<td>4. I felt satisfied. (R)</td>
<td>0.48 ( \lambda ) set to 1</td>
<td></td>
</tr>
<tr>
<td>5. I felt comfortable. (R)</td>
<td>0.56</td>
<td>9.06</td>
</tr>
<tr>
<td>6. I felt self-confident. (R)</td>
<td>0.57</td>
<td>8.20</td>
</tr>
<tr>
<td>7. I felt relaxed. (R)</td>
<td>0.62</td>
<td>8.78</td>
</tr>
<tr>
<td>8. I felt content. (R)</td>
<td>0.58</td>
<td>8.36</td>
</tr>
<tr>
<td>9. I felt confused.</td>
<td>0.54</td>
<td>7.78</td>
</tr>
<tr>
<td>10. I felt steady. (R)</td>
<td>0.58</td>
<td>9.13</td>
</tr>
<tr>
<td><strong>Core Affect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Displeased - Pleased</td>
<td>0.34 ( \lambda ) set to 1</td>
<td></td>
</tr>
<tr>
<td>2. Sleepy - Awake</td>
<td>0.73</td>
<td>5.89</td>
</tr>
<tr>
<td>3. Dull - Peppy</td>
<td>0.65</td>
<td>6.56</td>
</tr>
<tr>
<td>4. Passive - Active</td>
<td>0.67</td>
<td>6.42</td>
</tr>
<tr>
<td>5. Bored - Interested</td>
<td>0.75</td>
<td>6.37</td>
</tr>
<tr>
<td>6. Indifferent - Engaged</td>
<td>0.74</td>
<td>6.18</td>
</tr>
<tr>
<td>7. Pessimistic - Optimistic</td>
<td>0.49</td>
<td>6.86</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I often have tender, concerned feelings for people less fortunate than me.</td>
<td>0.71</td>
<td>10.39</td>
</tr>
<tr>
<td>2. I would describe myself as a pretty soft-hearted person.</td>
<td>0.84</td>
<td>10.60</td>
</tr>
<tr>
<td>3. I am often quite touched by things that I see happen.</td>
<td>0.69 ( \lambda ) set to 1</td>
<td></td>
</tr>
<tr>
<td><strong>Sense of Coherence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Do you have very mixed-up feelings and ideas?</td>
<td>0.74</td>
<td>7.21</td>
</tr>
<tr>
<td>2. Does it happen that you have feelings inside you would rather not feel?</td>
<td>0.79</td>
<td>8.21</td>
</tr>
<tr>
<td>3. Many people - even those with a strong character - sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past? (R)</td>
<td>0.78 ( \lambda ) set to 1</td>
<td></td>
</tr>
<tr>
<td>4. When something happened, have you generally found that: You overestimated or underestimated its importance - You saw things in the right proportion.</td>
<td>0.57</td>
<td>6.35</td>
</tr>
<tr>
<td>5. How often do you have the feeling that there's little meaning in the things you do in your daily life?</td>
<td>0.48</td>
<td>5.93</td>
</tr>
<tr>
<td>6. How often do you have feelings that you're not sure you can keep under control?</td>
<td>0.61</td>
<td>6.73</td>
</tr>
</tbody>
</table>

Global fit indices: \( X^2 = 1791.41, df = 1434, p < 0.01, \) RMR = 0.07, SRMR = 0.04, CFI = 0.97, GFI = 0.85, AGFI = 0.82, RMSEA = 0.03. \( R \) = reverse-coded.
### Table 7

Assessment of Construct Validity for Main Study Variables

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
<th>SOC</th>
<th>PI Bully</th>
<th>PI Victim</th>
<th>State Anxiety</th>
<th>CWIJ</th>
<th>Core Affect</th>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Coherence</td>
<td>0.79</td>
<td>0.39</td>
<td>0.04</td>
<td>0.01</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI with Bully</td>
<td>0.96</td>
<td>0.67</td>
<td>0.23</td>
<td>0.09</td>
<td>-0.09</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI with Victim</td>
<td>0.95</td>
<td>0.59</td>
<td>0.10</td>
<td>0.03</td>
<td>-0.15</td>
<td>0.12</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Anxiety</td>
<td>0.93</td>
<td>0.57</td>
<td>0.27</td>
<td>0.10</td>
<td>-0.19</td>
<td>-0.37</td>
<td>-0.08</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coworker Interpersonal Justice</td>
<td>0.94</td>
<td>0.65</td>
<td>0.23</td>
<td>0.10</td>
<td>0.02</td>
<td>0.48</td>
<td>0.14</td>
<td>-0.38</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Affect</td>
<td>0.93</td>
<td>0.63</td>
<td>0.27</td>
<td>0.12</td>
<td>-0.07</td>
<td>0.41</td>
<td>0.32</td>
<td>-0.52</td>
<td>0.41</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>0.79</td>
<td>0.56</td>
<td>0.06</td>
<td>0.03</td>
<td>-0.25</td>
<td>0.09</td>
<td>0.24</td>
<td>-0.02</td>
<td>0.15</td>
<td>0.23</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Note: The numbers in diagonal cells are $\sqrt{AVE}$; PI = personal identification, CR = composite reliability, AVE = average variance extracted, MSV = maximum shared variance, ASV = average shared variance.
Although the survey items were collected over a period of time, I also tested for common method bias. In order to do so, I compared the unconstrained common method factor model to the fully (zero) constrained common method factor model (Podsakoff, MacKenzie, & Podsakoff, 2012). The test resulted in the $X^2$ being significantly different (difference in $X^2 = 218.52$, $df = 58$, $p < 0.01$). Thus, there is significant shared variance in the model, which resulted in my retaining the common latent factor for the remaining analyses.

A between-participants multivariate analysis of variance (MANOVA) was conducted using all five dependent variables. The coworker bullying observation main effect with significant using Wilk’s criterion, $F(5, 309) = 11.30$, $p < 0.01$, partial $\eta^2 = 0.155$. Follow-up univariate analysis of variance (ANOVA) tests indicated that this effect was evident for four of the five dependent variables: coworker interpersonal justice, $F(1, 313) = 24.06$, $p < 0.01$, partial $\eta^2 = 0.07$; personal identification with the victim, $F(1, 313) = 3.97$, $p < 0.05$, partial $\eta^2 = 0.013$; personal identification with the bully, $F(1, 313) = 12.27$, $p < 0.01$, partial $\eta^2 = 0.038$; and state anxiety, $F(1, 313) = 3.21$, $p = 0.074$, partial $\eta^2 = 0.010$. This effect was not significant for core affect, $F(1, 313) = 0.14$, $p = 0.71$, partial $\eta^2 = 0$.

Manipulation Check

In order to determine if the two manipulations (coworker bullying observation and victim gender) had the intended effect, manipulation check questions were asked after all other in-lab questions had been answered. These items were derived from the Experience of Negative Behaviors at Work scale (Rayner et al., 2002), consisting of 24 items and ranked on a scale of 1-5, with 1 = strongly disagree and 5 = strongly agree (with the prompt asking “In these videos I saw…”), as well as applicable items from the School Bullying Bystander Survey (Hazler et al., 1991), which consisted of 4 items and asked about the physical characteristics of the bully and
victim (i.e., gender and ethnicity), or whether no bullying was observed. From the Experience of Negative Behaviors at Work scale (which relates to the coworker bullying observation manipulation), 8 items reflected the negative behaviors associated with coworker bullying. Sample items include “Someone being humiliated or ridiculed in connection with their work,” “Someone insulting or making offensive remarks about someone else,” and “Persistent criticism of work and effort.” An independent samples t-test was conducted to determine if those participants who viewed the coworker bullying videos scored significantly different than those who did not view the coworker bullying incident. The results indicated that the mean differences were significant for all eight of the items ($p < 0.01$), thus indicating that participants were influenced by the coworker bullying manipulation.

