CHILDREN’S TENDENCY TO DEFEND VICTIMS OF SCHOOL BULLYING: GENDER, SOCIAL IDENTITY, AND NORMATIVE PRESSURE

By

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Bullying is prevalent in schools in the United States and across the world. Increasing attention has been paid to the phenomenon of bullying by researchers and practitioners, because of its negative consequences on children who bully and who are bullied, consequences which may sometimes be lethal. Once studied as a problem of individual bullies and victims, researchers are now recommending that bullying be studied as a group phenomenon. Many bystanders support school bullying, but some appear to work in support of its victims. Labeled “defending” by some authors, children’s tendency to help victim has been studied much less than their tendency to bully.

A somewhat persistent finding in studies about defending is that girls seem more likely to defend victims than do boys. Social identity theory (Tajfel & Turner, 1986) was used in the study to frame questions about whether gender-based social expectations may relate to children’s tendency to help victims. The current study explored two potential mediators in the relationship between gender and defending behavior. Those mediators were social gender identity and normative pressure from significant others to help victims. Regression analyses suggested that gender identity predicted defending behavior as well as biological sex and that normative pressure from friends may have mediated the relationship between gender and defending.
Limitations of the study included the lack of causal inference possible in a correlational study, questionable scale psychometrics, weaknesses inherent in self-reported observations, and the underrepresentation of males in the study. Implications for research concentrated on improving upon the study’s limitations and enlarging the body of research that focuses on defending behavior. Implications for counseling involved combining the efforts of pro-defending parents, teachers, and students into programs that restructure social groups, reframe gender expectations, and support effective defending behavior in children.
CHAPTER 1
INTRODUCTION

School bullying, a pattern of aggression between students, is prevalent in the United States. According to a recent study by the World Health Organization, 29.9% of students in the U.S. have bullied other children, been bullied, or both (Nansel et al., 2001). Both students who bully and those who are victimized are at risk for negative mental, behavioral, and physical consequences (Kim, Leventhal, Koh, Hubbard, & Boyce, 2006; Laflamme, Engström, Möller, Alldahl, & Hallqvist, 2002), with pathology frequently lasting into adulthood (e.g., Dempsey & Storch, 2008). Furthermore, bullying is associated with lethality. A study of all school-related violent deaths in the United States between 1994 and 1999 found that victims of bullying comprised 20% of school-related homicide perpetrators and 12% of homicide casualties (Anderson et al., 2001). Another study conducted jointly by the U.S. Secret Service and the Department of Education, also concluded that a majority of school shootings in the United States were committed by victims of bullying (Vossekul, Fein, Reddy, Borum, & Modzeleski, 2002).

Once conceived of as an individual behavioral phenomenon involving only bullies and victims, bullying is now viewed more as a process in which social context factors influence the behavior (Furlong, Morrison, & Greif, 2003). When bullying situations occur, children adopt a number of social roles, including roles in which peers ignore, allow, encourage, or physically assist acts of bullying (Salmivalli, Lagerspetz, Björkqvist, Österman, Kaukiainen, 1996). However, not everyone promotes or allows bullying. Increased interest in studying the socio-ecological contexts of bullying has led to the identification of children who tend to intervene to help victims of bullying (Salmivalli et al., 1996). Children who act in some way to prevent or intervene in bullying have been referred to in the literature as “defenders.” Defending represents the only identified prosocial bystander role behavior in bullying.
Defenders, because they tend to intervene in bullying, may potentially help improve school safety. Therefore, it seems desirable for caregivers, professionals, and institutions to work toward supporting these children. There is a paucity of evidence that this effort to support defending is happening. Furthermore, there is little or no research specifically focusing on children who defend the victims of bullying. Compared to the rapidly growing body of research dedicated to children who bully or are bullied, a small but increasing number of studies explore the phenomenon of peers intervening in bullying. Understanding children who defend against bullying may reveal a new avenue toward preventing school-related violence.

The relationship between peer context and defending behavior has been studied somewhat marginally. In addition, much less has been done to explore a broader socio-ecological context, in which influential adults help establish norms related to defending. Because teachers and parents could conceivably influence bullying and defending behavior, it seems important to explore their possible normative social influence in regard to defending. Support for defending behavior from mothers, fathers, and teachers may be helpful in establishing consistent patterns of defending in students over time.

Researchers might be able to facilitate this process of adult support for defending by bringing more institutional attention to defending behavior. Increased institutional attention to defending could create awareness, in parents and teachers, that children who adopt a defending role may be encouraged by adult support. Thus, it is important to begin the process of understanding how adults in the social environment are involved in facilitating social norms related to defending.

Evidence suggests that gender norms create a higher expectation for girls to defend than for boys. Defending and bullying tend to vary by gender. Boys appear more likely to bully and
girls appear more likely to defend (e.g., Salmivalli, Kaukiainen, & Voeten, 2005). When boys adopt a defending role, they also are less likely than girls to maintain that defending role in the future, or among different friends (Salmivalli, Lappalainen, & Lagerspetz, 1998). A more thorough examination of the apparent defending gap between girls and boys may aid caregivers, practitioners, and educators in reinforcing defending in both girls and boys.

Because a growing body of research considers bullying to be a group process, it is helpful to investigate what social forces are involved in gender differences in children’s defending behavior. A more intricate picture of these seeming gender effects will help determine what concerned adults can do to improve behavior-related safety conditions for children at school. The present study focused on defending behavior in children, specifically examining how social normative influences on defending were associated with gender.

**Scope of the Study**

Though bullying is traditionally studied as a problem among individual bullies and victims, a growing number of researchers assert that bullying only happens as a group process (Sutton & Smith, 1999) and that it is most appropriate to study bullying as emerging from conducive socio-ecological contexts (Furlong, Morrison, & Greif, 2003). Some research on these socio-ecological contexts has led to the identification of several roles that children play in bullying scenarios.

