St. John's University

St. John's Scholar

2022

DOES EMPATHIC ANGER MOTIVATE PEOPLE TO ACT ON PRO-DEFENDING COGNITIONS?

Adir Pinchot

DOES EMPATHIC ANGER MOTIVATE PEOPLE TO ACT ON PRO-DEFENDING
COGNITIONS?

A dissertation submitted in partial fulfillment

of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF PSYCHOLOGY

of

ST. JOHN'S COLLEGE OF LIBERAL ARTS AND SCIENCES

at

ST. JOHN'S UNIVERSITY
New York
by
Adir Pinchot

Date Submitted   5/15/2022   Date Approved   5/3/2022

_____   _____

Adir Pinchot   Ernest Hodges

ABSTRACT

DOES EMPATHIC ANGER MOTIVATE PEOPLE TO ACT ON PRO-DEFENDING
COGNITIONS?

Adir Pinchot

Recent theoretical and empirical work suggests that empathic anger represents a

form of anger that motivates bystanders to intervene and defend victims of aggression.

Prior research on defending behavior has identified cognitive correlates of defending, but

most studies failed to distinguish between different forms of defending and did not

evaluate how these cognitions interact with emotions, such as empathic anger, in

motivating or inhibiting defending behavior. This study attempted to address these

lacunae by analyzing whether empathic anger moderates the associations between

cognitions associated with defending (i.e., perspective taking, moral disengagement, and

self-efficacy for defending) and different types of defending behavior. The study also

tested whether the moderating effect of empathic anger is moderated by inhibitory

control. The study sample included 453 total participants, comprised of 291 adults from

the general population and 162 college undergraduate students. Factor analysis identified

two dimensions of defending behavior: victim-focused defending, comprised of

interventions focused on comforting the victim, and other-focused defending, comprised

of assertive and aggressive interventions targeting the aggressor and/or other bystanders.

The results indicated that empathic anger was a positive predictor of victim-focused

defending across models, whereas empathic anger was unrelated to or inversely predicted

other-focused defending after controlling for victim-focused defending and other covariates. Hierarchical regression analyses revealed that empathic anger moderated the impact of perspective taking on victim-focused defending and the effects of perspective taking and self-efficacy for defending on other-focused defending behavior. Empathic anger's moderating effect was in turn moderated by inhibitory control. These three-way interactions indicated that, specifically among those with low levels of inhibitory control, the associations between defending cognitions and defending behavior were weaker for people with a tendency to experience heightened empathic anger, compared with people who experience low levels of empathic anger. These results suggest that empathic anger constitutes a motivator of and/or an emotional reaction to the act of comforting the victim, to the exclusion of confrontational defending strategies, and that heightened empathic anger renders people less likely to act on certain pro-defending cognitions.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Researchers have generally viewed anger as an immoral emotion (Haidt, 2003)

that fuels vengeance, violence, and destructive interpersonal behavior (van Doorn et al.,

2014; Vitaglione & Barnett, 2003). Yet, theorists have long acknowledged that, "for

every spectacular display of angry violence, there are many more mundane cases of

people indignantly standing up for what is right or angrily demanding justice for

themselves or others" (Haidt, 2003, p. 856). Recent empirical research has begun to

explore positive forms of anger, identifying "empathic anger" as a unique emotion that

independently predicts defending behavior. We contend that the role of empathic anger in

promoting defending behavior can be better understood by applying recently developed

and empirically supported models that outline the interactions between emotions and

cognitions in shaping interpersonal behaviors.

Social Information Processing Models

Social-cognitive and social information processing (SIP) theories (Bandura, 1986;

Crick & Dodge, 1996) offer detailed descriptions of how individuals process and

interpret the cues presented in any given social situation and arrive at a decision as to

how to behave. SIP models assume that an individual's understanding and interpretation

of social situations influence their behaviors (Lemerise & Arsenio, 2000). Over the last

four decades, the development and study of SIP models have contributed to advances in

our understanding of social interactions and adjustment (Lemerise & Arsenio, 2000).

Crick and Dodge

Crick and Dodge (1994), in their reformulation of the SIP model, outline the six

steps involved in a child's processing of environmental cues. These include encoding of

external and internal cues, interpretation and mental representation of those cues, clarification or selection of a goal, response access or construction, response decision, and behavioral enactment. According to the model, each step is influenced by the biological capabilities and database of memories that the child brings into the social situation. The child's behavioral response in any given situation is a function of this multi-level processing. Crick and Dodge's formulation of the model is limited in that it does not account for the role of emotion in determining social behavior. Although the authors acknowledge the importance of emotion and speculate as to the role it might play in SIP, they do not attempt to construct a fully integrated model.

Lemerise & Arsenio

Lemerise and Arsenio's (2000) formulation of the SIP model represents an attempt to integrate "emotion processes" with the Crick and Dodge (1994) model. Lemerise and Arsenio hypothesize that cognitive processing influences one's emotions and "emotionality and regulatory ability will affect both processing of social (and emotional) information and decision making in challenging social situations" (p. 112). According to their model, an individual encodes, interprets, and utilizes his/her own internal emotions, as well as others' affective cues, in the formulation of goals and the decision-making process.

Lemerise and Arsenio's (2000) model accurately summarizes the bidirectional influence between emotions and the individual steps of the SIP model. Cognitive processes (e.g., hostile attributions) contribute to and shape the experience of emotions (e.g., anger) and the experience of emotions (e.g., sadness) colors the cognitive processes (e.g., attending more to negative cues). However, Lemerise and Arsenio's model fails to

adequately account for the role that emotion plays in motivating action (see Orobio de Castro et al., 2005) and moderating the links between social cognitions and behaviors.

The Read et al. (2010) Approach-Avoidance Model

Another approach to understanding social behavior emphasizes the central role of the behavioral approach and inhibition/avoidance systems. According to Read et al. (2010), personality is structured in a three-level hierarchical system involving two levels of motivation and an overarching control system, which interact to influence behavior. The domain-specific motivational system constitutes the lowest level of the hierarchical structure. This system includes the beliefs, goals, and plans that are specific to a particular behavioral domain and parallel the social information-processing mechanisms (Roos et al., 2016). The approach-avoidance systems represent the next level up in the hierarchical personality structure. These systems influence whether the domain-specific cognitions are expressed in behavior (Keltner et al., 2003; Read et al., 2010). Emotions play an important role in the activation of the approach and avoidance systems (Frijda, 1986). Examples of domain-specific motives that are motivated by the approach system include social bonding, exploration and play, caring and parenting, and mating. Domain-specific motives that are motivated by the avoidance system include avoiding physical harm and avoiding social separation. The third and highest level of the personality structure is the general inhibitory system, which regulates the approach-avoidance systems and moderates the interactions between the lower-level motivational systems (Read et al., 2010; Roos et al., 2016).

Read et al.'s (2010) model suggests that emotions activate the approach or avoidance systems, which, together with inhibitory control, moderate the behavioral

expression of domain-specific cognitions. The research literature on social aggression has produced empirical evidence supporting anger's role in activating the approach system and moderating the relationship between cognitions and behavior. Although most of the literature is based on child and adolescent samples, we cite this research with the assumption that the underlying processes remain consistent across development.

The Relationship between Aggressive Cognitions and Behaviors

Research on aggression has identified a number of aggressogenic cognitions, such as hostile intent attributions and self-efficacy for aggression, as predictors of aggressive behavior. Though these findings are consistent across cross-sectional studies, the effect sizes are small to moderate (Orobio de Castro, 2005; Roos et al., 2016). The correlations are particularly weak in studies for which shared method variance is not a problem (Runions & Keating, 2010). A longitudinal study of 913 fourth graders found a small, positive correlation ($r = .10, p < .05$) between hostile attribution bias and negative behaviors (i.e., intrusiveness, hostility, verbal aggression, and physical aggression) over a period of two years. The weak associations between aggressogenic cognitions and behaviors across studies suggest that "other factors are likely to alter the behavioral expression of aggressogenic thought" (Roos et al., 2016, p. 1009).

Anger as a Moderator

In applying Read et al.'s (2010) approach-avoidance model to this question, researchers hypothesized that anger moderates the behavioral expression of aggressogenic cognitions. Runions and Keating (2010) tested this theory, analyzing whether anger, whose expression is itself moderated by inhibitory control, moderates the relationship between hostile attributions and aggressive behavior. The researchers found

4

that anger and inhibitory control interacted with hostile attributions in predicting aggressive behavior, but only when behavior was assessed through mother-reports of aggression, rather than teacher-reports. Building upon Runions and Keating's (2010) study, Roos et al. (2016), in a study of 311 fifth and sixth grade students, evaluated anger and effortful control as moderators of the relationships between multiple aggressive cognitions (e.g., self-efficacy for aggression and normative beliefs about aggression) and aggressive behavior. The researchers measured aggressive behavior through peer nominations. Their results indicated that anger and effortful control moderate the relationship between self-efficacy for aggression and aggressive behavior, as well as the relationship between normative beliefs about aggression and aggressive behavior.

Although this line of research requires replication and expansion to include other socio-cognitive mechanisms, the studies conducted by Runions and Keating (2010) and Roos et al. (2016) provide empirical evidence supporting the theoretical view of anger as an approach-activating emotion that motivates children to act on their underlying aggressive cognitions. The question that our study will address is whether anger plays a similar role in the context of prosocial cognitions and behaviors.

Prosocial Behavior

Prosocial behavior refers to voluntary, intentional behavior that benefits another person (Eisenberg, 2003). This umbrella term includes a wide variety of behaviors, which can be altruistically or selfishly motivated. Altruistic behavior is defined as intrinsically motivated, voluntary behavior intended to benefit another person, whereas selfish prosocial behaviors aim at extrinsic benefits, such as social desirability, approval, and material compensation (Eisenberg, 2003; Eisenberg et al., 1989). Research on prosocial

behavior has provided substantial evidence in support of the stability of prosocial

behavior by elementary school and early adolescence (Eisenberg, 2003).

Defending Behavior

Defending behavior represents a subcategory of prosocial behavior that has been

the subject of extensive research. Defending strategies generally have been shown to

correlate with gender, as females tend to engage in more defending behaviors across

almost all studies (Meter et al., 2019; Jenkins and Nickerson, 2019). A large swath of the

research on defending behavior focuses on the behavior of bystanders in school bullying

scenarios (Pozzoli et al., 2017). The behavior of bystanders in such situations influences

whether the bullying will continue, student's sense of safety at school, and the victim's

wellbeing (Pozzoli et al., 2017). Despite the importance of and programs promoting

bystander intervention, research indicates that peers rarely intervene when witnessing

bullying, even when they object to it (Pöyhönen et al., 2010).

Types of Defending Behavior

The category of defending behavior includes a range of diverse strategies. When

intervening in a victimization situation, defenders select whether to focus their

intervention on the perpetrator, the victim, or other bystanders. In focusing on the victim,

they can act directly by supporting or comforting the victim or indirectly by seeking help

from a third-party, such as a medical professional (Meter et al., 2019). In focusing on the

perpetrator, defenders can also choose to act directly by confronting the aggressor or

indirectly through the help of a third-party, such as an authority figure or law

enforcement. Confronting a perpetrator can be done through a non-aggressive, assertive

stance or through verbal (e.g., yelling), relational (e.g., gossiping), and/or physical

aggression (Meter et al., 2019). Despite the notable differences between these defending strategies, most of the research literature fails to distinguish between them (Ma et al., 2019).