For the victim gender manipulation, one question from the School Bullying Bystander Survey was of primary interest to assess whether participants who viewed either the coworker bullying video or the neutral coworker interaction video were able to ascertain the bullying victim’s gender. This question asked participants to identify the victim’s gender, with options for male, female, or no bullying observed. The results of the independent samples t-test indicated that the mean differences were statistically significant ($p < 0.01$), indicating that those participants who viewed the bullying interaction were able to distinguish the bullying victim’s gender. Based on the results of the manipulation check for both the coworker bullying and victim gender manipulations, I conclude that experimental realism was achieved for this study.
Table 8

Regression Results for Main Study

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Coworker Interpersonal Justice</th>
<th>PI with Victim</th>
<th>PI with Bully</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Gendera</td>
<td>0.01</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.11*</td>
<td>-0.12*</td>
<td>-0.10*</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-0.06</td>
<td>-0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.07</td>
</tr>
<tr>
<td>Dark Triad</td>
<td>0.01</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Coworker Respect</td>
<td>0.27***</td>
<td>0.19**</td>
<td>0.18**</td>
</tr>
<tr>
<td>Coworker Trust</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>0.05</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>Trait Anxiety</td>
<td>-0.11</td>
<td>-0.11*</td>
<td>-0.02</td>
</tr>
<tr>
<td>Fear of Being Bullied</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.07</td>
</tr>
<tr>
<td>Intention to Help</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

| Conditions        | Coworker Bullying Observed (CBO)b | -0.14** | -0.22** | 0.21** | 0.25** | -0.15** | -0.06 |

| Moderators        | Coworker Bullying Observed (CBO)b | 0.01 | -0.16* | -0.13 |
|                   | Sense of Coherence               | -0.16* | -0.04 | -0.13 |
|                   | Participant & Victim Gender Matchedc | -0.18** | 0.05 | 0.02 |
|                   | CBO X Empathy                    | -0.26*** | -0.06 | 0.15* |
|                   | CBO X Sense of Coherence         | -0.07 | 0.17*** | 0.10 |
|                   | CBO X Gender Matched             | 0.15 | 0.15 | -0.18* |

| R Square          | 0.11*** | 0.12*** | 0.21*** | 0.15*** | 0.17*** | 0.23*** | 0.07** | 0.09** | 0.11** |
| Adjusted R Square | 0.08*** | 0.08*** | 0.16*** | 0.12*** | 0.14*** | 0.18*** | 0.04** | 0.05** | 0.06** |

N = 315, *p < 0.10, **p < 0.05, ***p < 0.01. Standard coefficients shown.

aGender is coded as 1 = male and 2 = female.
bCoworker Bullying Observed coded as 0 = "bullying not observed" and 1 = "bullying observed."
cParticipant & Victim Gender Matched is coded as a dummy variable, where 0 = "gender did not match" and 1 = "genders matched."

(table continues)
Table 8 (continued)

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>State Anxiety</th>
<th>Core Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Gender&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.13**</td>
<td>0.13**</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-0.17**</td>
<td>-0.15**</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>Dark Triad</td>
<td>-0.03</td>
<td>-0.04</td>
</tr>
<tr>
<td>Coworker Respect</td>
<td>0.15**</td>
<td>0.06</td>
</tr>
<tr>
<td>Coworker Trust</td>
<td>0.15**</td>
<td>0.18**</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>Trait Anxiety</td>
<td>0.27***</td>
<td>0.26***</td>
</tr>
<tr>
<td>Fear of Being Bullied</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Intention to Help</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coworker Bullying Observed (CBO)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.17**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moderators</th>
<th>State Anxiety</th>
<th>Core Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>0.09</td>
<td>-0.34***</td>
</tr>
<tr>
<td>Sense of Coherence</td>
<td>0.45***</td>
<td>-0.10</td>
</tr>
<tr>
<td>Participant &amp; Victim Gender Matched&lt;sup&gt;d&lt;/sup&gt;</td>
<td>-0.23***</td>
<td>0.03</td>
</tr>
<tr>
<td>CBO X Empathy</td>
<td>-0.01</td>
<td>0.14</td>
</tr>
<tr>
<td>CBO X Sense of Coherence</td>
<td>-0.14*</td>
<td>0.13</td>
</tr>
<tr>
<td>CBO X Gender Matched</td>
<td>0.24**</td>
<td>0.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R Square</th>
<th>Core Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.21***</td>
<td>0.08**</td>
</tr>
<tr>
<td>0.23***</td>
<td>0.09**</td>
</tr>
<tr>
<td>0.31***</td>
<td>0.14***</td>
</tr>
<tr>
<td>0.08**</td>
<td>0.09**</td>
</tr>
<tr>
<td>0.14***</td>
<td>0.09***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjusted R Square</th>
<th>Core Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.18***</td>
<td>0.04**</td>
</tr>
<tr>
<td>0.20***</td>
<td>0.05**</td>
</tr>
<tr>
<td>0.26***</td>
<td>0.09***</td>
</tr>
</tbody>
</table>

N = 315, *p < 0.10, **p < 0.05, ***p < 0.01. Standard coefficients shown.
<sup>a</sup>Gender is coded as 1 = male and 2 = female.
<sup>b</sup>Coworker Bullying Observed coded as 0 = "bullying not observed" and 1 = "bullying observed."
<sup>c</sup>Participant & Victim Gender Matched is coded as a dummy variable, where 0 = "gender did not match" and 1 = "genders matched."
Hypotheses Testing

Before testing the hypotheses using regression analysis, the control variables were first examined to determine their significance on each of the dependent variables. Following Spector and Brannick (2011), I conducted preliminary regression analyses in which I regressed all control variables to each dependent variable. Thus, only those control variables which were significantly related to the dependent variables were retained. For the 2 x 2 experimental design, hierarchical regression analysis was used to evaluate the direct and interaction effects via IBM SPSS Statistics 22. Additionally, the main variables using scales were centered to address the potential of multicollinearity, resulting in variance inflation factors (VIFs) lower than 5 (Hair et al., 2010). Table 8 summarizes these findings, with Model 1 including the control variables, Model 2 containing the control variables and the coworker bullying observation variable, and Model 3 displaying all of the direct and interaction effects.

Direct Effects

Hypothesis 1 which states that coworker bullying observed is negatively related to coworker interpersonal justice is supported ($\beta = -0.14, p < 0.05$). Hypothesis 2a which stated a negative relationship between coworker bullying observed and personal identification with the victim was supported ($\beta = 0.21, p < 0.05$). Similarly, Hypothesis 2b which suggested a negative relationship between coworker bullying observed and personal identification with the bully was supported ($\beta = -0.15, p < 0.05$). Hypothesis 3 which suggested a positive relationship between coworker bullying observed and state anxiety was not supported ($\beta = -0.17, p < 0.05$), in that it was statistically significant, but in the opposite direction from hypothesized. Hypothesis 4 which suggested a negative relationship between coworker bullying observed and core affect was significant in the regression analysis ($\beta = 0.15, p < 0.05$), yet based on the MANOVA results,
which suggested a statistically insignificant relationship for the coworker bullying observed main effect, I conclude that Hypothesis 4 is not supported.