Among the identified bullying-related roles, only one is defined by a pattern of benevolent behaviors intended to deter bullying. This benevolent role that prosocial children often play in bullying scenarios is sometimes called “defender.” The rest of the bullying-related roles are roles in which children ignore, allow, or even facilitate bullying (Olweus, 2001). Six roles have been empirically verified: defender, bully, victim, outsider (i.e., uninvolved children), assistant
(i.e., children who physically help the bully) and reinforcer (i.e., children who cheer the bully) (Salmivalli, Lagerspetz, Björkqvist, Österman, Kaukiainen, 1996).

The notion that children create a context conducive to bullying—that the defender role is the only prosocial bullying-related role yet identified—may be counterintuitive to many. However, Ojala and Nesdale (2004) conclude that societal groups often seem to encourage bullying as a tool for punishing and excluding persons who act outside the expectations for their own groups, or who try to join groups that do not want them. Such processes, say Ojala and Nesdale (2004), conform to components of social identity theory.

Defenders are often identified using a scale developed by Salmivalli and colleagues (1996). According to literature reviewed in Chapter 2 of this dissertation, use of this scale shows that many children appear to assume the defending role (e.g., Salmivalli et al., 1996). However, it seems that many of those children identified as defenders “trade off” their defending role to other children from one year to the next, such that less than half of children identifiable as defenders one year will be identifiable as defenders the following year (Menesini, Codecasa, Benelli, & Cowie, 2003). This type of role instability is not reported for the other bullying-related roles.

Furthermore, there appears to be correlational evidence suggesting that children in the defender role may require more peer support to acquire or maintain their defender role than do children in other bullying related roles. Being identified in other bullying-related roles predicts future behavior in keeping with those roles (Salmivalli et al., 1998). This finding does not hold for the defending role, but being currently identified as a defender strongly correlates with having defender friends (Salmivalli et al., 1998). This possible reliance of defending behavior on peer influence seems unfortunate considering no role has been identified in which peers
support children who defend, though children who bully have followers who consistently assist and reinforce them. The absence of identified peer roles to support children who defend may be partly attributable to the fact that there is little research done on children known to defend. Nevertheless, enough research exists to suggest at least one other interesting pattern related to children’s defending behavior.

The most common finding in studies examining defending behavior is that girls appear to be more likely to defend than are boys (Camodeca & Goossens, 2005; Goossens, Olthof, & Dekker, 2006; Menesini et al., 2003; Salmivalli et al., 1996; Salmivalli et al., 1998; Salmivalli Kaukiainen, Kaistaniemi, Lagerspetz, 1999; Salmivalli, Kaukiainen, & Voeten, 2005; Salmivalli & Voeten, 2004; Sutton & Smith, 1999). That is, nine out of the thirteen studies that directly examine defending behavior find boys to be markedly underrepresented among children who defend, although results are mixed in one study (Sutton & Smith, 1999). In addition, boys who defend appear likely to change their defending role more so than girls who defend (Salmivalli, Lappalainen, & Lagerspetz, 1998).

The lack of boys in the defender role is troubling because boys appear most likely to be bullies and victims, and may benefit from having defenders within their male peer groups. Research findings to date do not investigate this gender discrepancy in defending behavior further than reporting its occurrence. This gender discrepancy may come from an innate female tendency to be helpful toward others; but it also could be that social and gender norms encourage girls to defend, and discourage boys from defending. Social identity theory has the potential to explain how social norms may influence the relationships among bullying, defending, and gender.
Theoretical Framework

Social identity theory (SIT; Tajfel & Turner, 1986) is thought to explain group processes that lead to bullying (Ojala & Nesdale, 2004). Because defending behavior emerges within the same group settings as bullying (e.g., Salmivalli et al., 1996), social identity theory, as a parsimonious explanation of a broad array of group processes, ought to sufficiently frame research questions about defending. According to SIT, one’s self-esteem relies on membership within an in-group that collectively acts in ways that make the in-group favorably distinct from a specified out-group (Tajfel & Turner, 1986). In addition, group membership guides individual members’ behavior through various individual and group mechanisms of conformity (Abrams & Hogg, 1990).

SIT may be useful in explaining gender differences in defending behavior if genders are considered social groups in addition to being biological groups. Wilson and Liu (2003) and Schmitt, Branscombe, and Kappen (2003) consider gender identity to be a group identity as described by SIT, an interpretation which is endorsed by one of the creators of SIT (Turner & Reynolds, 2003). Based on assumptions of SIT, it might be predicted that women and men will behave in bullying situations in various ways, depending on social gender expectations and depending on how much they identify with being a female or male.

If females, as a group, are stereotyped as performing a particular behavior (i.e., defending victims), individual females will perform that behavior according to how much they identify with being female and with being distinct from males. Similarly, if a particular behavior is proscribed for males, individual males will avoid that behavior only insofar as they glean their self-esteem from their maleness as it differs from femaleness. If one’s gender is not considered an important in-group and the opposite gender is not considered the important referential out-group, then
one’s behavior should not follow social gender expectations as stringently as when gender is considered important.

Furthermore, group differences in a particular behavior should exist only as far as it is considered important to a group’s favorable distinctiveness. If the behavior in question (i.e., defending) is not highly prescribed for one gender and proscribed for the other, then gender differences in that behavior should be small, compared to how they would be if the behaviors were highly and differentially mandated for each gender.