The Relationship between Defending Cognitions and Behaviors

Moral Disengagement

A number of cognitions have been identified as predictors of defending behavior (Meter & Card, 2015), including moral disengagement, self-efficacy, and perspective taking. Moral disengagement represents a "self-regulatory mechanism that involves disengaging immoral conduct from moral self-sanctions," enabling the individual to justify engaging in "morally questionable thoughts and behaviors" (Meter et al., 2019, p. 3). Bandura (1996) described four broad categories of techniques that can be used to morally disengage: cognitive restructuring; minimizing one's agentive role; minimizing, disregarding, or distorting the consequences; and dehumanizing or blaming the victim.

Individuals who are willing to "put their wellbeing at risk in order to defend victimized peers are thought to engage less in moral disengagement" (Meter et al., 2019, p. 3). A substantial swath of the research literature across the lifespan suggests that moral disengagement positively correlates with bullying behavior and negatively correlates with prosocial defending behavior (Caravita et al., 2012; Gini, 2006; Ma et al., 2019; Meter & Card, 2015; McCreary 2012; Obermann 2011; Thornberg & Jungert, 2013; Thornberg et al., 2017; Thornberg et al., 2015). Ma et al.'s (2019) meta-analysis of 17 studies that reported the association between moral disengagement and defending found a significant but small average effect size ($r = -.12$, $p < .001$) supporting an inverse relationship between these two constructs. Furthermore, longitudinal studies have reported small,

negative prospective associations between moral disengagement and defending behavior in adolescence (Doramajian & Bukowski, 2015; Gini et al., 2022; Sijtsema et al., 2014).

However, some findings suggest a more complex relationship between moral disengagement and defending. Certain cross-sectional and longitudinal studies have found that, when controlling for other variables, such as gender and age, moral disengagement was not significantly associated with defending behavior (Barchia and Bussey, 2011, Sjogren et al., 2020, Thornberg et al., 2020). Thornberg and colleagues (2020) suggested that "the negative association between moral disengagement and defending varies in weakness across samples in a way that could include an insignificant relationship in some samples" (p. 575). Gini et al.'s (2022) longitudinal study found that there was no significant main effect of moral disengagement on defending, but that moral disengagement negatively predicted defending for people with specific characteristics (e.g., high levels of moral identity). This suggests that other individual differences may moderate the relationship between moral disengagement and defending behavior.

There is also evidence that the association between moral disengagement and defending varies in important ways depending on the type of defending being studied, particularly when distinguishing between prosocial vs. aggressive forms of defending. In their study of 372 college students, Meter et al. (2019) found that the type of defending behavior predicted by moral disengagement depended upon the type of victimization to which the bystander was responding. In responding to an incident of physical aggression, moral disengagement was negatively correlated with comforting the victim ($r = -.15$, $p < .05$), positively associated with relationally aggressive defending ($r = .26$, $p < .05$), and unrelated to directly confronting the aggressor, reporting to authority, and verbally

aggressive defending. In responding to an incident of relational aggression, moral disengagement was negatively associated with directly confronting the perpetrator ($r = -.30, p < .01$) and comforting the victim ($r = -.26, p < .01$), positively associated with telling an authority figure ($r = .19, p < .01$) and engaging in relational aggression towards the perpetrator ($r = .28, p < .01$), and unrelated to verbally aggressive defending. These findings highlight the need to further explore and clarify the relationship between moral disengagement and defending and the necessity of distinguishing between different forms of defending and considering individual difference variables that may moderate this association.

Self-efficacy

Evaluation of self-efficacy represents another cognitive process that has been associated with defending behaviors. Self-efficacy refers to one's "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Students are more likely to defend a victim if they believe in their ability to intervene effectively (Barchia & Bussey, 2011). Early research on the links between self-efficacy and defending behavior yielded mixed results. Some studies found self-efficacy to be positively related to defending (Gini, Albiero, Benelli, & Altoe, 2008), whereas others found no association between the two constructs (Rigby & Johnson, 2006). Researchers have attributed this ambiguity to the use of overly general measures of self-efficacy (e.g., self-efficacy for assertion and general self-efficacy). In contrast, more recent cross-sectional (Pöyhönen et al., 2010; Sjogren et al., 2020; Thornberg et al., 2020) and longitudinal (Gini et al., 2022; van der Ploeg et al., 2017) studies utilizing domain-specific assessments of participant's self-efficacy for defending

yield more consistent evidence pointing to a small, but significant association between self-efficacy for defending and defending behavior.

Perspective Taking

Research on defending has also found evidence of associations between perspective taking and defending behavior. Perspective taking was defined by Davis (1983) as "a cognitive, intellectual reaction" that constitutes the "ability to understand the other person's perspective" (p. 113). It has been conceptualized as the cognitive component of empathy, an independent construct (Davis, 1983; Pöyhönen et al., 2010) that serves as a prerequisite for (Eisenberg & Fabes, 1990) and moderately correlates with (Pozzoli et al., 2017; Vitaglione & Barnett, 2003) affective empathy. A meta-analysis by van Noorden et al. (2015) found that five of six recent studies assessing the link between cognitive empathy and defending reported positive correlations ranging from $r = .14$ to $r = .52$. In a meta-analysis of 20 studies (consisting of 17,400 participants) that measured cognitive empathy and defending, Ma et al. (2019) found a small but significant average effect size ($r = .12$, $p < .001$) indicating that children and adolescents with higher cognitive empathy were more likely to engage in defending behavior. Despite the plethora of studies supporting the association between cognitive empathy and defending, some divergent studies support the contention that the two constructs are unrelated (van der Ploeg et al., 2017)

Although research has generally produced significant correlations between defending behavior and the three aforementioned defending cognitions (i.e., moral disengagement, self-efficacy for defending, and perspective taking/cognitive empathy), the correlations remain weak, ranging from small to moderate. Paralleling the literature

on aggresogenic cognitions and behaviors, this trend suggests that other factors are likely to alter the behavioral expression of cognitions related to defending. According to Read et al.'s (2010) approach-avoidance model, the experience of approach-activating emotions should moderate these associations, as they motivate individuals to act on these underlying cognitions. The research literature on aggressive behavior supports the notion that anger acts as an activator of the approach system, moderating the relationship between aggressive cognitions and behaviors. Although tests of anger's role as a moderator in the expression of defending cognitions do not exist, the theorizing of Hoffman and the new line of empirical research on empathic anger support the supposition that anger plays a similar role in the context of defending behavior.

Empathic Anger

Hoffman's theory of empathy posits that an initial "global" or general empathic response is subsequently shaped by a person's attributions, resulting in a specific empathic affect (Hoffman, 1989). This conceptualization diverges from previous conceptual and operational definitions of empathy, which conflated empathy with sadness (Vitaglione & Barnett, 2003). Hoffman theorized that attributing the cause of a person's suffering to the actions of a transgressor leads to an angry empathic response, which he referred to as "empathic anger" (Hoffman, 1989). The experience of empathic anger mobilizes energy and motivates a person to defend victims of aggression (Hoffman, 2001).

Consistent with Hoffman's theory, empirical research has produced evidence of associations between empathic anger and various forms of defending behavior. In a study of 191 college students, Vitaglione and Barnett (2003) found that, when controlling for

11

empathic sadness, self-reports of state and trait empathic anger predicted intent to help

victims and punish perpetrators (correlation coefficients ranged between .25 and .54, all

significant at the $p < .001$ level). Subsequent studies have confirmed the effects of third-

party anger on compensating victims (van Doorn et al., 2018) and some suggest that

empathic anger promotes compensation for the victim more than it promotes punishing

the aggressor (Gummerum et al., 2016).

Only a handful of studies have evaluated the impact of empathic anger on

bystander behavior in bullying situations and most of them evaluate empathic anger as "a

subcomponent of a more general emotional dimension," instead of assessing it

independently (Pozzoli et al., 2017, p. 89). To correct for this trend, Pozzoli et al. (2017)

conducted a study of 398 early adolescent children, in which the researchers administered

the trait empathic anger scale (TEA; Vitaglione & Barnett, 2003) and an eight-item, self-

report scale of defending and passive bystanding behaviors. Pozzoli and his colleagues

found a strong correlation between empathic anger and defending ($r = .57$, $p < .001$). The

researchers also conducted a path analysis that incorporated empathic concern,

perspective taking, and empathic anger. They found that empathic anger independently

predicted defending behavior and partially mediated the effects of empathic concern and

perspective taking on defending. The limited empirical literature on empathic anger and

defending behavior supports Hoffman's assertion that empathic anger mobilizes a

person's energies and motivates people to defend the victims of unfair treatment and

aggression.

A Model of Empathic Anger, Cognition, and Defending Behavior

According to Read et al.'s (2010) approach-avoidance model, the experience of emotion, which is regulated by the higher-level control system, influences the behavioral expression of underlying social cognitions. The research on aggression, which has found anger and inhibitory control to moderate the relationship between aggresogenic cognitions and behaviors, provides evidence that anger motivates an individual to act on their underlying social cognitions. Hoffman's theoretical work and the emerging empirical literature indicate that empathic anger is associated with defending behaviors. We contend that the role that empathic anger plays in motivating defending behaviors can be better understood through the application of Read et al.'s (2010) approach-avoidance model. We theorize that the experience of empathic anger, which is regulated by one's overarching control system, activates the approach system and motivates an individual to act on their underlying defending cognitions. In other words, one's tendency to experience empathic anger and capacity for inhibitory control moderates the associations between the cognitive processes that underlie defending behavior (i.e., self-efficacy for defending, moral engagement, and perspective taking) and the tendency to engage in defending behaviors. The present study will test this moderation model of defending behavior, which, to our knowledge, has not been evaluated by previous research.

We hypothesized that an increased tendency to experience empathic anger would strengthen the association between defending-related cognitions and defending behavior and that this moderating effect of empathic anger would be most significant in those with a decreased capacity for inhibitory control. Consequently, we expected defending cognitions to be maximally related to defending behavior in individuals who tend to