*Figure 5.* Interaction between coworker interpersonal justice, coworker bullying observed, and empathy

*Figure 6.* Interaction between personal identification with the bully, coworker bullying observed, and empathy
Moderation Effect of Empathy

Hypothesis 5 suggested that those with high empathy would strengthen the negative relationship between coworker bullying observed and coworker interpersonal justice. The regression analysis demonstrates that this moderation effect is significant ($\beta = -0.26, p < 0.05$). As shown in Figure 5, those participants who observed coworker bullying and had high empathy had less coworker interpersonal justice than those participants with low empathy. Therefore, high levels of empathy strengthens the negative relationship between coworker bullying observed and coworker interpersonal justice, thus supporting Hypothesis 5. Hypothesis 6a, which suggested that those with high empathy would strengthen the positive effect of the relationship between coworker bullying observed and personal identification with the victim, was not supported ($\beta = -0.06, ns$). Hypothesis 6b which posited that those with high empathy would weaken the negative effect of the relationship between coworker bullying observed and personal identification with the victim was significant ($\beta = 0.15, p < 0.10$). Figure 6 suggests that those participants with high empathy who also witnessed a coworker being bullied had slightly more personal identification with the bully than those who either had low empathy or did not witness the bullying event. That is, individuals with higher levels of empathy who witness a coworker bullying event tend to personally identify with the bully more than those who have low empathy or who did not witness the bullying incident; thus, Hypothesis 6b is not supported, as the results indicate that high levels of empathy strengthens the relationship between coworker bullying observed and personal identification with the bully. The remaining hypotheses that used empathy as a moderator with coworker bullying observed and state anxiety (H7; $\beta = 0.01, ns$), and core affect (H8; $\beta = 0.14, ns$) were not significant.
Figure 7. Interaction between personal identification with the victim, coworker bullying observed, and sense of coherence.

Figure 8. Interaction between state anxiety, coworker bullying observed, and sense of coherence.
Moderation Effect of Sense of Coherence

Hypothesis 9 which suggested a moderating effect of SOC on the relationship between coworker bullying observed and coworker interpersonal justice was not significant ($\beta = -0.07, ns$). Hypothesis 10a which posited a moderating effect of SOC on the relationship between coworker bullying observed and personal identification with the victim was significant ($\beta = 0.17, p < 0.05$). Figure 7 demonstrates that those participants who had high SOC and witnessed the coworker bullying incident were more likely to personally identify with the victim. Hence, those with higher levels of SOC are more likely to personally identify with the bullying victim after witnessing a bullying incident, resulting in support for Hypothesis 10a. Hypothesis 11, which posited a moderating effect of SOC on the relationship between coworker bullying observed and state anxiety was significant at the $p < 0.10$ level ($\beta = -0.14$). As displayed in Figure 8, those individuals with high SOC who also witnessed the bullying incident had higher state anxiety than those with low SOC. Yet, state anxiety was lower overall for those who witnessed the coworker bullying event than for those who did not witness the coworker bullying event. Based on these findings, Hypothesis 11 is not supported. Finally, the two remaining hypotheses using SOC as a moderator with coworker bullying observed and personal identification with the bully (H10b; $\beta = 0.10, ns$) and core affect (H12; $\beta = 0.13, ns$) were not significant.
Figure 9. Interaction between state anxiety, coworker bullying observed, and participant-victim gender match

Figure 10. Interaction between personal identification with the bully, coworker bullying observed, and participant-victim gender match
Moderation Effect of Victim’s Gender

Hypothesis 13a, which proposed a moderating effect of gender on the relationship between coworker bullying observed and coworker interpersonal justice, was not supported ($\beta = 0.14, ns$). Similarly, Hypothesis 13b, which posited a moderating effect of gender on the relationship between coworker bullying observed and personal identification with the victim, was also not supported ($\beta = 0.14, ns$). Hypothesis 13c proposed a moderating effect of gender between coworker bullying observed and state anxiety. The regression results indicated that this relationship was significant ($\beta = 0.24, p < 0.05$). As Figure 9 illustrates, those participants who were the same gender as the victim and witnessed the coworker bullying event did not differ in their state anxiety from those who were of the different gender and did not witness the bullying incident. Nevertheless, state anxiety differed for those who did not witness the bullying event versus those who did witness the event in relation to whether or not the victim was of the same or opposite gender. That is, those participants who were the opposite gender as the victim and did not witness the bullying event were more likely to have higher state anxiety than those who were of the same gender. Thus, Hypothesis 13c is not supported. Finally, Hypothesis 13d which posited a moderating effect of gender between coworker bullying observed and core affect was not significant ($\beta = 0.01, ns$). Finally, although not originally hypothesized, some support was found for the interaction between participant-gender match, coworker bullying observed, and personal identification with the bully ($\beta = -0.18, p < 0.10$). Figure 10 suggests that participants who were the same gender as the victim and who witnessed the coworker bullying event had less personal identification with the bully than those who were of the opposite gender than the victim or who did not witness the bullying incident.
Effect Size and Power

Effect sizes and power analyses for each of the dependent variables were calculated. The results of these tests are displayed in Table 9. Power was calculated using the prescribed method in G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007; Faul, Erdfelder, Buchner, & Lang, 2009). Cohen’s $d$ effect size was calculated based on Cohen (1988, 1992). Based on these calculations, as displayed in Table 9, coworker interpersonal justice had a medium effect size at 0.55; personal identification with the victim and with the bully both had a small effect size at 0.22 and 0.40, respectively; state anxiety also had a small effect size at 0.20; and core affect had a trivial effect size at 0.02.

As displayed in Table 9, the observed power for each of the dependent variables was also calculated. Coworker interpersonal justice and personal identification with the bully had the highest powers at 0.99 and 0.97 respectively, which indicates that there is not likely a Type II error. For the remaining variables, particularly personal identification with the victim and state anxiety, however, as they are below the typical threshold of 0.80 for power (Cohen, 1992), may be subject to a Type II error, meaning that the findings presented above should be taken with caution. Yet, an important consideration is that the threshold of 0.80 is suggested for $a priori$
calculations of power, while I calculated the observed power (also called post-hoc power). Some researchers suggest that a threshold of 0.50 is acceptable for observed power (Fabrigar & Wegener, 2016; Francis, 2012, 2013). Furthermore, core affect had a substantially lower power at 0.10, which is not surprising given that the MANOVA conducted in the preliminary analysis was not significant for the coworker bullying observed effect. Combining the observed power with the calculated effect sizes (Cohen’s $d$), and given the number of participants per condition (ranging from 78-81; the rule of thumb is 50 respondents per condition, Simmons, Nelson, & Simonsohn, 2013), I suggest that the conclusions drawn from this study are accurate interpretations based on the analysis.

Summary

The purpose of this study is to understand better how witnessing a coworker bullying incident affects both interpersonal and intrapersonal outcome. This chapter offers results of the analyses used to test the hypotheses, with tables and figures used to provide a detailed presentation of the data. Table 10 provides a summary of the results of the hypotheses testing.
Table 10

Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: CBO - CWIJ</td>
<td>Supported ($\beta = -0.14, p &lt; 0.05$)</td>
</tr>
<tr>
<td>2a: CBO + PI Victim</td>
<td>Supported ($\beta = 0.21, p &lt; 0.05$)</td>
</tr>
<tr>
<td>2b: CBO - PI Bully</td>
<td>Supported ($\beta = -0.15, p &lt; 0.05$)</td>
</tr>
<tr>
<td>3: CBO + State Anxiety</td>
<td>Significant, opposite direction ($\beta = -0.17, p &lt; 0.05$)</td>
</tr>
<tr>
<td>4: CBO - Core Affect</td>
<td>Not supported</td>
</tr>
<tr>
<td>5: Empathy moderates CBO/CWIJ</td>
<td>Supported ($\beta = -0.26, p &lt; 0.05$)</td>
</tr>
<tr>
<td>6a: Empathy moderates CBO/PI Victim</td>
<td>Not supported</td>
</tr>
<tr>
<td>6b: Empathy moderates CBO/PI Bully</td>
<td>Not supported</td>
</tr>
<tr>
<td>7: Empathy moderates CBO/State Anxiety</td>
<td>Not supported</td>
</tr>
<tr>
<td>8: Empathy moderates CBO/Core Affect</td>
<td>Not supported</td>
</tr>
<tr>
<td>9: SOC moderates CBO/CWIJ</td>
<td>Not supported</td>
</tr>
<tr>
<td>10a: SOC moderates CBO/PI Victim</td>
<td>Supported ($\beta = 0.17, p &lt; 0.05$)</td>
</tr>
<tr>
<td>10b: SOC moderates CBO/PI Bully</td>
<td>Not supported</td>
</tr>
<tr>
<td>11: SOC moderates CBO/State Anxiety</td>
<td>Significant, not supported ($\beta = -0.14, p &lt; 0.05$)</td>
</tr>
<tr>
<td>12: SOC moderates CBO/Core Affect</td>
<td>Not supported</td>
</tr>
<tr>
<td>13a: Participant/Victim Gender Match moderates CBO/CWIJ</td>
<td>Not supported</td>
</tr>
<tr>
<td>13b: Participant/Victim Gender Match moderates CBO/PI Victim</td>
<td>Not supported</td>
</tr>
<tr>
<td>13c: Participant/Victim Gender Match moderates CBO/State Anxiety</td>
<td>Significant, not supported ($\beta = 0.24, p &lt; 0.05$)</td>
</tr>
<tr>
<td>13d: Participant/Victim Gender Match moderates CBO/Core Affect</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