Throughout this dissertation one’s identification with being male or female has been termed gender identity. Operationally, gender identity was determined using a measure of “gender typing” (Hall & Halberstadt, 1980). Social expectations of defending behavior according to gender were operationalized using a measure of normative pressure (i.e., from parents, friends, and teachers) to help victims (Rigby & Johnson, 2006). If either gender identity or normative pressure strongly qualified the relationship between gender and defending, results were to be interpreted as supporting a social identity theory explanation of defending behavior. Finding support for social identity theory was seen as lending credibility to interventions that attempt to alter children’s social environments to encourage group- and self-identities that are commensurate with safe and fair play. Failure to find support was construed as pointing to alternative directions in research and intervention in bullying.

**Statement of the Problem**

In order to understand the importance of defending, it is important to understand the prevalence and aftermath of bullying. Bullying is verbal or physical, direct or indirect, group or individual aggression that is repeated, and in which there is a power imbalance, consistent in direction, between the victim and the aggressor (Gini & Pozzoli, 2006). It is not a conflict of equally matched opponents. Estimates vary regarding the prevalence of bullying in schools in
the United States. For example, Nansel et al. (2001) report that 29.9% of sixth- through tenth-grade children say they have been involved in bullying either as a perpetrator, victim, or both. Harris Interactive and GLSEN (2005) find that 65% of teens have been harassed or assaulted over the course of one year. Twenty-five percent of children in sixth through tenth grade report bullying others “once or twice” during the spring term of 1998 and 24.2% report being bullied once or twice during the spring term of 1998 (Nansel et al., 2001). A full 8.8% of middle and early high school students report bullying others every week, and 8.4% report being bullied every week. Furthermore, bullying appears to be much more prevalent in middle school than in high school. About 10% of middle school students report bullying others weekly, and 7.6 to 13.3% report being bullied weekly (Nansel et al., 2001). Teachers are just as, or more, likely than students to say that bullying is a serious problem in their schools (Harris Interactive & GLSEN, 2005).

The pattern of aggression that constitutes bullying has particularly negative consequences when compared to less-patterned, incidental aggression (Furlong, Morrison, & Greif, 2003). Victims often suffer deteriorated school performance and sometimes drop out; and they also complain of somatic symptoms (Gillies-Rezo & Bosacki, 2003). Children who bully experience an increased risk of committing criminal acts and bullying others in adulthood (Gillies-Rezo & Bosacki, 2003). Some evidence points to bullying being a cause, and not just a consequence, of socially immature behavior in children who are victimized; of increased aggression (i.e., defiance, cruelty, fighting, tendency to argue) in children who bully; and of aggression, conduct problems, lack of behavioral control, and psychopathological externalizing of behaviors in children who are considered both bullies and victims (Kim, Leventhal, Koh, Hubbard, & Boyce, 2006). Even relational bullying, in which children are teased, ostracized, and socially sabotaged,
has been related to symptoms of depression and social anxiety in college students aged 18-25 who were bullied as adolescents (Dempsey & Storch, 2008).

Furthermore, bullying appears physically hazardous, even lethal. Ten percent of all physical injuries in 10- to 15-year-old children are evidently the result of bullying (Laflamme, Engström, Möller, Alldahl, & Hallqvist, 2002). In addition, bullying seems to be related to suicide in some victims (Carney 2000; Rigby & Slee, 1999). Homicide is also a prospect for victims. At least two studies find that the majority of school shooters have been victims of bullying (Leary, Kowalski, Smith, & Philips, 2003; Voskuil et al., 2002). More generally, victims of bullying appear to comprise 12% of victims of various forms of school-related homicide, and they comprise 20% of perpetrators of school-related homicide (Anderson et al., 2001).

It is possible that adults are helping create environments that are conducive to bullying. For example, 27.8 to 34.6% of children say their parents expect them to support or avoid interfering with bullying (Rigby, 2005). Furthermore, some research shows that adults may not be setting a helpful example. Approximately 33% of a nationwide sample of U.S. teachers admit to bullying students “a few times” or “frequently” (Twemlow, Fonagy, Sacco, & Brethour Jr., 2006).

Of particular theoretical relevance to the present study is the evidence that students acting outside of expectations for their respective genders have reason to fear reprisal from fellow students. Among the many reasons for being harassed or assaulted, as indicated by children in a national U.S. study (Harris Interactive & GLSEN, 2005), were “gender expression” (26 to 37% of respondents) and sexual orientation (32 to 43%), with more boys than girls reporting reprisal for their gender expression. Twenty-four percent of teens in the same survey say they have
heard someone criticize a fellow student for acting too much like the opposite sex; and 33% say that students are harassed about their sexual orientation. While 90% of teens perceived to be lesbian, gay, bisexual, or transgendered are harassed or assaulted, the number is 62% for students not so perceived (Harris Interactive & GLSEN, 2005). While the present study does not address issues related to LGBT status, the implications of the Harris Interactive and GLSEN (2005) study suggest that gender expectations may sometimes be promoted with harassment or physical force. If aggression enforces gender-typed behavior, it is easy to imagine that boys might feel safer bullying while girls might feel safer defending. Such force-imposed behavior norms may stifle children’s attempts to make positive changes when those changes do not conform to gender expectations. In general, bullying appears to be widespread and to cause considerable harm, and linked to the enforcement of gender expectations. In cyclical fashion, these gender expectations may proscribe defending in boys while allowing it in girls, leaving boys with the greater likelihood of bullying those who exhibit non-normative behavior.