experience high levels of empathic anger and low levels of inhibitory control. In contrast, defending cognitions were expected to be minimally related to defending behavior when individuals experience low levels of empathic anger and high levels of inhibitory control. The hypothesized two and three-way interactions are depicted in Figures 1-3.
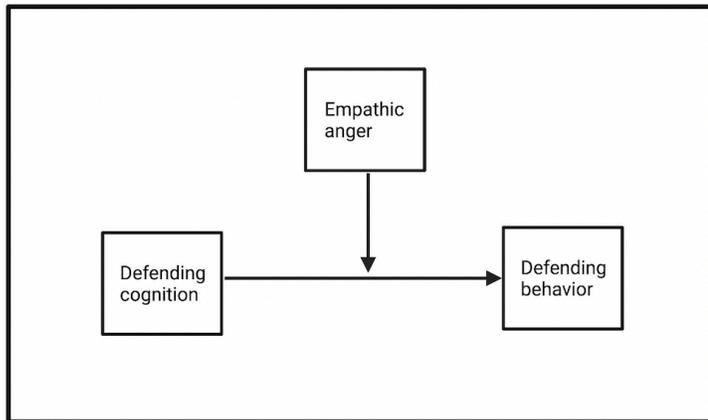
Figure 1. Conceptual diagram of the hypothesized moderating effect of empathic anger.
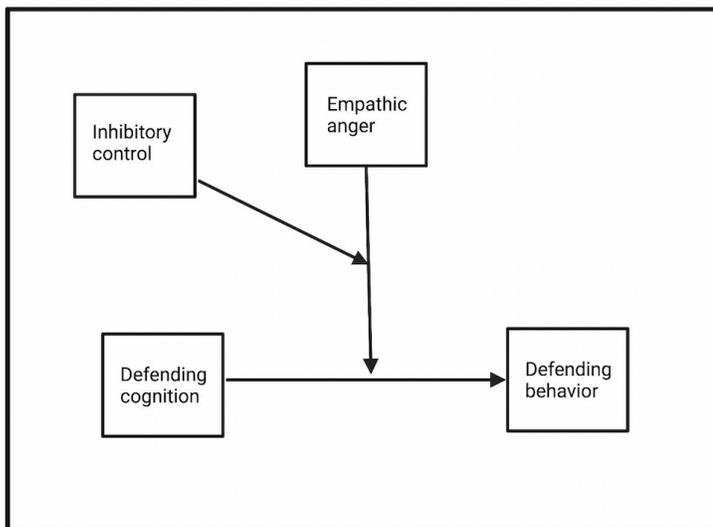
Figure 2. Conceptual diagram of the hypothesized moderating effects of empathic anger and inhibitory control.
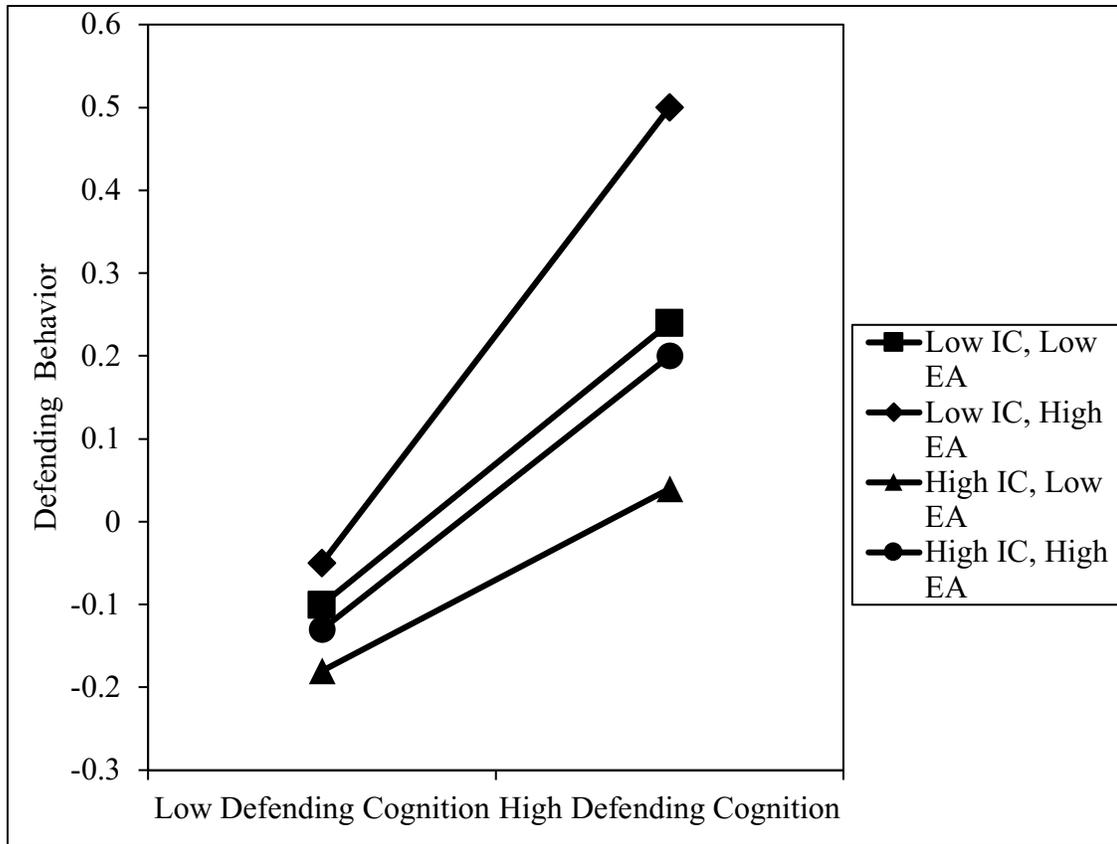
Figure 3. The hypothesized three-way interaction of the pro-defending cognitions,

empathic anger, and inhibitory control in predicting defending behavior.

METHOD

Participants and Procedure

Participants were recruited from introductory psychology classes at St. John's University and through the Amazon Mechanical Turk (Amazon MTurk). The undergraduate sample was provided with class credit for participation. The Amazon MTurk sample was recruited from the general population and received a small monetary compensation for participation. Prior to beginning the survey, participants were provided informed consent electronically.

All questionnaires were administered in randomized order to each participant through the Qualtrics online survey software. The questionnaires included a survey of demographic information, the perspective taking subscale of the interpersonal reactivity index, the moral disengagement scale, a measure of self-efficacy for defending, the trait empathic anger scale, the inhibitory control subscale of the adult temperament questionnaire, and a measure of defending behavior for both in-person and cyber aggression.

The study sample included 453 total participants, comprised of 291 adults from the general population (153 men and 138 women) and 162 college undergraduate students (25 men and 137 women). The mean age of the adults was 41.08 ($SD = 12.24$), ranging from 21 to 95. The mean age of the undergraduates was 19.22 ($SD = 1.33$), ranging from 18 to 25. The racial/ethnic composition of the overall sample was as follows: 67.3% White/Non-Hispanic, 10.8% Black/African American, 9.3% Hispanic/Latinx, 7.7% Asian/Pacific Islander, 1% American Indian/Native American, and 4% Other.

MEASURES

Interpersonal Reactivity Index (IRI). Participants completed the perspective

taking subscale of the Interpersonal Reactivity Index (IRI; Davis, 1983), a 7-item self-

report measure of an individual's capacity for and tendency to engage in perspective

taking when interacting with other people. Each item on the IRI is a statement about the

participant, which the participant responds to on a four-point Likert scale. For the

purposes of this study, a seven-point Likert scale was used, ranging from 1 (Very untrue

of me) to 7 (Very true of me). Sample items include "I try to look at everybody's side of a

disagreement before I make a decision" and "I sometimes find it difficult to see things

from another person's point of view" (reverse coded). Higher scores reflect increased

capacity for and use of perspective-taking. Cronbach's alpha was .89.

Moral Disengagement Scale (MDS). The participants also completed the moral

disengagement scale (Bandura et al., 1996). The MDS is a 32-item measure that assesses

individual's adherence to beliefs and thought processes that people use to disengage from

moral self-sanctions. The wording of the items was changed (e.g., references to "kids"

switched to "people") so that they were appropriate for an adult sample (see Meter et al.,

2019). Whereas the original study used a three-point Likert scale, for the purposes of this

study, a seven-point Likert scale was used, ranging from 1 (Strongly disagree) to 7

(Strongly agree). The scale consists of 8 subscales representing the various mechanisms

of moral disengagement: Moral justification, Euphemistic language, Advantageous

comparison, Displacement of responsibility, Diffusion of responsibility, Distorting

consequences, Attribution of blame, and Dehumanization. Each participant's responses

were aggregated to create an overall moral disengagement score. Low scores on the

moral disengagement scale reflect higher levels of moral *engagement*. Cronbach's alpha was .97.

Self-efficacy for Defending (SED). Self-efficacy beliefs for defending behavior were assessed using a five-item scale based on Thornberg et al.'s (2017) scale of self-efficacy for defending. Each item is a statement about the participant, which the participants responded to on a seven-point Likert scale, ranging from 1 ("Very untrue of me") to 7 ("Very true of me"). Sample items include "I feel that I'm very good at telling off/standing up to people who are mean towards another person" and "I feel that I'm very good at helping people who are being bullied." Higher scores reflect higher levels of self-efficacy for defending. Thornberg et al. (2017) reported a Cronbach alpha of 0.90. In this study, Cronbach's alpha was .91.

Trait Empathic Anger Scale (TEA). The participants were also asked to complete the Trait Empathic Anger Scale (TEA; Vitaglione & Barnett, 2003), which consists of seven items (e.g., "I feel angry for a person when his or her feelings have been hurt by someone else") rated on a five-point scale (ranging from 1 = "does not describe me very well" to 5 = "describes me very well"). In this study, a seven-point Likert scale was used, ranging from 1 ("Very untrue of me") to 7 ("Very true of me").

Pozzoli et al.'s (2017) confirmatory factor analysis supported the one-factor model for this scale and indicated that the loading of one item (i.e., "When someone I know gets angry at someone else, I feel angry at that person too) was very low. As such, we removed that item. The resulting scale contained six items. High scores reflect a tendency to experience empathic anger. Cronbach's alpha was .86.

Adult Temperament Questionnaire (ATQ). Participants completed the Inhibitory control subscale of the Adult Temperament Questionnaire (ATQ; Evans & Rothbart, 2007). The subscale consists of 12 items. Participants responded to the statements on a seven-point Likert scale, ranging from 1 ("Very untrue of me") to 7 ("Very true of me"). Cronbach's alpha was .76.

Defending Behavior Scale (DBS). Defending victimized peers was assessed using the Defending Behavior Scale (Lambe & Craig, 2020). The scale presents 18 items describing possible behavioral responses when witnessing acts of victimization. Lambe and Craig (2020) asked participants to respond on a five-point scale indicating the frequency with which they engaged in the various defending behaviors over the past few months. In this study, participants were asked to think about past situations and to respond on a seven-point Likert scale ranging from 1 ("Very untrue of me") to 7 ("Very true of me").

The scale includes four subscales reflecting different types of defending: comforting (e.g., "I comforted the person being victimized afterwards") , aggressive defending (e.g., "I took revenge on the person doing the bullying), report to authority (e.g., "I reported the situation to the people in charge"), and solution-focused defending (e.g., "I tried to sort out the problem by talking to the people involved in the bullying"). Each subscale consists of 4-5 items.

In this study, the DBS was administered twice to assess participants' responses to witnessing in-person acts of aggression and cyber bullying. The scale was adapted so that the wording was not specific to children/school settings (e.g., changed "told a parent" to "told a law enforcement/safety official"). The Cronbach's alpha for the DBS total score was .92 when asking about cyber bullying and .91 when asking about in-person aggression.

RESULTS

Initial Analyses

The variables were examined for normality, linearity, and heteroscedasticity prior to the t-test, correlation, and hierarchical regression analyses. Potential outliers were identified through examination of box-plots and stem-and-leaf plots. Normality and linearity were assessed via the evaluation of P-P plots, histograms, studentized deleted residuals, Cook's Distance, leverage values, standardized DFBeta values, and standardized DFFits values. Heteroscedascity was assessed by examination of tolerance and variable inflation factor multicollinearity statistics in the regression analyses. Skewness and kurtosis were assessed for all variables. The results of these evaluations did not necessitate the winsorization or transformation of the variables in the study.

Factor Analysis. Initial analysis of the bivariate correlations among the dependent variables indicated that the subscales of the defending behavior scale were highly interrelated (see Table 1). As such, a principal components analysis was conducted to determine whether the subscales should be analyzed independently or consolidated into factors. Using an oblique (nonorthogonal) rotation with Kaiser Normalization the rotation converged in 9 iterations. The scree plot (Figure 4) indicated the presence of two factors with eigenvalues above 1. Aggressive and solution-focused defending (in-person and cyber) loaded strongly onto the first factor. Comforting (in-person and cyber) loaded strongly onto the second factor. Report to authority (in-person and cyber) was associated with both factors. The factor loadings are reported in Table 2. The standardized factor scores were saved as two variables, which served as the dependent variables in this study. The first factor, made up mostly of the aggressive and solution-focused subscales (both

in-person and cyber), was labeled "other-focused Defending," as these subscales are generally focused on assertive and aggressive interventions that target the perpetrator and/or other bystanders. The second factor was labeled "victim-focused defending," as it is comprised mostly of the comforting subscale, which is focused on supporting the victim.