Note: CBO = coworker bullying observed; CWIJ = coworker interpersonal justice; PI = personal identification.
CHAPTER 6
DISCUSSION AND CONCLUSION

Given the prevalence of bullying in the workplace, researchers and managers need to understand how bullying affects the various players of the bullying incident, including bullies, targets, and bystanders. As most of the literature investigates the effect of bullying on the bullies and the victims (e.g., Agevall, 2007; Namie & Lutgen-Sandvik, 2013; Nielsen et al., 2011), this study examines the under-represented player in the bullying situation: the bystander. Additionally, this study explores a relatively under-researched area of bullying in that it examines the effects of peer-on-peer bullying, rather than abusive supervision (i.e., Tepper, 2000). The research questions presented at the beginning of this study asks whether bystanders who witness a coworker bullying another coworker have altered interpersonal and intrapersonal responses.

Therefore, the objective of this study was three-fold: (1) to examine how witnessing a bullying event influences interpersonal justice and personal identification with coworkers, (2) to examine how witnessing a coworker bullying event would affect the bystander’s state anxiety and core affect, and (3) to examine how the bystander’s empathy, sense of coherence, and the victim’s gender influence these relationships. In the previous chapter, the results of the data analysis and the hypotheses testing are summarized. In general, the results presented in Chapter 5 suggest that observing a coworker bullying incident had more of an effect on interpersonal outcomes than intrapersonal outcomes, and that empathy, sense of coherence, and the bullying victim’s gender also have an influence on these relationships. Below, I discuss the results of main findings, with possible explanations of why some hypotheses were not supported.
Moreover, I provide an in-depth discussion regarding the implications of the findings for both researchers and managers, and provide recommendations for future research.

Findings

Direct Effects

As posited in Hypothesis 1, those bystanders who witnessed a coworker being bullied perceived worse treatment from their coworkers than those who did not witness a coworker being bullied. This finding reinforces previous studies that examined coworkers as a source of justice (e.g., Cropanzano et al., 2007; Donovan et al., 1998; Lavelle et al., 2007; Li & Cropanzano, 2009), and extends these studies by concluding that if a person witnesses a coworker being bullied by another, then that person would believe that they would be treated with less dignity and respect, than a person who did not witness a coworker being bullied.

Additionally, as suggested in Hypotheses 2a and 2b, those who witnessed a coworker bullying incident were also more likely to personally identify with the victim and less likely to personally identify with the bully. This finding extends previous literature which links organizational outcomes and identification with the supervisor (e.g., Chun et al., 2009; Miao et al., 2012; Zhu et al., 2013), by extending to personal identification with a coworker. Furthermore, these findings suggest that coworkers will personally identify more with the person who was bullied rather than with the person who introduced this negative event into the workplace. Moreover, the findings in this study give better understanding of how personal identification can occur within the workplace. Brockner and Greenberg (1990) suggest that bystanders may identify with a victim of mistreatment due to things such as group similarities (e.g., similar work roles). This study provides a tangible example of how bystanders may or may not identify with one coworker or another. Particularly, in the case of a new coworker, the
witnessing of a fellow coworker being bullied by another coworker would cause the bystander to feel closer to the person being bullied than to the person who is perpetrating the bullying incident.

Interestingly, Hypothesis 3 which suggested a positive relationship between coworker bullying observed and state anxiety, was significant, but in the opposite direction from hypothesized. One possible explanation is that other forces were in play in the participant’s experience of the experiment. For example, as demonstrated by Derakshan et al. (2009), experimental participants who were instructed to switch tasks during the experimental process had stronger negative effects of state anxiety than those participants who did not switch tasks. During the course of the in-lab session, participants were instructed to view the videos, then complete a task, and then return to the computer to complete survey questionnaires. This sequence may have unintentionally introduced additional sources of state anxiety, as both testing and trait anxieties were not strong influences in the analysis. Additionally, an important consideration is that those participants who were in the non-bullying condition were more anxious than those who were in the bullying condition. A possible explanation is that the bullying incident distracted the participants from other stressors, with the focus of concern shifting from themselves to the situation at hand. Thus, the participant may have paid less attention to the sources of anxiety in the lab situation. Another possible explanation is that the participants in the bullying condition may have disassociated themselves from the situation, similar to how psychologists use of a “screening technique”, in which individuals who have witnessed a traumatic event are asked to imaging the event being played on a television to help them disassociate with the event (Dalenberg et al., 2012; Substance Abuse and Mental Health Services Administration, 2014).
Hypothesis 4 which predicted a negative relationship between core affect and coworker bullying observation was not supported. This may be due to the nature of core affect itself, in that it is a precursor to emotions and moods (i.e., Russell, 2005; Yik et al., 2011). As a precursor, an event would have to be particularly powerful to cause core affect to be altered. In this study, it is possible that the experimental conditions were not strong enough to elicit a change in core affect. Additionally, based on the results of the analysis, both the dark triad personality traits and the fear of being bullied also played a role. That is, the dark triad traits had a negative relationship with core affect, while the fear of being bullied had a positive relationship. This suggests that personality characteristics and fear of retribution may have more of an influence on core affect than witnessing a coworker being bullied.

Effects of Empathy

As suggested by de Vignemont (2007), the bystander must witness the coworker’s emotional response to the bullying event in order for empathy to occur; the videos displayed this reaction. As suggested in Hypothesis 5, and supported by the analysis, empathy affects the relationship between coworker bullying observed and coworker interpersonal justice. Specifically, those bystanders who had higher levels of empathy and who witnessed the bullying event had more coworker interpersonal justice than those who had lower levels of empathy or did not witness the bullying incident. That is, high empathy levels strengthened the negative effect of the coworker bullying incident on coworker interpersonal justice. This finding supports a previous conclusion by Skarlicki and Kulik (2005) who suggested that an empathetic response may explain how bystanders’ justice concerns are engaged despite not being formed from the bystander’s self-interest or relationship with the victim.
Hypothesis 6a, which suggested that empathy moderates the relationship between coworker bullying observed and personal identification with the victim, was not supported. This may be arise from the bystander desiring to be closer to the person who was victimized, but not necessarily to put themselves in the victim’s shoes. Furthermore, Hypothesis 6b, which proposed that empathy would influence the relationship between coworker bullying observation and personal identification with the bully was not supported. The bystander did not want to be close to the bully, much less to put themselves in the bully’s position, which corroborates previous research in which bystanders are more inclined to completely disassociate with the bully (Bloch, 2010), which may explain why the bystanders in this study did not express neither empathy nor personal identification towards the bully.

Both Hypotheses 7 and 8, which posited that empathy would moderate the relationship between coworker bullying observed and state anxiety and core affect, respectively, were not supported. Regarding state anxiety, one possible explanation is that other potential sources of state anxiety (as discussed previously) may have contributed to the lack of a significant finding; further, these other sources (such as student status) may not be related to empathy levels. Regarding core affect, the main effect of empathy on core affect was negative and significant, yet the interaction of the coworker bullying observation and empathy was not significant. One possible reason, as mentioned above with the direct effect of coworker bullying observation and core affect, may reside in the personality characteristics of the individual. Ciucci and Baroncelli (2014) in exploring callous-unemotional traits (including lack of guilt, lack of empathy, poor affect, use of others for personal gain; Fanti, Frick, & Georgiou, 2009; Frick, 2004) found that these traits influence bullying behaviors in school-aged children, and may continue into adulthood. This finding suggests that when individuals witness an instance of coworker
bullying, that their personality traits may also influence their core affect more than witnessing a coworker bullying incident.