**Need for the Study**

This review contains no claim that the phenomenon of bullying has been under-researched. This dissertation does, however, contain such a claim regarding research about defending against bullying. Bullying research overwhelms research related to defending. On March 11, 2008, a search of the PsycINFO database using the keyword combination “bully* OR bulli*” (no quotes in search) resulted in 2,518 listed articles, 1,795 coming from peer reviewed journals. Of the 2,518 listings, only 40 included the keyword “defend*” and those listings did not all discuss persons who defend the victims of bullying. This author found that about thirteen studies directly assessed defending with a validated measure. Even these few studies examining defending discussed children who defend tangentially, focusing interest largely on children who bully or are bullied.
Furthermore, there appears to be no indication that researchers, teachers, counselors, parents, or policymakers are doing anything to specifically provide children who defend with targeted support for their behavior. This seems unfortunate considering the potential improvements in school safety that might come from well-guided defending behavior. Considering that defenders do not often remain defenders and that they may lack peer support for their behavior, these children may need as much adult attention and support as do children who bully or who are bullied. However, research on the social contexts of children who defend is currently limited to their friendship groups, their popularity, and their classroom behavioral norms. These classroom norms are not gender-specific and do not address norms outside of the classroom. Gender norms are presumably created and communicated not only by peers and classroom environments, but also by caregivers, cultures, communities, and nations. Gender-specific norms have been investigated in regard to delinquent behavior (Ford, Stevenson, Wienir, & Wait, 2002), but they have not yet been applied to the study of defending behavior. Furthermore, despite the often-replicated finding that girls are more likely to defend than boys, the reasons behind this apparent gender effect have not been studied. Considering the widespread harm attributable to bullying, it seems advisable try new directions in bullying research by studying the relationship between gender and defending behavior as a focal topic instead of as a marginal one.

Children who defend victims of bullying have the potential to impact the outcome of bullying in schools. The actions of these children could help decrease bullying-related violence and its concomitant physical and emotional injuries. Currently, research assessing school bullying-reduction programs does not seem to indicate that the programs make any use of children who are thought to take specific initiative in deterring bullying. Program developers
who become aware that defenders exist will likely incorporate this knowledge into their programs. In addition, defender-aware counselor educators will be able to provide counselors-in-training with a more complex picture of the response some children have to bullying. Therefore, broader knowledge about children who defend and the contexts that influence them seems desirable for counselor educators, counselors-in-training, and practitioners.

So far, the relationship between gender and defending has been treated as a demographic detail. A more direct look at the relationship between gender and defending may serve to inform caregivers, educators, and policymakers about the potential for changing social environments to promote prosocial behavior in both sexes. Investigating the potentially gender-based disincentives or incentives children perceive in helping the victims of bullying may lead to information that is useful to mental health practitioners as well.

**Purpose of the Study**

The present study had a long-term goal of stimulating research interest about children who defend. Another long-term goal was to increase attention and support—from teachers, counselors, parents, and other adults—for children who defend to the level of support provided for children who bully or are bullied. Over time, increased support and attention may improve the consistency of defending behavior in children. Support for defending may also increase the chance of identifying and acquiring for all children the potential school safety benefits that could result from well-guided defending behavior. For example, awareness on the part of researchers and practitioners regarding the role of defending may result in increased incorporation of children who defend into programs intended to ameliorate the bullying problem in schools. The present study was intended to begin the process that could lead to the attainment of these long-term goals.
More immediately, the goal of the present study was to examine the reported gender patterns in defending behavior. The study investigated the level to which the reported gender discrepancy in defending behavior was attributable to socially derived differences between boys and girls and to social expectations for children to engage in defending behaviors. Much of the research describing the social context of defending describes only peer-related influences. The present study examined gender norms, which presumably arise from other environments than just those formed by peers, and so the study also inquired into adult expectations for children to engage in, or refrain from, defending behavior.

**Rationale for the Methodology**

This study investigated whether a relationship existed between socialized gender identity and defending behavior, and whether this relationship influenced the apparent relationship between “biological” gender and defending behavior. The study employed quantitative data gathering and analysis, and used survey instruments to measure the variables of interest, which were defending behavior, gender, gender-identity, normative pressure to defend, and age. All variables were continuous in order to examine relationships and interactions among variables.

A persistent gender difference in defending behavior has been found using various versions of the defender scale (e.g., Salmivalli et al., 1996). However, well-described method of direct observation (Pepler & Craig, 1995) of defending behavior did not substantiate this gender gap in defending. Limitations of this direct observational method are discussed in Chapter 2. Except for that direct observational method, this author found no other validated method of measuring defending behavior beside the defender scale. Furthermore, because of a potential confound between children’s popularity and their peers’ tendency to describe them as defenders, also discussed in Chapter 2, peer-reports of defending behavior were excluded from the study. Therefore, self-reports on the defender scale were used to estimate defending behavior.
Defending behavior appears strongly tied to gender, as stated earlier. It was thought meaningful to determine whether there were connections between one’s gender and one’s gender identity in predicting defending behavior. Therefore, in addition to asking children to report their gender, the present study used a scale (Hall & Halberstadt, 1980) to measure gender identity in subjects.

As explained earlier, social identity theory asserts that gender identity and associated behaviors depend partly on the expectations of others. In order to allow the researcher to examine expectations related to children’s defending behaviors, participants were asked about “normative social pressure to defend.” Normative pressure to help victims was a term used by Rigby and Johnson (2006) to describe the expectations of specific people (i.e., father, mother, teacher, and friends) for a child to defend victims of bullying. Normative pressure to help victims was measured by Rigby (2005) and by Rigby and Johnson (2006) separately for each pressure source (i.e., mother, father, friends, teacher). Their method of measurement was partially replicated in the present study.