Table 1
Summary of correlations among the various forms of defending

(N=453)	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. C	…	.18**	.44**	.49**	.70**	.12**	.33*	.37**
2. AD	…	…	.47**	.67**	.23**	.84**	.50**	.62**
3. RTA	…	…	…	.68**	.52**	.41**	.77**	.63**
4. SFD	…	…	…	…	.52**	.57**	.61**	.78**
5. C-c	…	…	…	…	…	.23**	.52**	.54**
6. AD-c	…	…	…	…	…	…	.51**	.66**
7. RTA-c	…	…	…	…	…	…	…	.69**
8. SFD-c	…	…	…	…	…	…	…	…

Note. *p < .05, **p < .01. C = Comforting, AD = Aggressive Defending, RTA = Report to Authority, SFD = Solution-focused Defending, C-c = Cyber Comforting, AD-c = Cyber Aggressive Defending, RTA-c = Cyber Report to Authority, SFD-c = Cyber Solution-focused Defending.
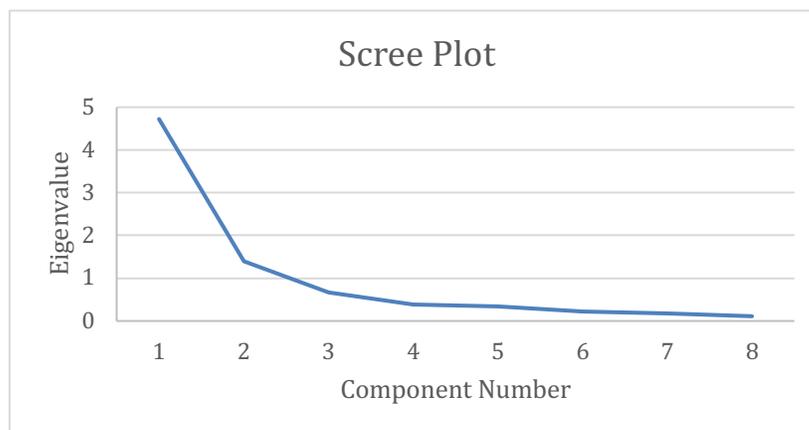
Figure 4. Scree plot indicating the number of factors identified in the principal components analysis

Table 2

Factor loadings from the principal components analysis of the DBS subscales

DBS subscales	Component 1	Component 2
Comforting	-.113	.909
Aggressive Defending	.950	-.148
Report to Authority	.485	.512
Solution-focused Defending	.659	.385
Comforting (cyber)	.052	.867
Aggressive Defending (cyber)	.973	-.224
Report to Authority (cyber)	.589	.388
Solution-focused Defending (cyber)	.730	.301

Differences between samples. A set of t-tests were conducted comparing the adult community and student samples on all independent and moderating variables. The results indicated that the student sample scored significantly higher on perspective taking ($t = 2.96$, $p < .01$), self-efficacy for defending ($t = 4.50$, $p < .001$), and empathic anger ($t = 7.69$, $p < .001$). The adult sample scored higher than the students on moral disengagement ($t = -3.80$, $p < .001$) and inhibitory control ($t = -6.92$, $p < .001$). In order to control for the differences between these groups the scores were standardized, within each sample, on all of the variables used in the study. Descriptive statistics and differences between the groups prior to standardization are reported in Table 3.

Table 3

Descriptive statistics and groups differences between undergraduate and general adult samples for unstandardized dependent and independent variable scales

Variable	Undergraduates M (SD)	General M (SD)	t (df)	Cohen's d
PT	5.16 (.88)	4.88 (1.08)	2.96* (451)	.27
MD	2.80 (.66)	3.18 (1.48)	-3.80** (451)	-.31
SED	4.63 (1.01)	4.13 (1.031)	4.50** (451)	.41
EA	5.71 (.84)	4.96 (1.23)	7.69** (451)	.68
IC	4.15 (.67)	4.68 (.94)	-6.92** (451)	-.62

*p < .01, **p < .001

Note. Cohen's d uses the pooled standard deviation. PT = Perspective Taking, MD = Moral Disengagement, SED = Self-efficacy for defending, EA = Empathic Anger, IC = Inhibitory Control.

Correlations. Correlations were computed to evaluate the relationships among the variables and evaluate whether that they are consistent with past research. Pearson's *r* correlations are reported in Table 4. Perspective taking was positively correlated with self-efficacy, empathic anger, and inhibitory control and inversely associated with moral disengagement. Moral disengagement was inversely associated with empathic anger and inhibitory control, but positively related to self-efficacy for defending. Self-efficacy for defending positively correlated with perspective taking, moral disengagement, and empathic anger but was unrelated to inhibitory control. The two moderating variables, empathic anger and inhibitory control, were positively correlated.

The two defending dimensions, other-focused and victim-focused defending, were positively correlated with each other. Other-focused defending was positively correlated with moral disengagement and self-efficacy for defending, inversely related to perspective taking and inhibitory control, and unrelated to empathic anger. Victim-focused defending was positively correlated with perspective taking, self-efficacy for defending, and empathic anger. It was unrelated to moral disengagement and inhibitory control.

Regarding the covariate of gender, positive correlations with the categorical sex variable indicated that higher scores on the variable of interest were associated with being female. Men tended to be higher on moral disengagement, whereas women scored higher on empathic anger and victim-focused defending. Regarding the covariate of age, increased age was associated with increases in inhibitory control and decreases in moral disengagement and victim-focused defending.

Table 4

Summary of correlations among forms of defending behavior, predictor variables, and covariates

(N=453)	OFD	VFD	PT	MD	SE	EA	IC	Sex
OFD	…	…	…	…	…	…	…	…
VFD	.37**	…	…	…	…	…	…	…
PT	-.11*	.40**	…	…	…	…	…	…
MD	.59**	-.05	-.28**	…	…	…	…	…
SE	.50**	.54**	.24**	.22**	…	…	…	…
EA	-.02	.41**	.43**	-.22**	.30**	…	…	…
IC	-.31**	.08	.39**	-.36**	-.02	.12**	…	…
Sex	-.02	.32**	.09	-.14**	.09	.22**	-.03	…
Age	-.03	-.15**	.04	-.11*	-.02	.02	.11*	-.21**

Note. *p < .05, **p < .01. OFD = Other-focused Defending, VFD = Victim-focused Defending, PT = Perspective Taking, MD = Moral Disengagement, SED = Self-efficacy for defending, EA = Empathic Anger, IC = Inhibitory Control. Coding for sex variable: 0 = male, 1 = female

Regression Analyses

Six hierarchical regression models were analyzed, three for each of the two defending dimensions, to examine the moderating influence of empathic anger and inhibitory control on the relationships between defending-related cognitions (i.e., perspective taking, moral disengagement, and self-efficacy for defending) and the outcome variables (i.e., victim-focused defending and other-focused defending). The hierarchical regressions each consisted of four steps: the covariates of gender and age (Step 1), the main effects of the defending-related cognition, empathic anger, and

inhibitory control (Step 2), the three two-way interaction terms (Step 3), and the three-way interaction term (Step 4). Significant two-way and three-way interactions were further probed through PROCESS (Hayes, 2012) using models 1 and 3 (Figures 5 and 6).

Model 1

Conceptual Diagram
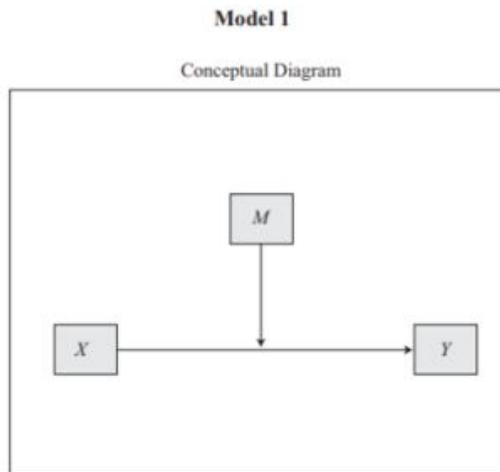
Figure 5. Hayes' (2012) conceptual diagram of a single moderating effect

Model 3

Conceptual Diagram
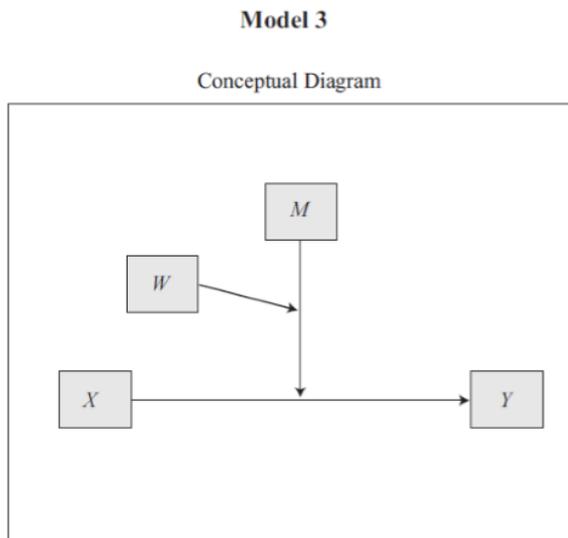
Figure 6. Hayes' (2012) conceptual diagram of two moderating effects

A number of general patterns are worth noting. The covariates alone (step 1), due to the predictive power of the gender covariate, were significant in predicting victim-focused defending but not other-focused defending. The introduction of the main effect variables (Step 2) introduced significant change in R^2 across all six regressions. Steps 3 and 4 introduced no significant change in R^2 when victim-focused defending was the dependent variable, whereas steps 3 and 4 introduced some small but significant increases in R^2 when other-focused defending was the dependent variable. Tables 5 and 6 display the ΔR^2 statistics, standardized regression coefficients, and total R^2 for the three regression analyses when predicting victim-focused and other-focused defending, respectively.

Table 5
Summary of hierarchical regression analyses for victim-focused defending

| | Cognitive Variables | | | | | |
| | Perspective Taking | | Moral Disengagement | | Self-efficacy | |
Predictor	$\triangle R^2$	β	$\triangle R^2$	β	$\triangle R^2$	β
Step 1	.11**		.11**		.11**	
Sex		.31**		.31**		.31**
Age		-.08		-.08		-.08
Step 2	.19**		.13**		.31**	
Sex		.22**		.24**		.22**
Age		-.11**		-.10*		-.10**
Cognition		.30**		.08		.45**
EA		.24**		.36**		.21**
IC		-.04		.09		.08*
Step 3	. 00		.01		.00	
Cognition x		-.05		-.02		-.01
Cognition x		-.02		-.11*		.07
EA x IC		.01		-.04		-.05
Step 4	.01		.00		.00	
IC x EA x		.11*		-.02		.06
Cognition						
Total R^2	.31		.25		.43	
n		453		453		453

29

Table 6
Summary of hierarchical regression analyses for other-focused defending

	Cognitive Variables					
	Perspective Taking		Moral		Self-efficacy	
Predictor	$\triangle R^2$	β	$\triangle R^2$	β	$\triangle R^2$	β
Step 1	.00		.00		.00	
Sex		-.03		-.03		-.03
Age		-.03		-.03		-.03
Step 2	.10**		.37**		.36**	
Sex		-.04		.04		-.05
Age		.00		.06		.01
Cognition		.01		.58**		.54**
EA		.03		.12**		-.13**
IC		-.32**		-.12**		-.29**
Step 3	.02*		.01		.00	
Cognition x		-.13*		.04		-.06
Cognition x		-.10		-.06		-.04
EA x IC		.10		.01		.03
Step 4	.01*		.01		.01**	
IC x EA x		.10**		-.00		.11**
Cognition						
Total R^2	.13		.38		.38	
n	453		453		453	

Note. *p < .05, **p < .01

Prediction of Victim-focused Defending

In the regression models predicting victim-focused defending, sex was a
significant predictor and had a positive regression weight, indicating that women were
more likely to engage in victim-focused defending. Age was not a significant predictor.
Each of the three models included one of the defending-related cognitions: perspective
taking, moral disengagement, or self-efficacy for defending. Perspective taking and self-

efficacy for defending were significant predictors of victim-focused defending and had positive regression weights (perspective taking $\beta = .30$, $p < .01$; self-efficacy $\beta = .45$, $p < .01$). Moral disengagement did not significantly predict victim-focused defending. Empathic anger was a significant predictor and had a positive regression weight across the three regression models predicting victim-focused defending. Inhibitory control was only a significant predictor of victim-focused defending in the self-efficacy for defending model. It had a positive regression weight ($\beta = .08$, $p < .05$). Inhibitory control was unrelated to victim-focused defending in the perspective taking and moral disengagement models.