Effects of Sense of Coherence

Hypothesis 9 which predicted that SOC would moderate the relationship between coworker bullying observation and coworker interpersonal justice was not supported. This may also be due to the concept of “scope of justice,” in which bystanders may view a victim as outside the boundary within which the bystander perceives moral values, rules, and considerations of fairness to apply (i.e., Opotow, 1990, 1996; Staub, 1989). Furthermore, this scope of justice is motivated by self-interest (Elster, 1993; Hogan & Emler, 1981), which may explain why bystanders in this study did not trigger their SOC. That is, being able to cope with a negative event may not be involved with the determination of justice perceptions when the victim of injustice is outside the scope of justice.

Hypothesis 10a which posited that SOC moderates the relationship between coworker bullying observed and personal identification with the victim was supported. Hence, those individuals who witnessed the coworker bullying incident and had high SOC tended to personally identify with the victim more than those who did not witness the bullying incident or who had low SOC, as those with high SOC were able to better cope with the stressors imposed with witnessing the coworker bullying event (e.g., Antonovsky, 1987b, 1991, 1993).

Conversely, Hypothesis 10b, which suggested that SOC moderates the relationship between coworker bullying observed and personal identification with the bully was not supported. One possible explanation for this finding is that in the interest of self-preservation, bystanders who witnessed the coworker bullying incident chose to distance themselves from the
person who engaged in a negative event, despite being able to mentally cope with the repercussions of witnessing the bullying incident.

As posited, Hypothesis 11 which suggested that SOC moderates the coworker bullying observation and state anxiety relationship was significant, but not supported. Despite being moderately significant, the interaction graph indicates that state anxiety was lower overall for those who witnessed the coworker bullying event than for those who did not witness it. This finding corroborates previous research by Antonovsky and Sagy (2001) that found no relationship between SOC and state anxiety in an acute stress situation. Furthermore, since the main effect of state anxiety in the MANOVA was only moderately significant ($p < 0.10$), it is possible that the coworker bullying incident was not strong enough to trigger the bystanders to engage in coping mechanisms.

Hypothesis 12 that suggested a moderating effect of SOC on the relationship between coworker bullying observed and core affect was not supported. This finding may result from the personality traits of the participants may have more of an effect on core affect despite being able to handle the implications of witnessing a coworker being bullied.

Effect of Victim Gender

Interestingly, the only significant effect of victim gender was on state anxiety. That is, when the participant and the bullying victim were the same gender, results did not indicate any differences than when they were opposite gender on coworker interpersonal justice, personal identification with the victim, or core affect. Yet, when the bystander and the victim were the opposite gender, and did not witness the bullying incident, there was a significant interaction on state anxiety, yet based on the interaction graph, there was more difference between the genders in the control condition than in the bullying interaction. One possible reason is that seeing
someone bullied took precedence over the gender of the victim, making gender less salient in this case.

One interesting finding, despite not being originally hypothesized, was that the victim’s gender had an effect on whether participants personally identified with the bully or not. That is, when the bystander was of the same gender as the victim and witnessed the coworker bullying event, resulted in the bystander identifying even less with the bully than those who were of the opposite gender of the victim or who did not witness the bullying incident.

Contributions and Implications

Theoretical

Drawing from affective events theory (AET), the present study examines the phenomena of coworker bullying as an affective event, which can alter bystander’s attitudes. Based on the significant findings in this study, AET is appropriate to use when examining workplace bullying between peers. Specifically, by using an affective event to manipulate the conditions of bullying versus non-bullying between coworkers, bystanders to these episodes had an affective reaction, which contributes to the strength of AET in studies exploring effects of deviance among employees. Furthermore, the current study illuminates the necessity of examining the third player in the bullying arena: the bystander.

This study contributes to the justice literature by expanding on interpersonal justice using an underexplored target for the perceived interpersonal justice between coworkers. Although the justice literature is well-established (e.g., Colquitt et al., 2001; Colquitt et al., 2013; Cropanzano et al., 2001), the inclusion of coworkers into interpersonal justice extends prior findings by Rupp, Shao, Jones, and Liao (2014) by incorporating a specific target to interpersonal justice. Specifically, by finding a negative relationship between the bystander who witnessed the
coworker bully incident and coworker interpersonal justice, I provide evidence that the coworker is indeed another source of justice for employees. Furthermore, as Skarlicki and Kulik (2005) suggest, bystanders are able to consider the broader social context and the behavior of all parties, which may cause them more or less concern about injustices done to the victim. Based on the results of this study, coworker bullying is one such injustice that the bystander can conclude are of importance as a new coworker, which helps these new coworkers to form interpersonal justice perceptions about their future coworkers.

Additionally, this is the first study, to my knowledge, to examine empirically Ashforth et al.’s (2016) concept of personal identification. Moreover, I identified scale items to use in future quantitative studies based on the recommendations provided in the Ashforth et al. (2016) article. In so doing, I was able to identify how bystanders of coworker bullying identified with both the victim and the bully, and found empirical evidence for both aspects. Additionally, the findings in this study illuminate how an individual can develop personal identification based on a couple of related events, and how quickly this personal identification can form. Within the span of a couple hours, participants were able to discern another person’s attributes and how strongly they felt about the aforementioned attributes, and how they desired to emulate those attributes. Moreover, the closeness-focused aspect of personal identification appears to be of particular influence here, in that the bystanders appeared to be receptive to influence from the target of the personal identification (the victim and the bully) and appeared to have concern for the well-being of the personal identification target, as well as for the health of the anticipated interpersonal bond.

Furthermore, this study also illustrates the importance of empathy, sense of coherence, and the victim’s gender in a coworker bullying situation. Specifically, the use of these variables
as moderators illuminates their effect on the relationships with coworker bullying observation. Hence, empathy, sense of coherence, and the victim’s gender in relation to the bystander’s gender are important contextual factors which provide further insight into the coworker bullying phenomena. Specifically, empathy was of particular importance in the relationship between witnessing a bullying event and coworker interpersonal justice, which corroborates previous findings by Skarlicki and Kulik (2005). Hence, when considering interpersonal relationships among the actors in the bullying arena, empathy becomes an important outcome to investigate in these relationships. Additionally, SOC was of more importance for coworker bullying observed and personal identification with the victim. Those bystanders who personally identified with the victim and had high SOC were better able to cope with witnessing the victim being bullied than those with low SOC or who did not witness the bullying incident. That is, these bystanders were better able to handle the potential consequences of witnessing the bullying event in the interest of self-preservation, despite personally identifying with the victim of the bullying.

Another interesting observation is that more of the hypotheses were supported for the interpersonal outcomes rather than the intrapersonal outcomes. While some explanations have been provided, another possible explanation is that individuals are less aware of how their reactions affect others than they are of how events affect themselves (Coloroso, 2008; Fried & Fried, 2003; Lutgen-Sandvik & Fletcher, 2013; Olweus, 2001a, 2001b). For example, witnessing a strong, negative event (such as a bullying incident), may cause a bystander to silently deliberate a course of action, and once decided upon, the bystander then acts. This internal deliberation may occur so quickly that the bystander may only aware of how they processed the situation once they put it in the context of other individuals, which relates to sensemaking (e.g., Maitlis, 2009; Pratt et al., 2006). Furthermore, it is possible that the use of
the videos in this context were not able to elicit the intrapersonal outcomes as well as the interpersonal outcomes, in that the bystanders could see themselves working with these individuals, but not have an internal reaction to witnessing one of them being bullied.