The research questions presented below represent an exploration of the utility of SIT for explaining gender differences in defending behavior. A relationship between gender and defending behavior was seen as negating support for SIT, unless other variables were found to mediate this relationship. Therefore, except as regarded participant gender, each relationship described in each research question required independent support in order for the researcher to claim full support for the use of SIT in explaining gender differences in defending behavior. As such, the Type I error rate, $\alpha = .05$, was applied per comparison and not at a familywise level, except in the last research question which was an attempt to build a model for predicting defending.
Research Questions

The questions that follow represent an itemization of the more general question regarding whether the apparent gender gap in defending is related to the socialization of gender identity. The conceptual framework for the variables chosen for study came from social identity theory. Social identity theory suggests the potential for encouraging, in boys as much as in girls, the assumedly prosocial behavior called “defending,” and that such encouragement may help to elevate levels of defending in both sexes. If social identity theory was to be supported as explaining gender differences in defending behavior, adult and peer normative pressure to help victims, and one’s own gender identity should have contributed to the prediction of defender effects, and should have appeared to modify the gender differences in defending scores. The following questions guided data gathering and analysis. Results of analyses are presented in Chapter 4, referring specifically to each research question by number.

1. Does gender, gender identity, or normative pressure to help victims (i.e., from mother, father, best friends, or favorite teacher) predict defending behavior, when controlling for the three anticipated control variables?

2. Does gender identity mediate the relationship between gender and defending behavior, when controlling for the three anticipated control variables?

3. Does normative pressure to help victims (i.e., from mother, father, best friends, or favorite teachers) mediate the relationship between gender and defending behavior, when controlling for the three anticipated control variables?

4. Does gender in-group pressure differ from gender out-group pressure in its relationship to defending behavior? That is, is the relationship between “normative pressure to help victims” and defending behavior different as a function of whether or not the participant and the person exerting pressure are the same gender?

5. Does the presence of adults in a friendship group moderate the relationship between normative pressure and defending?

6. When all independent variables are combined to predict defending behavior, is the predictive value of participant gender changed?
Definition of Terms

DEFENDING. Any behavior intended to stop an incident of bullying or to otherwise support a victim of bullying. In the present study, a child’s score on the six-item, self-report Defender Scale (Salmivalli, 1998; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999; Salmivalli, Lappalainen, & Lagerspetz, 1998) represented his or her level of defending behavior.

GENDER IDENTITY. “An unarticulated, global sense of one’s maleness or femaleness that is acquired early in life and is considered to be relatively impermeable to change” (Lorenzi-Cioldi & Doise, 1990; p77). In the present study, the level of feminine versus masculine gender identity was measured using a single unidimensional scale (Hall & Halberstadt, 1980) in which high scores denoted high masculinity and low scores denoted high femininity.

NORMATIVE PRESSURE TO HELP VICTIMS. The extent to which a child’s mother, father, best friends, and favorite teachers would expect him or her to support a victim of bullying versus support a bully. Operationalization of the term was accomplished via the adaptation of four single-item scales (Rigby & Johnson, 2006) in which a child could indicate his or her perception of the expectations of these important others. Higher scores indicated expectations to support the victim and lower scores indicated expectations to support bullying.

BULLYING. Verbal or physical, direct or indirect, group or individual aggression that is repeated, and in which there is a power imbalance, consistent in direction, between the victim and the aggressor (Gini & Pozzoli, 2006). This excludes aggression between persons or groups that are equally matched, and in which altercations are anomalous or spontaneous. Bullying was not investigated in the present study, but its definition was important to understanding what defending is.

Overview of the Remainder of the Study

Chapter 1 of this dissertation served to introduce both the topic of defending and the objectives of the present study. Chapter 2 provides a review of literature relevant to the present study. Chapter 3 explains in detail the methodology used in the study. Chapter 4 describes results of planned analyses and Chapter 5 includes a discussion of conclusions and limitations of the study, as well as implications for research and practice.
CHAPTER 2
REVIEW OF RELATED LITERATURE

This chapter describes the prevalence and outcomes of school bullying, and how developments in bullying research have led to the identification of several roles children assume in bullying scenarios. One role, the defender role, involves acting to intervene in bullying. The other roles (i.e., bully, assistant, reinforcer, victim, outsider) describe students who actively take part in bullying, are victimized by it, or who to withdraw from it. The present study focused on defending behavior. Evidence from other studies suggests that girls may be more likely than boys to defend victims. Social identity theory was tested in this study for its ability to explain this gender difference in defending behavior.

Further delineation of the Problem

The United States Department of Education defines bullying as behavior that is 1) aggressive in intent, 2) repeated, 3) unprovoked, and 4) based on a power imbalance between victim and bully (Furlong, Morrison, & Greif, 2003). These four components are commonly included in definitions of bullying found in research literature (Greene, 2003), and the ideas of power imbalance and repetition are widely prevalent in bullying definitions (Smith & Brain, 2000). The repetition and power imbalance components make bullying a form of aggression that is distinct from one-time assaults, fights between equals, or random acting out behaviors.

According to existing bullying literature, bullying appears to be normative for child groups around the world, though it is generally considered socially unacceptable (Smith & Brain, 2000). Research suggests that bullying occurs in most schools (e.g., Salmivalli & Voeten, 2004). Children as young as 3 to 5 years are involved in bullying (Crick, Casas, & Ku, 1999). According to prevalence literature from the United States and around the world, bullying appears to be the most common type of aggression during elementary and middle school (Greene, 2003).
A review by Marini, Spear, and Bombay (1999) confirms findings that bullying confers negative consequences both upon children who bully and those who are bullied. Their review attests that children who bully are at risk for legal, mental health, and drug-related problems. Meanwhile, children who are bullied experience physical symptoms of illness, life-long isolation, drug abuse, suicide, and decreased school performance including drop-out apparently in relation to victimization (Marini et al., 1999). Awareness of the associated consequences of bullying has prompted researchers to examine the once ignored phenomenon.