Only two of the interactions in the regression models predicting victim-focused defending were significant: the two-way interaction between inhibitory control and moral disengagement and the three-way interaction between perspective taking, empathic anger, and inhibitory control. The significant two-way interaction was explored further via PROCESS using model 1 (Figure 5). Moral disengagement did not significantly predict victim-focused defending at either level of inhibitory control. However, there was a significant difference between the group of people who scored low on both moral disengagement and inhibitory control and the group that scored low on moral disengagement but high on inhibitory control. The low moral disengagement, low inhibitory control group was the least likely to engage in victim-focused defending, while the low moral disengagement, high inhibitory control group was the most likely to engage in victim-focused defending. The conditional effects of moral disengagement in predicting victim-focused defending at values of inhibitory control (the moderator) are displayed in Table 7.
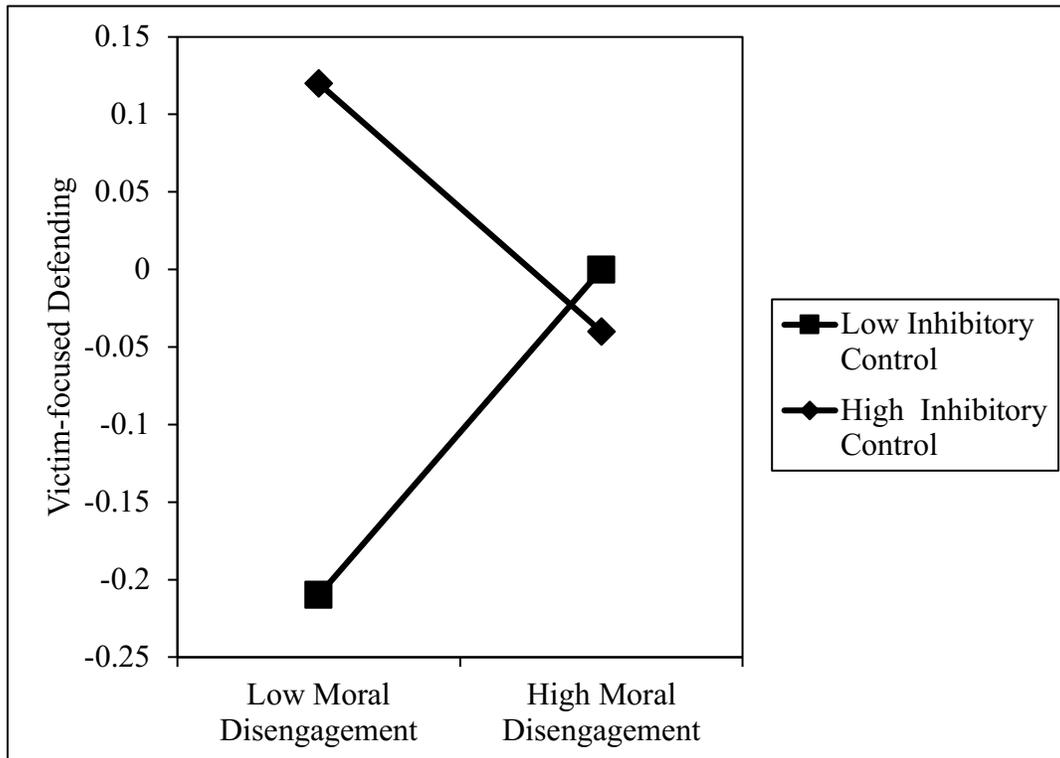
Figure 7. The two-way interaction of inhibitory control and moral disengagement for defending in predicting victim-focused defending.

Table 7
Conditional effects of moral disengagement in predicting victim-focused defending at values of inhibitory control (the moderator)

Value of Inhibitory Control	Effect	*p* value
-1	.11	.12
1	-.07	.29

The three-way interaction between perspective taking, empathic anger, and inhibitory control was explored using PROCESS model 3 (Figure 6). Perspective taking significantly predicted victim-focused defending regardless of the levels of the moderator

variables (i.e., empathic anger and inhibitory control). However, the link between perspective taking and victim-focused defending was stronger in individuals who were low on both inhibitory control and empathic anger, compared to those who were low on inhibitory control but high on empathic anger. This two-way interaction between empathic anger and perspective taking was only significant at low levels of inhibitory control. The conditional effects of perspective taking in predicting victim-focused defending at values of empathic anger and inhibitory control are shown in Table 8. The tests of the two-way interaction between empathic anger and perspective taking at values of inhibitory control are displayed in Table 9.

Figure 8. The three-way interaction of perspective taking, empathic anger, and inhibitory control in predicting victim-focused defending.

Table 8

Conditional effects of perspective taking in predicting victim-focused
defending at values of empathic anger and inhibitory control (the moderators)

Value of Inhibitory Control	Value of Empathic Anger	Effect	*p* value
-1	-1	.42	.00
-1	1	.18	.03
1	-1	.30	.00
1	1	.32	.00

Table 9

Tests of the two-way interaction between empathic anger and moral disengagement at
values of inhibitory control.

Value of Inhibitory Control	Effect	*p* value
-1	-.12	.01
1	.01	.86

Supplemental Analyses in the prediction of victim-focused defending

In order to account for the moderate correlation between the victim-focused and

other-focused dimensions of defending ($r = .37, p < .01$), the initial regression analyses

were compared with a second set of regression analyses that added the other defending

dimension as a covariate. Some notable differences between the results of these analyses

emerged. Moral disengagement, which was not a significant predictor of victim-focused

defending in the initial regression analyses, was a significant, inverse predictor of victim-

focused defending when other-focused defending was added as a covariate. Another

notable difference concerned inhibitory control. In the initial regressions predicting

victim-focused defending, inhibitory control was a significant, positive predictor only in

the model including self-efficacy. However, when other-focused defending was added as a covariate, inhibitory control was a significant, positive predictor of victim-focused defending across all three models. Finally, neither the significant two-way nor the significant three-way interactions from the initial analyses remained significant when other-focused defending was added as a covariate.

Prediction of Other-focused Defending

Neither the sex nor the age covariates significantly predicted other-focused defending. Moral disengagement and self-efficacy for defending predicted other-focused defending and had positive regression weights. Perspective taking was not a significant predictor of other-focused defending. Empathic anger was a significant predictor of other-focused defending only in the moral disengagement and self-efficacy for defending models. It had a positive regression weight in the moral disengagement model and a negative regression weight in the self-efficacy model. Inhibitory control was a significant predictor of other-focused defending and had a negative regression weight across all three models.

The three-way interactions in the perspective taking and self-efficacy models predicting other-focused defending were significant. These three-way interactions were explored further via PROCESS using model 3. The three-way interaction between inhibitory control, empathic anger, and perspective taking in predicting other-focused defending revealed that the two-way interaction between empathic anger and perspective taking was only significant at low levels of inhibitory control (Figure 9). Perspective taking was a positive predictor of other-focused defending only in the group that scored low on both inhibitory control and empathic anger, but not for the group that was low in

inhibitory control and high in empathic anger. Perspective taking was also not related to

other-focused defending in the two groups that were high in inhibitory control. The

conditional effects of perspective taking in predicting other-focused

defending at values of empathic anger and inhibitory control are shown in Table 10. The

tests of the two-way interaction between empathic anger and perspective taking at values
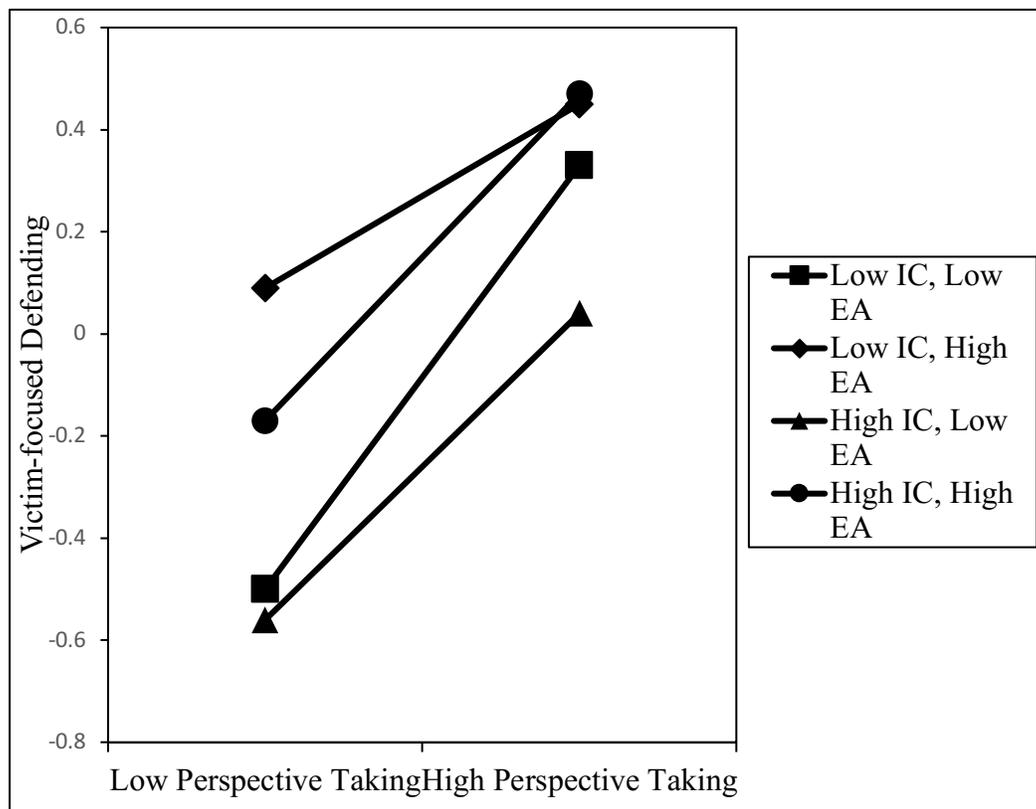
of inhibitory control are displayed in Table 11.

Figure 9. The three-way interaction of perspective taking, empathic anger, and inhibitory

control in predicting other-focused defending.