Managerial

In light of these findings, and given the growing prevalence of bullying in the workplace, managers need to consider all parties engaged in the instance of workplace bullying, and need to be aware of peer-on-peer bullying. Based on these results, to increase coworkers treating one another with respect, dignity, and politeness, managers should investigate instances of coworker bullying and work to develop anti-bullying policies to distribute throughout the organization, as previous research has established that these types of policies are a common and successful measure to combat workplace bullying (Kieseker & Marchant, 1999; Pate & Beaumont, 2010; Salin, 2008). Furthermore, to ensure the success of these anti-bullying policies, they should be clearly designated as ‘anti-bullying’ policies (Cowan, 2011) and should contain consequences for those who decide to engage in bullying behavior (Branch, Ramsay, & Barker, 2013).

The findings in the present study suggest that bystanders react to witnessing a bullying incident in a variety of ways. Identifying instances of coworker bullying is imperative for managers to mitigate its negative consequences on both the individual and the organization (e.g., Einarsen et al., 2003, 2011; Lutgen-Sandvik et al., 2013; Rayner et al., 2002; Vartia, 2001). Furthermore, managers can also determine how coworker interpersonal justice may affect other organizational outcomes (cf., Lavelle, Rupp, Manegold, & Thornton, 2015). Additionally, when a new hire joins the organization, managers need to consider with whom that individual is working in the event that the new hire establishes a personal identification with that individual, since the new hire may be spending a great deal of time with them. Thus, when establishing
training mentors, managers should use great care to ensure that the new hire is placed with an employee who has attributes that the manager would want to see emulated in the new hire.

**Limitations and Future Research**

As with any study, there are some limitations which should be identified. An issue with all experiments, the generalizability of the findings may not translate to an organizational setting. One reason why these results may not translate to an organizational setting is that bullying events are able to elicit emotions and reactions, yet by using a video to depict the bullying event, the participants did not have any real threat to themselves as they witnessed the bullying incident. Likewise, due to the use of the video, the subjects did not have the opportunity to interact with these coworkers, thus not being able to determine for themselves if the bullying was justified or not based on what they knew about the two individuals. Similarly, the subjects did not have an outlet in which to intervene, should they have desired to do so when witnessing the event, nor were they given the opportunity to escape from witnessing the bullying event. Despite statistical evidence presented in the preceding chapters regarding the effect of the videos used to elicit the coworker bullying incident, future studies should investigate how coworker bullying manifests itself in an organizational setting.

Additionally, the premise used in this study of peer-on-peer bullying within the workplace, provides a host of fruitful research opportunities. One area is to investigate how coworker interpersonal justice functions with the other justice dimensions (procedural, distributive, and informational). Furthermore, the refinement of a scale for personal identification provides several opportunities for quantitative studies.

As there is still unknown regarding the effects of gender and bullying in the workplace, a future area of exploration is to replicate this study using a female bully instead of a male bully to
determine if the same effects are found. Additionally, incorporating different ethnicities of the bully and/or victim may illuminate further complexities of this phenomena.

Conclusion

Now more than ever, workplace bullying is increasingly an issue that managers and organization face. This study provides a foundation upon which further research may be based in the examination of coworker bullying. Moreover, the use of an experimental approach in this study provides an in-depth investigation of bystanders of coworker bullying. Additionally, the current study explores both interpersonal outcomes (coworker interpersonal justice and personal identification with coworkers) as well as intrapersonal outcomes (state anxiety and core affect) in relation to bystanders witnessing a coworker bullying incident. Furthermore, this study provides evidence that empathy, sense of coherence, and gender match of the bystander and the victim influence some of the relationships between bystanders of coworker bullying and interpersonal and intrapersonal outcomes. The findings from the current study contribute to the workplace bullying literature as well as the justice and identity literatures.
APPENDIX A

RECRUITING FLYER FOR PILOT STUDY
Research Participation Opportunity

This study is designed to understand more about two things: (1) the effectiveness of a proposed training program, and (2) how exposure to a certain situation encourages certain reactions. There are three parts to this opportunity and you must complete all three (3) to receive credit.

I.  Fill out an online survey that should take about 20 minutes to complete.

   The survey must be completed by Sunday, June 12 at 5:00pm in order to provide us enough time to set up the training program for you.

   The survey link is: https://unt.az1.qualtrics.com/SE/?SID=SV_2tywu3FBud1rhz

II. Participate in a lab session in BLB 279.

   You will be scheduled a time to test the training program. The session generally takes about 45 minutes – 1 hour to complete.

   At the end of the online survey described in Part I above, you will choose the lab sessions that best meet your schedule. The times for each session are listed below so that you can check your calendar before you make your choices at the end of the survey. You will be asked to rank your top three (3) choices. By ranking your top 3 choices, you are agreeing to be available to participate at those times.

   • Thursday, [Date], 11:00 am
   • Thursday, [Date], 12:30 pm
   • Thursday, [Date], 2:00 pm
   • Thursday, [Date], 3:30 pm
   • Friday, [Date], 9:00 am
   • Friday, [Date], 10:30 am
   • Friday, [Date], 12:00 pm
   • Friday, [Date], 1:30 pm

III. Fill out a post-lab online survey that should take about 15 minutes to complete.

   The survey opens on Sunday, [Date] at 8:00 am and closes on Wednesday, [Date] at 5:00pm. The survey must be completed by this date to ensure that you earn your extra credit in your class and your entry into the drawing for the Amazon gift card.

   This survey link will be emailed to you based on the email address that you provide after completing the lab session.

   If you have any questions, please contact me via email at michele.medina@unt.edu.
APPENDIX B

IN-LAB INSTRUCTIONS
Instructions

Thank you once again for participating in this study. The real purpose of the study was to evaluate how observing an instance of bullying affect people’s responses and relationships with coworkers in a fictitious restaurant setting. Depending on when you arrived to the lab session, you were assigned into either the group which saw a coworker being bullied by another coworker, or two coworkers who appeared to get along. We thank you for contributing to our research. Should you have any questions, feel free to contact me at michele.medina@unt.edu.

The owners of the restaurant, Olivier and Anne Bellerose, moved from France to Texas in the early 2000s with their four children. Their dream was to open a French restaurant which they could then pass down to their children when they retired. The Belleroses realized their dream when The French Rose opened on February 21, 2012. Their concept was simple: to serve downtown Dallas with classic French recipes for lunch and dinner. Their prices reflect the differences in the menu, with lunch ranging from $10-25 and dinner ranging from $25-50 per plate.

Anne stays home with the children, while Olivier oversees the restaurant and a couple of other enterprises. He isn't at the restaurant often, and relies on his manager, Jacques, to oversee the daily operations. Jacques implemented a system for employees to work their way up the latter within the restaurant. All new hires start as bussers and dishwashers. Then, depending on the skill of the employee, he or she can then move to the kitchen and cook or move into waiting tables.

Part of the busser position involves setting the table to reflect the menu being offered. Lunch has a more informal place setting, while dinner has a more formal setting. Bussers need to know how to do both place settings quickly, as the restaurant needs to keep its table turnover times low. In the past, when new bussers started, the training policy was for more senior bussers to show the new hires how to set the tables for both lunch and dinner. At first, this system worked, but as time went on, Jacques started noticing inconsistencies in how the tables were set since the senior bussers were being promoted, which resulted in less experienced bussers teaching the new hires.

Jacques began to explore ways of keeping the training consistent. After talking with some of the new hires, Jacques realized that one of the main issues that new bussers struggled with was the place settings for lunch and dinner. Jacques worked with one of the senior bussers to develop a training plan. They decided that a training video explaining how to do the place settings would be the most effective route.

[Videos play.]

Now that you have seen both of the videos that demonstrate how to do a lunch place setting and a dinner place setting, take a few minutes to practice.
When you're ready, you may go to one of the stations labeled E, F, G, or H, to demonstrate what you've learned. Pay attention to which station you go to. You will be asked which station you go to once you return to your computer.