The scientific study of bullying began in Norway in the 1970s, with other Scandinavian countries contributing heavily to the topic early on (Greene, 2003). Smith and Brain (2000) identify the publication of the book *Aggression in the Schools: Bullies and Whipping Boys* (Olweus, 1978) as representing a milestone emerging from Scandinavia during that era. The study of bullying has since spread throughout North America, the Pacific region, the United Kingdom, Ireland, other European countries, and developing countries (Salmivalli & Voeten, 2004; Smith & Brain, 2000). Furlong, Morrison, and Grief (2003) have concluded, however, that research and political interest in bullying was slow to arise in the United States.

The primary focus of bullying-related research has changed over time from examining only bullies and their victims, without consideration of context, to regarding bullying as a group phenomenon with various roles played by most children. As far back as 1973, Dan Olweus studied group mechanisms related to bullying (Olweus, 1978). However, such social-psychological study of bullying was not then the trend. In the 1980s and 1990s, there was a substantial research focus on children who bullied or who were bullied, with the aim of finding characteristics that distinguished them from “normal” children (Greene, 2003; Smith & Brain, 2000). Although peers are present in 88% of bullying situations (Hawkins, Pepler, & Craig,
researchers had typically approached bullying as a problem of only bullies and victims (Greene, 2003; Smith & Brain, 2000). The narrow focus on perpetrators and targets of bullying was evident not only in research studies but also in intervention efforts (Furlong, Morrison, & Greif, 2003). Almost all counseling interventions in the past have focused on intervening with children who committed or were targeted by acts of bullying (Greene, 2003). Furlong and colleagues (2003) conclude that state governments sometimes enact bullying legislation in reaction to school violence as depicted in the media, rather than referring to current bullying literature. The resultant laws may lean toward punishing bullies instead of counseling them or attending to the broader sociological conditions that perpetuate bullying (Furlong et al., 2003).

Fortunately the trend of conceptualizing bullying as a problem of individual perpetrators and victims is changing. Researchers are now paying more attention to how bullying behavior is influenced by peers, schools, families, and larger institutions (Furlong et al., 2003). A growing consensus of research seems to suggest that interventions on an individual level have had limited effect (Greene, 2003). Addressing bullying as a group activity is becoming more commonplace in the literature. Much of the recent research on bullying focuses on group processes (Rodkin & Hodges, 2003; Salmivalli, 1999). Currently, numerous examples of group-based interventions can be found in program evaluation literature (Merrell, Gueldner, Ross, & Isava, 2008; Smith, Schneider, Smith, & Ananiadou, 2004).

An important result of the increased attention to group processes in bullying is the identification (Olweus, 2001) and empirical verification (Salmivalli et al., 1996) of specific roles that children play in the process of bullying. Unique among these roles is one in which children defend victims of bullying. Unfortunately, interest in children who defend has been slow to
grow. Even though a few research studies examine the defender role, they generally do not focus on defending but rather discuss it as part of the context of bullying.

The limited research on children who defend is reflected in their apparent omission from school anti-bullying programs. This author found no literature describing interventions that incorporated children who were known to defend, even though researchers have recommended using children who defend as key figures in anti-bullying interventions. Salmivalli (1999) recommended the use of children who defend as models, mentors, and counselors in school anti-bullying programs. However, later interventions developed or evaluated by that researcher (Salmivalli, 2001; Salmivalli, Kaukiainen, & Voeten, 2005) did not employ children who defend. In one of those programs, Salmivalli (2001) used peer counselors, but selected them using criteria other than their defender behavior. It appears that it is difficult to incorporate the defender role into practice, perhaps because of its inconspicuousness in research literature.

The State of Research on Defending

Though research studies rarely focus specifically on defending, findings related to defending are available. Some research literature identifies various qualities of individuals who defend and investigates contextual variables that may relate to defending. What follows is a report of the data available regarding individual characteristics and contextual influences of children who defend, and a detailed description of the relationship between gender and defending. The information presented is exhaustive of the literature referring to the bullying-related behavior termed “defending” and the children termed “defenders,” though the information is small in scope and volume compared to that available about children who bully or are bullied.

The following review suggests that children who adopt a defending role exist in measurable amounts, and that they appear to differ in terms of individual characteristics and
social environment from children who assume other bullying-related roles. It also reasons that attention to contextual variables influencing defending behavior should be extended beyond peer influences to adult influences. Furthermore, it concludes that the internalization of peer- and adult-derived gender norms was an obvious target for a study designed to overcome the shortfalls of current defender-related research.

**Individual Tendencies and the Defender Role**

Children who defend appear to differ from children who exhibit other bullying-related behaviors in regard to certain individual characteristics. These individual characteristics include high trait agreeableness, low aggression, competent moral awareness, views against bullying, strong empathic ability, heightened inhibitory control, enhanced comprehension of other’s motives, and proficient emotion regulation. Defenders, when personal attributes are examined, also display high self-esteem and a highly generalized positive self-concept.

As might be predicted, defenders seem to be more empathic than children who commit or abet the act of bullying. Gini, Albiero, Benelli, and Altoè (2007), studying 318 Italian children aged 12-14, found “empathic responsiveness” to correlate positively with defending and negatively with bullying. This finding held for boys but not for girls in the sample. Maeda (2003) found similar results for both genders. Studying 293 10- to 13-year-old children in the United States, she found that defenders were significantly more empathic than were children identified as bullies or as their followers.

Perhaps not surprising is that defender scale scores in a Finnish sample of children 9-12 years old were positively correlated with a scale of anti-bullying attitudes (Salmivalli & Voeten, 2004). In addition, children who defend appear less aggressive than children who bully or who support bullying. Maeda (2003) measured children on two types of aggression, reactive and proactive. Reactive aggression is an emotion-driven retaliation against someone perceived to
have done harm. Proactive aggression is aggression initiated to achieve status or material goods. In Maeda’s (2003) study, children known to defend scored lower on proactive aggression than those known to bully, assist bullying, or reinforce it. Children recognized as defenders in the study also scored lower on reactive aggression than children who bully. In addition, for boys only, children identified as defenders measured lower on reactive aggression than children who assist or reinforce bullying (Maeda, 2003).