Table 10

Conditional effects of perspective taking in predicting other-focused
defending at values of empathic anger and inhibitory control (the moderators)

Value of Inhibitory Control	Value of Empathic Anger	Effect	p value
-1	-1	.25	.00
-1	1	-.10	.31
1	-1	.00	.96
1	1	-.11	.24

Table 11

Tests of the two-way interaction between empathic anger and perspective taking at values
of inhibitory control

Value of Inhibitory Control	Effect	p value
-1	-.17	.00
1	-.05	.22

The significant three-way interaction between inhibitory control, empathic anger, and self-efficacy for defending in predicting other-focused defending revealed that self-efficacy for defending significantly predicted other-focused defending regardless of the levels of the moderator variables (i.e., empathic anger and inhibitory control). However, there was a two-way interaction at low levels of inhibitory control, such that the link between self-efficacy for defending and other-focused defending was stronger in individuals who were low on both inhibitory control and empathic anger, compared to those who were low on inhibitory control but high on empathic anger (Figure 10). The conditional effects of self-efficacy for defending in predicting other-focused defending at values of empathic anger and inhibitory control are shown in Table 12. The

tests of the two-way interaction between empathic anger and self-efficacy for defending

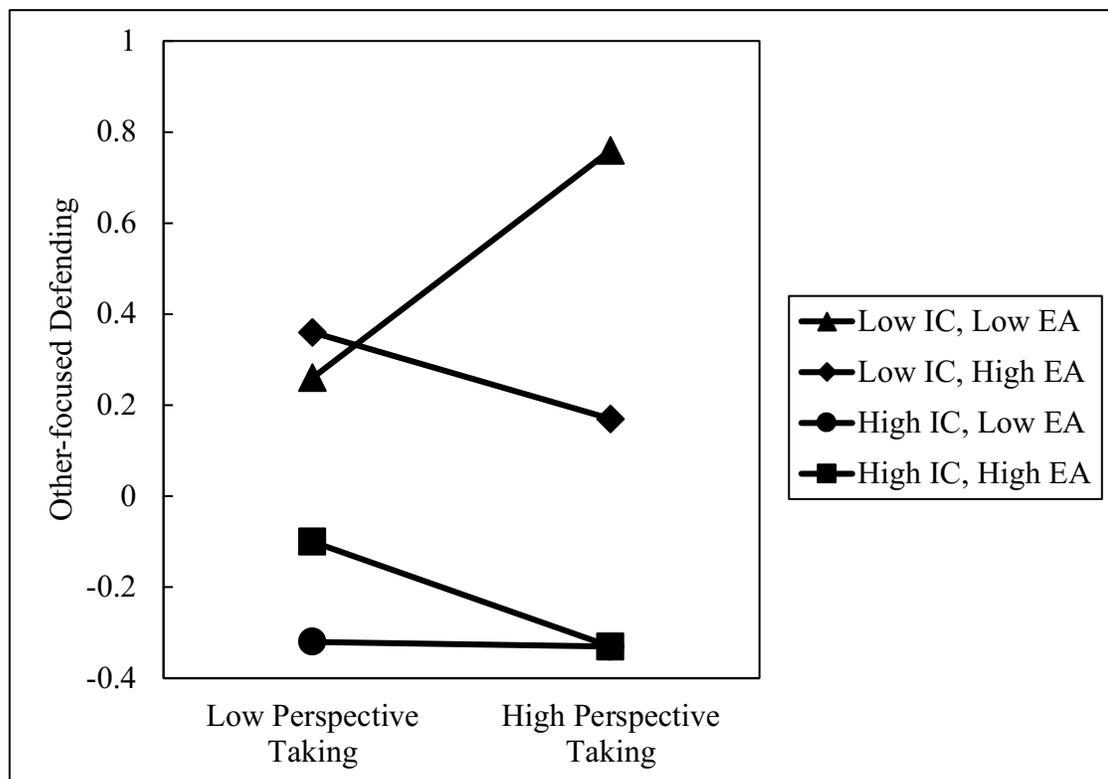at values of inhibitory control are displayed in Table 13.
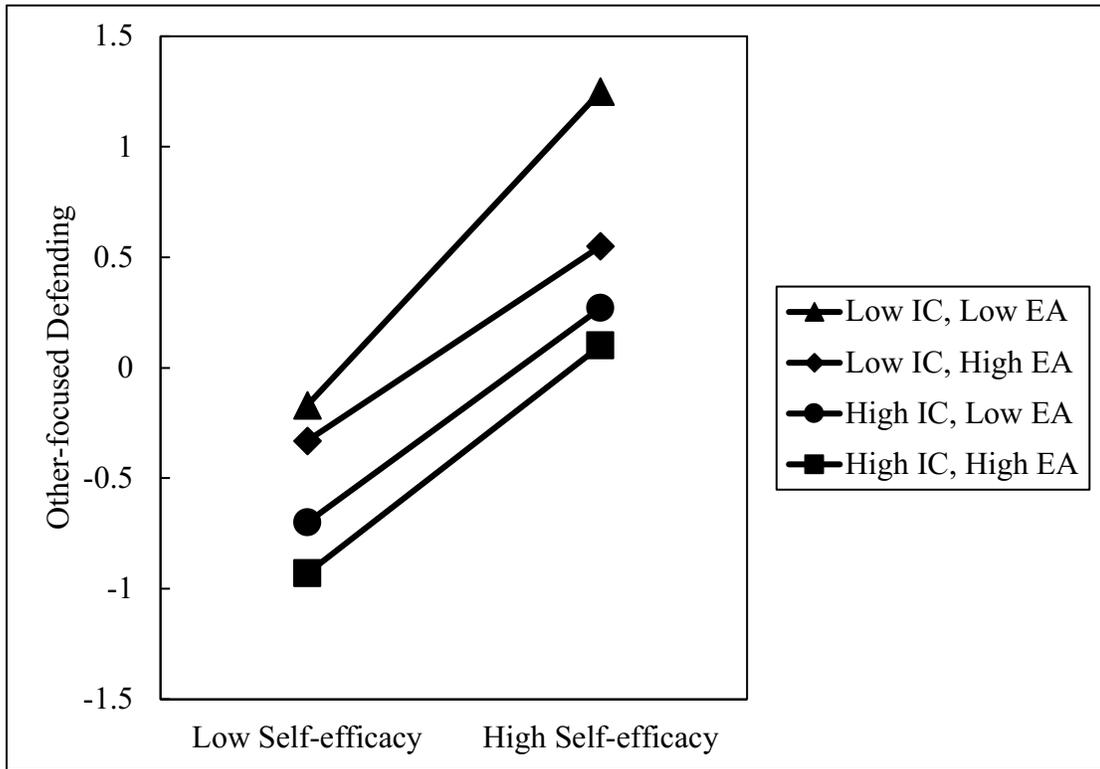
Figure 10. The three-way interaction of self-efficacy for defending, empathic anger, and

inhibitory control in predicting other-focused defending.

Table 12
Conditional effects of self-efficacy for defending in predicting other-focused
defending at values of empathic anger and inhibitory control (the moderators)

Value of Inhibitory Control	Value of Empathic Anger	Effect	*p* value
-1	-1	.71	.00
-1	1	.44	.00
1	-1	.48	.00
1	1	.52	.00

Table 13

Tests of the two-way interaction between empathic anger and self-efficacy for defending at values of inhibitory control

Value of Inhibitory Control	Effect	*p* value
-1	-.13	.01
1	.02	.68

Supplemental Analyses in prediction of other-focused defending

The initial regression analyses predicting other-focused defending were compared with a second set of regression analyses that added victim-focused defending as a covariate. Perspective taking and empathic anger were significant, inverse predictors of other-focused defending in the perspective taking model only after the addition of victim-focused defending as a covariate. Empathic anger was a significant predictor of other-focused defending in the moral disengagement model in the first set of analyses but was not significant when controlling for victim-focused defending. Similarly, the three-way interaction between perspective taking, empathic anger, and inhibitory control was significant in the first analyses, but only marginally significant when controlling for victim-focused defending.

DISCUSSION

The role of anger in promoting defending behavior has been largely ignored in the field of psychological research despite the ubiquity of instances in which people angrily demand justice or intervene to defend others from aggression (Pozzoli et al., 2017). Furthermore, studies of defending behavior and its correlates have generally operationalized defending behavior as a single, broad construct that predominantly includes prosocial and nonconfrontational defending behaviors and fails to incorporate more confrontational and/or aggressive forms of defending (Ma et al., 2019; Reijntjes et al., 2016). This study sought to address these lacunae in the research literature by exploring the role that empathic anger plays in motivating different forms of defending behavior. More specifically, we explored how empathic anger interacts with defending-related cognitions (i.e., perspective taking, moral disengagement, and self-efficacy for defending) and inhibitory control in predicting victim-focused and other-focused defending. We hypothesized, based on Read et al.'s (2010) approach-avoidance model and the literature on anger and aggressive behavior (Roos et al., 2016; Runions & Keating, 2010), that an increased tendency to experience empathic anger would strengthen the associations between the defending-related cognitions (i.e., perspective taking, moral disengagement, and self-efficacy for defending) and defending behaviors and that the moderating effect of empathic anger would be most significant among people with a decreased capacity for inhibitory control.

Our study focused on two defending dimensions that emerged from our factor analysis: a victim-focused defending dimension comprised mainly of nonconfrontational, comforting behaviors and an other-focused defending dimension comprised primarily of

aggressive or assertive interventions that target the perpetrator and/or other bystanders. Although we asked participants to indicate their engagement in these defending behaviors when witnessing both in-person aggression and cyber bullying, the results of the factor analysis indicated that participants' responses in these scenarios loaded onto the same factors and, therefore, did not warrant independent consideration. This may be due to the nearly identical measures used in our study to assess responses to in-person victimization and cyber bullying. Future studies should develop measures that better capture the unique set of defending strategies available to people in the cyber environment.

The results of our factor analysis are also notable because of the inclusion of both aggressive defending behaviors and prosocial, solution-focused defending behaviors in a single dimension. This finding parallels the empirical and theoretical differentiation between bully- and victim-oriented defending (Reijntjes et al., 2016). It also supports Meter et al.'s (2019) supposition that participants who engage in prosocial, assertive forms of defending may perceive certain forms of aggressive defending (e.g., verbal aggression) as equally acceptable ways of confronting an aggressor.

Our findings included associations between variables that supported or diverged from prior research in notable ways. A substantial number of previous research studies have found that girls tended to engage in higher levels of defending (Barchia & Bussey, 2011; Caravita, Gini, & Pozzoli, 2012; Pöyhönen et al., 2010; van der Ploeg, et al., 2017). In contrast, a study by Garandeau et al. (2019) found that being female was associated with victim-oriented defending, whereas being male was associated with bully-oriented defending. Our findings indicated that women were more likely to engage in victim-focused defending but that sex did not significantly predict other-focused defending.

41

These results and Garandeau et al.'s (2019) findings suggest that the significant associations between sex and defending behavior found in previous studies may be a function of the unidimensional, nonconfrontational defending construct utilized by these studies. Women and girls may be more likely to engage in these nonconfrontational defense strategies because they align with stereotypically female gender roles and cultural expectations (Ma et al., 2019).

Self-efficacy for defending positively predicted both defending dimensions after controlling for covariates, corroborating recent cross-sectional (e.g., Pöyhönen et al., 2010; Sjogren et al., 2020; Thornberg et al., 2020) and longitudinal (Gini et al., 2022; van der Ploeg et al., 2017) studies. Perspective taking positively predicted victim-focused defending after controlling for covariates, a finding supported by multiple meta-analyses (Ma et al., 2019; Van Noorden et al., 2015). In contrast, perspective taking was a significant predictor, with a negative regression weight, of other-focused defending, when controlling for victim-focused defending and other covariates. This finding was surprising and suggests that, while people who are high on perspective taking are prone to engaging in other forms of defending, they are less likely to engage specifically in confrontational forms of defending. This resistance to other-focused defending strategies may be due to perspective takers' consideration of the aggressor's perspective, which causes them to avoid inflicting physical harm and/or emotional pain even upon people who have hurt others. Alternatively, a heightened capacity for perspective taking may be reflective of an increased social–cognitive capacity that contributes to people's increased understanding of the behavioral costs associated with defending (Ma et al., 2019). One

such cost may be the increased risk of becoming the next victim if the aggressor retaliates against the defender (Gini et al., 2008; Reijntjes et al., 2016).