Remember, there is no pressure to do well. We just want to see how effective the training videos were.

Leave this screen open while you complete the demonstration.

[After participant has completed the demonstration]

Which station (E, F, G, H) did you complete your demonstration?

Thank you for doing both of the place settings. Please complete the following survey to gauge your feedback of the training.
APPENDIX C

VIDEO TRANSCRIPTS
Control of Workplace Bullying – Female/Male

Video 1 – Timestamped 11/17/2015

Place Setting Script (CONTROL of WB)

Coworker A: AMANDA
Coworker B: THOMAS

[Video opens with Amanda finishing up gathering the plates, silverware, etc. and going over last minute instructions from the cameraman. Then, Amanda sits down in a chair and faces the camera.]

Amanda (with great enthusiasm): Welcome to our training video for The French Rose. This video will show you the basics of how to get the table ready for our guests. We have two services – lunch and dinner which require different set ups of the plates and flatware. To go along with each plate setting, we have different ways of folding the napkins for lunch and dinner. Don’t worry – we’ll show you how to do these too. This video goes over the place settings. We’ll start with the lunch place setting.

[Pulls out plates, glasses, and silverware.]

Amanda (narrating as demonstrating the steps): Okay, so I know this looks like a lot of plates, forks, and glasses. But it’s really easy. It just takes practice! First, put the big plate in the middle. Then, you’ll put the forks on the left and the spoons and knife on the right. There are two forks – one big one and one little one. These are called the dinner fork and the salad fork. The dinner fork – the big one – goes to the immediate left of the plate; the salad fork – the small one – goes to the left of the dinner fork. Make sure that the bottom of the forks align with each other.

On the other side, you’ll place the knife, the small spoon, and the big spoon on the right side of the plate. The sharp side of the knife will be facing the plate. Then, the little spoon, or teaspoon, will go next to the knife. The big spoon, or soup spoon, will go right next to the teaspoon. Make sure that all the bottoms of all the silverware align together.

Okay, now to the glasses. For lunch, you’ll only need two – a glass for water and another for wine. The water glass goes 6 inches above the knife. And the wineglass goes to the right and slightly down of the water glass.

Now for the last step! The napkin goes in the middle of the plate! Okay, now let’s move on to the dinner plate setting.

[Amanda gets up and gathers the additional plates, glasses, and silverware for the formal dining setting. Thomas comes up behind Amanda as Amanda is gathering the items.]

Thomas (friendly): Hi Amanda, what are you doing???

Amanda (politely): Oh, I’m just demonstrating how to do a lunch setting.
Thomas (*notices camera*): Oh sorry, I didn’t mean to interrupt.

Amanda (*kindly*): It’s okay. I’ll see you later.

[Thomas walks off screen.]

Amanda (*retaining enthusiasm*): So, now let’s move onto the dinner plate setting. Now, this setting is more formal, and involves more plates and glasses than the lunch setting. The basic set up is similar to the lunch set up, but with a few changes. Recreate the same set up for the big plate, forks, knife, spoons, and glasses for the lunch place setting. These will change slightly for the dinner setting. First, place a smaller plate, called the salad plate, to the middle of the big plate. Right above the big plate, place a small fork, called the cake fork, with the handle facing toward the other forks. Right above the cake fork, place the dessert spoon, with the handle facing the spoons. You’ll add another glass by the wine glass for lunch. So you’ll have 3 glasses, the first is a water glass, the next one is a red wine glass, and the last one is a white wine glass. You’ll place the last glass to the right and slightly down from the last glass. On the other side, above the forks, you’ll place a small plate, the bread plate, right above the forks. You’ll place the bread knife on top of the bread plate, diagonally, with then handle facing the dinner plate.

Almost done! The last step is to place the napkin to the left of the forks.

That’s it. If when you first start you have questions – feel free to ask. We want to make sure that you have everything you need when you start this job. Thanks for watching!

[Video ends.]
[Video opens with Amanda getting the napkins and going over how to fold each type. Gets last minute instructions from the cameraman. Double-checks appearance in mirror. Then, Amanda sits down in a chair at a table and faces the camera.]

Amanda (really enthusiastic): Welcome to our new training video for The French Rose. The other video goes over the place settings for lunch and dinner. In this video, I’ll show you how to fold the napkins for both place settings. We’ll start with the lunch place setting.

[Gets a cloth napkin.]

Amanda (narrating as demonstrating the steps): In order to get the Rose napkin, you first start out with a square cloth napkin. Fold the napkin in half to make a triangle, leaving one side a little bit shorter than the other. Then, start rolling the napkin from the bottom, and keep going until you have about a 3 inch triangle left at the top. Next, start rolling it from one side, and keep going until you have about 4 inches left on the end. Tuck the tail into the fold, cramming it in there, using a knife if necessary to get the tail tucked in. Then, take the two remaining tails and pull them around to the front to make your rose napkin. This will be set in the middle of the plate of the lunch place setting.

OK, so that’s the rose napkin for the lunch place setting. Now, let’s move on to the formal napkin, called a French fold, for the dinner place setting.

[Amanda leans away from camera to get another cloth napkin. While Amanda is leaning away from the camera, Thomas comes up behind Amanda as Amanda is about to get started on the French napkin folding.]

Thomas (walking by door, peeks in and sees what’s going on): Making another video? (Sees napkins on table) Glad it’s for the napkins, I had a lot of trouble doing those. I’ll see you later!

[Thomas leaves.]

Amanda (retaining enthusiasm): So now we’re going to move onto the formal napkin for the dinner place setting. First, fold the napkin in half to make a large rectangle. Then fold the rectangle again to make a square. Put the square into a diagonal position and smooth out. Take the top right corner and have it meet the bottom right corner, and fold. Do this again 2 more times, leaving the bottom layer unfolded. Then, take the top layer and fold the corner into a little triangle. Take the next layer, and make a triangle out of the corner that is a little bit bigger than the first triangle, and tuck in the remaining fabric under the next layer. Do this again once more. You’ll have a total of 3 triangle folds. Carefully flip the napkin over. Fold the left edge over, and you’ll see some little triangles from the front. Fold the right side over the triangles. You don’t
want the edges to be flush, but want a little bit of overlap. Turn the napkin over again, and you’re finished! Place this napkin by the plate for the dinner place setting.

That’s it! The best way to get better with these napkins is to just practice them. Let us know if you have any questions! We’re here to help!

[Video ends.]
Manipulation of Workplace Bullying – Female/Male

Video 1 – Timestamped 11/17/2015

Place Setting Script (manipulation of WB)

Coworker A: victim – AMANDA
Coworker B: bully – THOMAS

[Video opens with Amanda finishing up gathering the plates, silverware, etc. and going over last minute instructions from the cameraman. Double-checks appearance in compact mirror. Then, Amanda sits down in a chair and faces the camera.]

Amanda (with great enthusiasm): Welcome to our training video for The French Rose. This video will show you the basics of how to get the table ready for our guests. We have two services – lunch and dinner which require different set ups of the plates and flatware. To go along with each plate setting, we have different ways of folding the napkins for lunch and dinner. Don’t worry – we’ll show you how to do these too. This video goes over the place settings. We’ll start with the lunch place setting.

[Pulls out plates, glasses, and silverware.]

Amanda (narrating as demonstrating the steps): Okay, so I know this looks like a lot of plates, forks, and glasses. But it’s really easy. It just takes practice! First, put the big plate in the middle. Then, you’ll put the forks on the left and the spoons and knife on the right. There are two forks – one big one and one little one. These are called the dinner fork and the salad fork. The dinner fork – the big one – goes to the immediate left of the plate; the salad fork – the small one – goes to the left of the dinner fork. Make sure that the bottom of the forks align with each other.