Maeda (2003) also found that children who defend are good at understanding the cognitive and emotional motives of other people’s behavior. On a scale to measure this cognitive and emotional “perspective-taking,” children categorized as defenders scored significantly higher than children who bully directly (i.e., children who directly assault or insult victims, as opposed to those who engage in social sabotage and veiled teasing).

Gini’s (2006) study of 204 students in Italy aged 8 to 11 provided partial support for Maeda’s (2003) findings on perspective-taking. To measure perspective-taking ability, researchers presented various scenarios to participants and asked them to infer the cognitive, emotional, and moral motives of the behaviors of the characters in the scenarios. Correct inferences were tallied to create a perspective-taking score. Children identified as defenders scored higher on cognitive perspective-taking than did those identified as victims. Scores on the defender scale correlated positively with cognitive, emotional, and moral perspective-taking (Gini, 2006). Perhaps contrary to Maeda (2003) was the finding that the only other role score to correlate with perspective-taking was the bully scale score, which correlated positively with cognitive and emotional, though not moral, perspective-taking (Gini, 2006). Even though there are inconsistencies between the findings of these studies, their combined results suggest a strong interpersonal awareness in children who defend, and perhaps in children who commit acts of
social bullying—an awareness that is less common in children playing other roles. It seems important that children who defend appear to be better than children who bully on moral perspective-taking, despite their similarity on two other perspective-taking dimensions (Gini, 2006).

Students who defend appear morally different from children who bully in another way. The Gini (2006) study also found that children who defend seem to have more concern for morals than children who engage in or promote bullying. The investigator used a “moral disengagement” scale to measure children’s tendency to minimize and justify violence and aggression. Children identified as defenders were less likely than bullies, assistants, and reinforcers to disengage morally; and defender scale scores correlated negatively with moral disengagement scale scores (Gini, 2006). However, the reported results of this study did not indicate that children in the defender role differed from children in other non-aggressive roles (i.e., victim, outsider) on the variable of moral disengagement.

Self-restraint, or inhibitory control, is another variable on which children who defend seem to differ from children who bully. Monks, Smith, and Swettenham (2003) gave 104 4- to 6-year-olds in London schools an exercise intended to measure their ability to overcome previously learned question-answer responses in order to answer new, counterintuitive test items correctly and quickly (e.g., looking at a flash card picture of a sun and, as instructed, quickly saying “night”). Children categorized as defenders scored higher on this task than children identified as bullies. The authors describe the task as requiring “inhibitory control” (Monks et al., 2003). Perhaps in the same category as inhibitory control, another form of self-control seems evident in these children. According to a scale designed to measure emotion regulation skills, defenders
Children who defend appear to have healthier self-esteem than children in other roles. Salmivalli, Kaukiainen, Kaistaniemi, and Lagerspetz (1999) measured 316 14- to 15-year-old Finnish schoolchildren on peer-evaluated self-esteem, self-evaluated self-esteem, and peer-evaluated defensive egotism (i.e., protective inflation of one’s sense of self superiority). Then the authors used those three self-esteem dimensions to create five self-esteem profiles: Defensive self-esteem, self-belittlers, genuine self-esteem, humble pride, and low self-esteem. “Defensive self-esteem” describes children who scored high on defensive egotism and above average on the other two dimensions. “Self-belittlers” were children who scored above average on peer-evaluated self-esteem, very low on self-evaluated self-esteem and not high on defensive egotism. “Genuine self-esteem” denotes children who scored high on peer- and self-evaluated self-esteem, but not on defensive egotism. “Humble pride” signifies children who scored high in self-evaluated self-esteem, very low on peer-evaluated self-esteem and not high on defensive egotism. Finally, “low self-esteem” indicates children who scored low in all three dimensions. Results showed that, for boys, but not for girls, a high defending score was most positively associated with the category of genuine high self-esteem. This is notable because, for boys at least, so-called genuine self-esteem differentiates children who defend not only from children in aggressive roles, but also from children who fall into other role behavior groups—including children who remain outside of bullying scenarios (Salmivalli et al., 1999).

Another attribute by which children who defend seem to stand out from other non-bullying children is self-concept. Self-concept differs from self-esteem in that self-esteem is an overall personal self-judgment, whereas self-concept describes one’s views about selected personal
qualities. Salmivalli (1998) measured 316 Finnish schoolchildren, 14 and 15 years old, on six self-concept areas: Academic, behavioral, emotional, social, family-related and physical. Defender scores correlated with all the self-concept area scores except for physical self-concept. This lack of correlation between defender scores and physical self-concept scores distinguished defender scores from bully, assistant, and reinforcer scores (which correlated positively with physical self-concept scores), and from outsider and victim scores (which correlated negatively with physical self-concept scores). Moreover, of all the bullying-related role-behavior scores, only defending scores correlated positively with academic and emotional self-concept scores. Therefore, three self-concept dimensions (i.e., physical, academic, and emotional) distinguished children who defend from children in all other identified roles, not just those in the aggressive roles (Salmivalli, 1998).

An important and stable individual characteristic that has been studied in relation to defending behavior is “Big Five” agreeableness. Tani, Greenman, Schneider, and Fregoso (2003) administered the Big Five Personality Inventory and the defender scale to 232 8- to 10-year-old students of two Italian schools. Children identified as defenders scored higher than children in all other roles on the dimension of agreeableness, which includes altruism as a component (Tani et al., 2003). Another individual variable that relates to defending is biological gender, which will be discussed in detail later in the chapter.