The nonsignificant zero-order correlation between moral disengagement and victim-focused defending that emerged from our findings diverged from the majority of cross-sectional (Gini et al., 2011; Meter & Card, 2015; Thornberg et al., 2017; Thornberg et al., 2015) and longitudinal studies (e.g., Doramajian & Bukowski, 2015; Gini et al., 2022; Sijtsema et al., 2014), which found significant, albeit weak, negative correlations between moral disengagement and prosocial forms of defending (see Ma et al., 2019 for a meta-analysis). However, this finding may be explained by Thornberg et al.'s (2020) observation that "the negative association between moral disengagement and defending varies in weakness across samples in a way that could include an insignificant relationship in some samples" (p. 575).

In our regression analyses, we found that moral disengagement was an inverse predictor of victim-focused defending, but only when other-focused defending was added as a covariate. In contrast, moral disengagement was positively associated with other-focused defending before and after controlling for covariates. This pattern indicates that, while individuals who morally disengage are prone to intervening in victimization scenarios, they are likely to engage in other-focused defending and unlikely to engage in victim-focused defending. This tendency of "moral disengagers" is also evidenced by Meter et al.'s (2019) study, which found that moral disengagement positively correlated with relationally aggressive defending across multiple victimization scenarios. Our findings support Meter et al.'s (2019) conclusion that highly morally disengaged individuals exhibit a willingness to defend, albeit employing aggressive strategies that

"require one to disengage from moral self-sanctions in order to successfully engage in the behavior" (Meter et al., 2019, p. 9). One moral disengagement mechanism that may specifically promote aggressive defending is the process of moral justification, which refers to the construing of aggressive conduct as "personally and socially acceptable by portraying it in the service of valued social or moral purposes" (Bandura et al., 1996, p. 365). Future research should seek to identify the specific moral disengagement mechanisms that enable people to bypass the moral self-sanctions that mitigate against aggressive defending.

Our findings also revealed discrepant associations between inhibitory control and different defending behaviors. Inhibitory control was a significant, inverse predictor of other-focused defending across models. This aligns with Read et al.'s (2010) theoretical model and the inverse relationship between inhibitory/effortful control and aggressive behavior (Roos et al., 2016; Runions & Keating, 2010). In contrast, inhibitory control was a significant, positive predictor of victim-focused defending across the three models when other-focused defending was added as a covariate. These contrasting associations indicate that one who is less inhibited is more likely to engage in confrontational defending behaviors, whereas an increased capacity for inhibitory control makes a person more likely to comfort victims of aggression. The significant two-way interaction between moral disengagement and inhibitory control suggests that this effect of inhibitory control is significant among people who take responsibility for their moral decisions but not among people who tend to cognitively disengage from moral self-sanctions.

When people witness one person victimizing another, our results suggest that experiencing empathic anger makes one generally more likely to comfort or support the victim in some way. In contrast, after controlling for victim-focused defending and other covariates, empathic anger was either unrelated to or rendered a person less likely to engage in confrontational defending behaviors that target the aggressor or other bystanders. This was surprising considering that anger is theoretically and empirically associated with aggressive behavior. Furthermore, based on Read et al.'s (2010) approach-avoidance model, we expected empathic anger to activate the approach system and increase the likelihood of behavioral interventions. Nevertheless, this preference among those who experience heightened empathic anger for victim-focused rather than other-focused defending seems to align with prior research suggesting that empathic anger promotes helping behaviors (e.g., providing monetary compensation) aimed at supporting the victim more than it promotes targeting aggressors (Gummerum et al., 2016).

One explanation for this phenomenon is that, as an empathic response to the victim's emotional experience, empathic anger only motivates action that specifically targets the victim, to the exclusion of intervention strategies that target the bully or other bystanders. This explanation does not, however, account for empathic anger's inverse association with other-focused defending. Another explanation for our findings is grounded in the possibility that people who are prone to empathic anger may be more prone to heightened emotions generally and that the consideration of response options may elicit other emotions in addition to empathic anger. Thinking about confronting the aggressor may elicit fear in individuals who are more prone to experiencing intense emotions (including

45

empathic anger). According to this approach, although empathic anger activates the approach system, the fear experienced when considering a confrontational response activates the avoidance system, which overrides the approach system and makes a person less likely to engage in assertive or aggressive defending behaviors.

Alternatively, it is plausible that, rather than the feeling of empathic anger motivating action, engagement in defending behavior may elicit the emotional response of empathic anger. According to this view, the act of comforting the victim focuses one's attention on and increases the salience of the damage inflicted by the aggressor, thereby eliciting empathic anger. Future studies should seek to clarify causality in the relationship between empathic anger and defending behaviors and evaluate whether other emotions interact with empathic anger in activating the approach and/or avoidance systems, thereby motivating or inhibiting different defending behaviors.

Empathic anger significantly moderated the associations between defending cognitions and defending behavior in one of the models predicting victim-focused defending (i.e., the perspective taking model) and two of the models predicting other-focused defending (i.e., the perspective taking and self-efficacy for defending models), which partially supported our hypothesis. Furthermore, the moderating effects of empathic anger in these models were moderated by inhibitory control, such that the effects only achieved significance among those with less capacity for inhibitory control. This finding supported our hypothesis that the effects of empathic anger would be strongest at low levels of inhibitory control.

However, the moderating effects of empathic anger proved to be the opposite of what we anticipated. The significant three-way interactions indicated that, among people with

low inhibitory control, people with high levels of empathic anger displayed weaker associations between pro-defending cognitions (i.e., perspective taking and self-efficacy for defending) and defending behaviors compared with people who scored low on empathic anger.

One explanation is that people who are more prone to experiencing empathic anger and less regulated may experience a dysregulating level of emotion when witnessing acts of aggression. Rather than increasing one's likelihood of acting on their cognitions, this emotional flooding may partially or completely override the approach-system and make it more difficult for individuals to organize themselves for action. This may be what Hoffman (2008) referred to as "empathic overarousal," which he described as an empathic distress reaction that becomes aversive because of its intensity and reduces the likelihood that bystanders will intervene. Future research should seek to explore whether empathic anger reactions can result in empathic overarousal and identify markers that distinguish between manageable and aversive levels of empathic anger.

Some limitations of this study are noteworthy and call for caution when interpreting our results. The generalizability of the study is limited by composition of our sample, which was 61% female and 67.3% White/Non-Hispanic. Prior research has demonstrated that correlations between correlates of defending and defending behavior are significantly stronger when using self-report measures of defending behavior compared to peer-reports (Deng et al., 2021). Our study measures consisted exclusively of self-report surveys, likely introducing bias that limits the validity of our measures. Future studies should collect more diverse samples and incorporate other methods of assessment, including

other-ratings, as well as physiological measures of emotional responses (see Eisenberg et al., 1994).

Another set of limitations relate to the study's failure to account for several variables that have been shown to predict defending behavior. Some of these variables pertain to the characteristics of the bystanders. These include bystanders' moral identity (Gini et al., 2022), social skills (Jenkins & Nickerson, 2019), social status (Caravita et al., 2019; Pöyhönen et al., 2010; Pronk et al., 2018), as well as their experiences being personally victimized (Batanova et al., 2014; Ma et al., 2019) and their feelings of guilt and shame (Tangney et al., 1996). Other relevant variables pertain to the situation, such as the relationships between the bystander, the victim, and the bully (Bellmore et al., 2012), the specific type of aggression (e.g., physical vs. verbal vs. relational) that the bystander is responding to (Meter et al., 2019), and the expected consequences of defending (Pöyhönen et al., 2012). Future research should incorporate additional variables that may interact with empathic anger and pro-defending cognitions in the prediction of defending behavior.

This study represents a significant contribution that filled several gaps in the field of defending behavior. Prior research on defending behavior generally studied samples of children and adolescents, rather than adults, and failed to differentiate between different forms of defending. In this study, we gathered an adult sample with a wide age range, measured four types of defending behaviors, and tested our hypotheses on the two defending dimensions that emerged from our factor analysis. There is also a dearth of studies testing whether individual difference variables moderate the relationships between pro-defending cognitions and defending behavior. To our knowledge, this study

was the first to test empathic anger, itself an understudied emotion, as a potential moderator of these associations.

Our findings demonstrate that experiencing empathic anger when witnessing acts of aggression and bullying makes a person generally more likely to comfort the victim and, in certain contexts, less likely to utilize assertive/aggressive intervention strategies. These findings may suggest that empathic anger motivates specific forms of defending behavior to the exclusion of others or that empathic anger constitutes an emotional response elicited by the experience of comforting a victim. This study also demonstrates that bystanders who are less controlled and experience heightened empathic anger are less likely to act on certain pro-defending cognitions (i.e., perspective taking and self-efficacy for defending). In these individuals, intense empathic anger may cause them to become emotionally overwhelmed and dysregulated, making it more difficult for them to translate their capacity for perspective taking and belief in their ability to intervene into action. If correct, this explanation suggests that anti-bullying and other programs aimed at encouraging bystander interventions should incorporate emotion regulation skills that can help bystanders regulate their own emotional reactions, thereby enabling them to engage in defending behavior.

REFERENCES

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of personality and social psychology*, *71*(2), 364

Barchia, K., & Bussey, K. (2011). Predictors of student defenders of peer aggression victims: Empathy and social cognitive factors. *International Journal of Behavioral Development*, *35*(4), 289-297.

Batanova, M., Espelage, D. L., & Rao, M. A. (2014). Early adolescents' willingness to intervene: What roles do attributions, affect, coping, and self-reported victimization play?. *Journal of school psychology*, *52*(3), 279-293

Caprara, G. V., & Steca, P. (2005). Self–efficacy beliefs as determinants of prosocial behavior conducive to life satisfaction across ages. *Journal of Social and Clinical Psychology*, *24*(2), 191-217.

Caravita, S. C., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social development*, *18*(1), 140-163.

Caravita, S. C., Gini, G., & Pozzoli, T. (2012). Main and moderated effects of moral cognition and status on bullying and defending. *Aggressive behavior*, *38*(6), 456-468.

Carlo, G., Mestre, M. V., McGinley, M. M., Samper, P., Tur, A., & Sandman, D. (2012).

> The interplay of emotional instability, empathy, and coping on prosocial and
>
> aggressive behaviors. *Personality and Individual Differences*, *53*(5), 675-680.

Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in

> reactive and proactive aggression. *Child development*, *67*(3), 993-1002.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-

> processing mechanisms in children's social adjustment. *Psychological*
>
> *bulletin*, *115*(1), 74

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a

> multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1),
>
> 113.

Deng, X., Yang, J., & Wu, Y. (2021). Adolescent empathy influences bystander

> defending in school bullying: A three-level meta-analysis. *Frontiers in*
>
> *psychology*, *12*.

Derr, S., & Morrow, M. T. (2020). Effects of a growth mindset of personality on

> emerging adults' defender self-efficacy, moral disengagement, and perceived peer
>
> defending. *Journal of interpersonal violence*, *35*(3-4), 542-570.

Doramajian, C., & Bukowski, W. M. (2015). A longitudinal study of the associations

> between moral disengagement and active defending versus passive bystanding
>
> during bullying situations. *Merrill-Palmer Quarterly*, *61*(1), 144-172.

Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In *Well-Being:*

> *Positive Development Across the Life Course*. Lawrence Erlbaum Associates.

Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2015). Prosocial development.
Handbook of child psychology and developmental science, 1-47.

Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and
relation to prosocial behavior. *Motivation and Emotion*, *14*(2), 131-149.

Eisenberg, N., Fabes, R. A., Miller, P. A., Fultz, J., Shell, R., Mathy, R. M., & Reno, R.
R. (1989). Relation of sympathy and personal distress to prosocial behavior: a
multimethod study. *Journal of personality and social psychology*, *57*(1), 55

Eisenberg, N., Fabes, R. A., Shepard, S. A., Murphy, B. C., Jones, S., & Guthrie, I. K.
(1998). Contemporaneous and longitudinal prediction of children's sympathy
from dispositional regulation and emotionality. *Developmental Psychology*, *34*(5),
910.

Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related
behaviors. *Psychological bulletin*, *101*(1), 91-119.

Frijda, N. H. (1986). *The emotions*. Cambridge University Press.

Garandeau, C. F., Vermande, M. M., Reijntjes, A. H., & Aarts, E. (2019). Classroom
bullying norms and peer status: Effects on victim-oriented and bully-oriented
defending. *International Journal of Behavioral Development*,
0165025419894722.

Gini, G. (2006). Social cognition and moral cognition in bullying: What's
wrong?. *Aggressive Behavior: Official Journal of the International Society for
Research on Aggression*, *32*(6), 528-539.

Gini, G., Albiero, P., Benelli, B., & Altoe, G. (2008). Determinants of adolescents' active

 defending and passive bystanding behavior in bullying. *Journal of adolescence*,

 31(1), 93-105.

Gini, G., Pozzoli, T., Angelini, F., Thornberg, R., & Demaray, M. K. (2022).

 Longitudinal associations of social-cognitive and moral correlates with defending

 in bullying. *Journal of school psychology*, *91*, 146-159.

Gummerum, M., Van Dillen, L. F., Van Dijk, E., & López-Pérez, B. (2016). Costly third-

 party interventions: The role of incidental anger and attention focus in punishment

 of the perpetrator and compensation of the victim. *Journal of Experimental Social*

 Psychology, *65*, 94-104

Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H.

 Goldsmith (Eds.), *Handbook of affective s ciences* (pp. 852–870). Oxford

 University Press.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable

 mediation, moderation, and conditional process modeling. Retrieved from

 http://www.afhayes.com/ public/process2012.pdf

Hoffman, M. L. (2008). Empathy and prosocial behavior. *Handbook of emotions*, *3*, 440-

 455.

Hoffman, M. L. (2001). *Empathy and moral development: Implications for caring and*

 justice. Cambridge University Press.

Hoffman, M. L. (1989). Empathy and prosocial activism. *Social and moral values:*

 Individual and societal perspectives, 65-85

Jenkins, L. N., & Nickerson, A. B. (2019). Bystander intervention in bullying: Role of

    social skills and gender. *The Journal of Early Adolescence*, *39*(2), 141-166.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition.

    Psychological review, *110*(2), 265.

Lambe, L. J., & Craig, W. M. (2020). Peer defending as a multidimensional behavior:

    Development and validation of the defending behaviors scale. *Journal of School*

    Psychology, *78*, 38-53.

Landmann, H., & Hess, U. (2017). What elicits third-party anger? The effects of moral

    violation and others' outcome on anger and compassion. *Cognition and emotion*,

    31(6), 1097-1111.

Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and

    cognition in social information processing. *Child development*, *71*(1), 107-118.

Lockwood, P. L., Seara-Cardoso, A., & Viding, E. (2014). Emotion regulation moderates

    the association between empathy and prosocial behavior. *PloS one*, *9*(5), e96555.

McCreary, G. R. (2012). *The impact of moral judgment and moral disengagement on*

    hazing attitudes and bystander behavior in college males. The University of

    Alabama.

Meter, D. J. (2015). Aggressive, assertive and non-confrontational forms of defending:

    Differentiation of forms and consequences of defending.

Meter, D. J., & Card, N. A. (2015). Defenders of victims of peer aggression:

    Interdependence theory and an exploration of individual, interpersonal, and

    contextual effects on the defender participant role. *Developmental Review*, *38*,

    222-240

Meter, D. J., Ma, T. L., & Ehrenreich, S. E. (2019). Telling, Comforting, and Retaliating:

    the Roles of Moral Disengagement and Perception of Harm in Defending

    College-Aged Victims of Peer Victimization. *International Journal of Bullying*

    Prevention, 1-12.

Miller, P. A., Eisenberg, N., Fabes, R. A., & Shell, R. (1996). Relations of moral

    reasoning and vicarious emotion to young children's prosocial behavior toward

    peers and adults. *Developmental psychology*, *32*(2), 210.

Obermann, M. L. (2011). Moral disengagement among bystanders to school

    bullying. *Journal of School Violence*, *10*(3), 239-257.

Orobio de Castro, B., Merk, W., Koops, W., Veerman, J. W., & Bosch, J. D. (2005).

    Emotions in social information processing and their relations with reactive and

    proactive aggression in referred aggressive boys. *Journal of Clinical Child and*

    Adolescent Psychology, *34*(1), 105-116.

Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the

    victim of bullying? The interplay between personal and social factors. *Merrill-*

    Palmer Quarterly (1982-), 143-163.

Pozzoli, T., Gini, G., & Thornberg, R. (2017). Getting angry matters: Going beyond

    perspective taking and empathic concern to understand bystanders' behavior in

    bullying. *Journal of adolescence*, *61*, 87-95.

Pronk, J., Lee, N. C., Sandhu, D., Kaur, K., Kaur, S., Olthof, T., & Goossens, F. A.

    (2017). Associations between Dutch and Indian adolescents' bullying role

    behavior and peer-group status: Cross-culturally testing an evolutionary

    hypothesis. *International Journal of Behavioral Development*, *41*(6), 735-742.

Pronk, J., Olthof, T., Aleva, E. A., van der Meulen, M., Vermande, M. M., & Goossens, F. A. (2020). Longitudinal associations between adolescents' bullying-related indirect defending, outsider behavior, and peer-group status. *Journal of research on adolescence*, *30*, 87-99.

Pronk, J., Olthof, T., Goossens, F. A., & Krabbendam, L. (2019). Differences in adolescents' motivations for indirect, direct, and hybrid peer defending. *Social Development*, *28*(2), 414-429.

Roos, S., Hodges, E. V., Peets, K., & Salmivalli, C. (2016). Anger and effortful control moderate aggressogenic thought–behaviour associations. *Cognition and emotion*, *30*(5), 1008-1016.

Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of personality and social psychology*, *67*(2), 206.

Read, S. J., Monroe, B. M., Brownstein, A. L., Yang, Y., Chopra, G., & Miller, L. C. (2010). A neural network model of the structure and dynamics of human personality. *Psychological review*, *117*(1), 61.

Reijntjes, A., Vermande, M., Olthof, T., Goossens, F. A., Aleva, L., & van der Meulen, M. (2016). Defending victimized peers: Opposing the bully, supporting the victim, or both?. *Aggressive behavior*, *42*(6), 585-597.

Rigby, K., & Johnson, B. (2006). Expressed readiness of Australian schoolchildren to act as bystanders in support of children who are being bullied. *Educational psychology*, *26*(3), 425-440.

Roos, S., Hodges, E. V., Peets, K., & Salmivalli, C. (2016). Anger and effortful control
moderate aggressogenic thought–behaviour associations. *Cognition and
emotion*, *30*(5), 1008-1016.

Runions, K. C., & Keating, D. P. (2010). Anger and inhibitory control as moderators of
children's hostile attributions and aggression. *Journal of Applied Developmental
Psychology*, *31*(5), 370-378.

Sijtsema, J. J., Rambaran, J. A., Caravita, S., & Gini, G. (2014). Friendship selection and
influence in bullying and defending: effects of moral
disengagement. *Developmental psychology*, *50*(8), 2093.

Sjögren, B., Thornberg, R., Wänström, L., & Gini, G. (2021). Bystander behaviour in
peer victimisation: moral disengagement, defender self-efficacy and student-
teacher relationship quality. *Research Papers in Education*, *36*(5), 588-610.

Sjögren, B., Thornberg, R., Wänström, L., & Gini, G. (2020). Associations between
individual and collective efficacy beliefs and students' bystander
behavior. *Psychology in the Schools*, *57*(11), 1710-1723.

Sze, J. A., Gyurak, A., Goodkind, M. S., & Levenson, R. W. (2012). Greater emotional
empathy and prosocial behavior in late life. *Emotion*, *12*(5), 1129.

Tangney, J. P., Wagner, P. E., Hill-Barlow, D., Marschall, D. E., & Gramzow, R. (1996).
Relation of shame and guilt to constructive versus destructive responses to anger
across the lifespan. *Journal of personality and social psychology*, *70*(4), 797.

Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic
moral sensitivity, moral disengagement and defender self-efficacy. *Journal of
adolescence*, *36*(3), 475-483.

Thornberg, R., Pozzoli, T., Gini, G., & Jungert, T. (2015). Unique and interactive effects of moral emotions and moral disengagement on bullying and defending among school children. *The Elementary School Journal*, *116*(2), 322-337.

Thornberg, R., Wänström, L., Hong, J. S., & Espelage, D. L. (2017). Classroom relationship qualities and social-cognitive correlates of defending and passive bystanding in school bullying in Sweden: A multilevel analysis. *Journal of school psychology*, *63*, 49-62.

Thornberg, R., Wänström, L., Elmelid, R., Johansson, A., & Mellander, E. (2020). Standing up for the victim or supporting the bully? Bystander responses and their associations with moral disengagement, defender self-efficacy, and collective efficacy. *Social Psychology of Education*, *23*(3), 563-581.

van der Ploeg, R., Kretschmer, T., Salmivalli, C., & Veenstra, R. (2017). Defending victims: What does it take to intervene in bullying and how is it rewarded by peers?. *Journal of school psychology*, *65*, 1-10.

van Doorn, J., & Brouwers, L. (2017). Third-party responses to injustice: a review on the preference for compensation. *Crime Psychology Review*, *3*(1), 59-77.

van Doorn, J., Zeelenberg, M., & Breugelmans, S. M. (2017). The impact of anger on donations to victims. *International Review of Victimology*, *23*(3), 303-312.

van Doorn, J., Zeelenberg, M., & Breugelmans, S. M. (2014). Anger and prosocial behavior. *Emotion Review*, *6*(3), 261-268.

van Doorn, J., Zeelenberg, M., Breugelmans, S. M., Berger, S., & Okimoto, T. G. (2018). Prosocial consequences of third-party anger. *Theory and Decision*, *84*(4), 585-599.

van Noorden, T. H., Haselager, G. J., Cillessen, A. H., & Bukowski, W. M. (2015).

Empathy and involvement in bullying in children and adolescents: A systematic

review. *Journal of youth and adolescence*, *44*(3), 637-657.

Vitaglione, G. D., & Barnett, M. A. (2003). Assessing a new dimension of empathy:

Empathic anger as a predictor of helping and punishing desires. *Motivation and*

Emotion, *27*(4), 301-325.

Vita

Name	*Adir Pinchot*
Baccalaureate Degree	*Bachelor of Arts*, *Yeshiva University, New York City Major: Psychology*
Date Graduated	*May, 2017*
Other Degrees and Certificates	*Master of Arts, St. John's University, Queens Major: Clinical Psychology*
Date Graduated	*May, 2020*