On the other side, you’ll place the knife, the small spoon, and the big spoon on the right side of the plate. The sharp side of the knife will be facing the plate. Then, the little spoon, or teaspoon, will go next to the knife. The big spoon, or soup spoon, will go right next to the teaspoon. Make sure that all the bottoms of all the silverware align together.

Okay, now to the glasses. For lunch, you’ll only need two – a glass for water and another for wine. The water glass goes 6 inches above the knife. And the wineglass goes to the right and slightly down of the water glass.

Now for the last step! The napkin goes in the middle of the plate! Okay, now let’s move on to the dinner plate setting.

[Amanda gets up and gathers the additional plates, glasses, and silverware for the formal dining setting. Thomas comes up behind Amanda as Amanda is gathering the items.]

Thomas (with contempt): What are you doing Amanda???

Amanda (timidly): I’m- I’m just demonstrating how to do a lunch setting.
Thomas (with disgust): You’re such an idiot! Don’t you know that you’re supposed to show them the formal dining setting first? (More talking to themselves than to Amanda. Amanda is looking down waiting for the rant to be over) Geez, you’re so incompetent! Why did they even hire you? ‘Cause I really don’t understand how someone as retarted as you could have gotten this job.

[Thomas storms off, Amanda sits there trying to recover from the outburst.]

Amanda (visibly shaken – trying to appear not affected by Thomas’s words, turns from camera to recover; talking to the person behind camera): Don’t worry about him/her – he/she is always like that to me. Can we make sure that (dismissive hand wave) whole thing doesn’t make it to the final cut? I don’t want the new hires to see that.

Cameraman (gently, from behind camera): Of course.

Amanda (still shaken, but relieved that the outburst won’t be included in the final cut): Okay, good.

Cameraman (from behind camera): Ready to continue?

Amanda (still shaken, but slowly recovering): Yeah, just give me a second. (Takes a few deep breaths, double-checks appearance in mirror). Okay, let’s get back to it.

Amanda (trying to be enthusiastic, but obviously struggling; narrating as demonstrating steps): So, now let’s move onto the dinner plate setting. Now, this setting is more formal, and involves more plates and glasses than the lunch setting. The basic set up is similar to the lunch set up, but with a few changes. Recreate the same set up for the big plate, forks, knife, spoons, and glasses for the lunch place setting. These will change slightly for the dinner setting. First, place a smaller plate, called the salad plate, to the middle of the big plate. Right above the big plate, place a small fork, called the cake fork, with the handle facing toward the other forks. Right above the cake fork, place the dessert spoon, with the handle facing the spoons. You’ll add another glass by the wine glass for lunch. So you’ll have 3 glasses, the first is a water glass, the next one is a red wine glass, and the last one is a white wine glass. You’ll place the last glass to the right and slightly down from the last glass. On the other side, above the forks, you’ll place a small plate, the bread plate, right above the forks. You’ll place the bread knife on top of the bread plate, diagonally, with then handle facing the dinner plate. Almost done! The last step is to place the napkin to the left of the forks.

(With a little more enthusiasm, but as not much as when we began): That’s it. If when you first start you have questions – feel free to ask. We want to make sure that you have everything you need when you start this job. Thanks for watching!

[Video ends.]
Napkin Folding Script (manipulation of WB)

Coworker A: victim – AMANDA  
Coworker B: bully – THOMAS

[Video opens with Amanda getting the napkins and going over how to fold each type. Gets last minute instructions from the cameraman. Double-checks appearance in mirror. Then, Amanda sits down in a chair at a table and faces the camera.]

Amanda (really enthusiastic): Welcome to our new training video for The French Rose. The other video goes over the place settings for lunch and dinner. In this video, I’ll show you how to fold the napkins for both place settings. We’ll start with the lunch place setting.

[Gets a cloth napkin.]

Amanda (narrating as demonstrating the steps): In order to get the Rose napkin, you first start out with a square cloth napkin. Fold the napkin in half to make a triangle, leaving one side a little bit shorter than the other. Then, start rolling the napkin from the bottom, and keep going until you have about a 3 inch triangle left at the top. Next, start rolling it from one side, and keep going until you have about 4 inches left on the end. Tuck the tail into the fold, cramming it in there, using a knife if necessary to get the tail tucked in. Then, take the two remaining tails and pull them around to the front to make your rose napkin. This will be set in the middle of the plate of the lunch place setting.

OK, so that’s the rose napkin for the lunch place setting. Now, let’s move on to the formal napkin, called a French fold, for the dinner place setting.

[Amanda leans away from camera to get another cloth napkin. While Amanda is leaning away from the camera, Thomas comes up behind Amanda as Amanda is about to get started on the French napkin folding.]

Thomas (walking by door, peeks in and sees what’s going on; with disgust says): They let you make another video?!?! I thought they wanted the newbies to learn the right way?! (Snatches napkin from Amanda’s hand, much to Amanda’s surprise.) What makes you think you have the right to show the newbies how to fold napkins the right way?? (Waving the napkin in Amanda’s face, Amanda is recoiling and looks scared) Do you even know how to fold it right? Look, I’ll show you (quickly folds the napkin to make the rose). See? This is how it’s done right. (Throws the folded rose down onto the table. Amanda just stares at it blankly. Thomas talking down to Amanda.) Oh, and don’t forget to clean the toilets before you leave today – you think you’re some big hot-shot doing these videos – don’t even think it! I’m still trying to figure out why they let you do the first video in the first place. The must have not wanted someone as good looking as me to intimidate the newbies, so it make sense that they’d have someone as ugly as you do the videos to make the newbies feel better. I’ve got to go get the lunch service ready, the RIGHT way.
[Thomas leaves, Amanda sits there regaining his/her composure].

Cameraman (gently, from behind camera): I can’t believe Thomas treats you like that.

Amanda (quietly): Oh, Thomas always treats me that way, I don’t know why.

[A few moments pass, in silence.]

Amanda (wanting to focus on something else): Can we get back to the video?

Cameraman (from behind camera): Sure. And don’t worry – I’ll make sure Thomas’s outburst isn’t in the final cut.

Amanda (softly): Thanks. Give me a minute. (Checks appearance in mirror again, takes a few deep breaths): Okay. Let’s move on.

Amanda (with enthusiasm, but not as much before): So now we’re going to move onto the formal napkin for the dinner place setting. First, fold the napkin in half to make a large rectangle. Then fold the rectangle again to make a square. Put the square into a diagonal position and smooth out. Take the top right corner and have it meet the bottom right corner, and fold. Do this again 2 more times, leaving the bottom layer unfolded. Then, take the top layer and fold the corner into a little triangle. Take the next layer, and make a triangle out of the corner that is a little bit bigger than the first triangle, and tuck in the remaining fabric under the next layer. Do this again once more. You’ll have a total of 3 triangle folds. Carefully flip the napkin over. Fold the left edge over, and you’ll see some little triangles from the front. Fold the right side over the triangles. You don’t want the edges to be flush, but want a little bit of overlap. Turn the napkin over again, and you’re finished! Place this napkin by the plate for the dinner place setting.

(With a little more enthusiasm, but not as much as when the video began): That’s it! The best way to get better with these napkins is to just practice them. Let us know if you have any questions! We’re here to help!

[Video ends.]
APPENDIX D

DEBRIEFING STATEMENT
Thank you once again for participating in this study. The real purpose of the study was to evaluate how observing an instance of bullying affect people's responses and relationships with coworkers in a fictitious restaurant setting. Depending on when you arrived to the lab session, you were assigned into either the group which saw a coworker being bullied by another coworker, or two coworkers who appeared to get along. We thank you for contributing to our research. Should you have any questions, feel free to contact me at michele.medina@unt.edu.
REFERENCES


Arthur, J. B. (2011). Do HR system characteristics affect the frequency of interpersonal deviance in organizations? The role of team autonomy in internal labor market practices. *Industrial Relations, 50*, 30-56.


Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382-388.


terror, mobbing, and emotional abuse on the job (pp. 304-323). St. Louis, MO: ORCM Academic Press.