Social-Contextual Variables and the Defender Role

The social world of children who defend differs from the environment of other children in several ways. Defenders appear to be more well-liked than other children, they appear never to be socially isolated, they associate with other children who defend, their classrooms exhibit anti-bullying norms, and their defending behavior seems to rely more on social ties than does behavior characterizing other roles. The following review will show that these discoveries raise
questions about unexplored social aspects of children’s lives (i.e., adult influences, gender norms) that may influence a tendency to defend.

Children who defend appear to be more popular than non-defending children, including children not identified in any role. One study conducted in Spain (Monks, Ruiz, & Val, 2002) assessed the sociometric status of 92 children who were 4 to 6 years old. The children were asked to nominate a few peers whom they “liked most” and “liked least.” Teachers were asked to name children whom they thought classmates “liked most” and “liked least.” To assign bullying-related roles to the children based on peer-nomination, Monks et al. (2002) adapted Salmivalli and colleagues’ (1996) bullying-roles questionnaire into cartoon depictions of bullying-related role behavior. They had children look at each cartoon and asked children to nominate some peers who engaged in the depicted behaviors, and then to report whether or not they themselves engaged in the depicted behaviors. Then the cartoon version of the questionnaire was adapted into Spanish text in order to allow teachers to nominate children whom they thought fit the textual descriptions of bullying-related role behaviors. The final adapted and translated scales allowed for the selection of children into five categories: Aggressors, victims, defenders, supporters (i.e., a category comprised of assistants and reinforcers) and bystanders (i.e., children who were not selected into any of the other four role categories). Results were assessed for sociometry (i.e., popularity) based both on peer-, teacher- and self-nomination into the various roles.

When reviewing the findings of the Monks and colleagues’ (2002) study, it is important to note that the method of assessing popularity and role behavior used in the study may have affected the study’s results. That is, self-and teacher-reports returned no significant results. Only peer nominations of popularity and defender role behavior resulted in significant findings.
Children selected by peers as defenders received more “like most” peer nominations than did those identified as bystanders. Peer-nominated defenders also received fewer “like least” peer nominations than aggressors and supporters. The peer-nominated defender (and supporter) scores also correlated positively with the number of “like most” peer nominations (Monks et al., 2002).

Monks and colleagues’ (2002) results imply that children who defend are more accepted and less rejected than children in any other role, including children who did not meet any threshold criterion for identification in a role. However, it is important also to discuss the apparent effect of nomination strategy (i.e., peer, self, and teacher) on the results of the study. Peer-reported popularity and peer-reported defending returned significant findings, but self and teacher reports on those variables did not. This method-specific result may suggest that the traditional peer-rating paradigm used to identify children who defend presents a confound. Specifically, there may be a relationship between a child’s popularity and his or her salience in the minds of children asked to rate peers on defender behavior. The peer-report method of selection may be conflated with the nominated child’s popularity. Children might simply name popular children as defenders and unpopular children as victims and aggressors. Salmivalli and colleagues (1998) suspect this confound, stating that “some of the consistency in the peer evaluations of children’s social behavior might reflect the stability of their social reputation among peers, not their behavior per se” (p. 214).

On the other hand, the inconsistent results in Monks et al. (2002) may arise from the cartoon adaptation of the defender scale for the pre-literate participants or the subsequent textual reconstruction of the scale for teachers, rather than from problems with the peer-report identification method. In addition, it may be that peers know more than teachers do about their
classmates. Fortunately, other research studies exist to support the notion that defenders are popular children, although the results from these studies do not necessarily abate concerns about peer-report methodologies.

Goossens, Olthof, and Dekker (2006) measured the sociometric status of over 240 school children in the Netherlands and followed up on the same children two years later. Their ages ranged from 8 to 12 years in the first year of sampling, and 10 to 14 years in the second. The researchers classified children into five sociometric categories: Popular, rejected, neglected, controversial and average. They then used various methods of grouping children into bullying-related behavior roles. Each method incorporated a modification of Salmivalli and colleagues’ (1996) original scale or of its administration. Examples of selection methods compared in Goossens et al. (2006) included using various cutoff scores, having children nominate only a few peers they thought appropriate for each item of the scale, and having children rate all of their peers for each item of the scale, as in the original scale procedure. Regardless of the method used, children identified as defenders were the only children who fell into the category of “popular” both years, and they were the only children who did not fall into any of the other sociometric categories either year (Goossens et al., 2006).

Sociometric status was also assessed in the original Salmivalli and colleagues (1996) study, which is credited for publishing the first version of the bullying role scales. The participants were 573 12- to 13-year-old Finnish schoolchildren. Children identified as defenders received more “like most” peer nominations than children in all other roles, and they received few “like least” nominations. These researchers also categorized children as popular, rejected, neglected, controversial, and average. Popular children scored higher on the defender scale than did children in other sociometric categories.
In addition to being admired, children who defend appear least likely to be friendless. Salmivalli, Huttunen, and Lagerspetz (1997) had children aged 11 to 12 sort themselves and their classmates into friendship groups. The children did this by drawing “maps” of peer groups, including themselves in any group to which they believed they belonged. To depict groups, children would draw classmates in clusters and circle the clusters. Children could depict someone as not existing in any peer group by drawing them outside of all cluster circles. Analysis combining the friendship maps indicated that children who defend were the only children who were always found to have a network of friends, though their friendship networks appeared to be smaller than those of children who bully, assist, or reinforce (Salmivalli et al., 1997).

In addition to enjoying an ample quantity of admirers and friends, children who defend appear to befriend children of a predictable type. Salmivalli and colleagues (1997) found that children who defend tend to associate mainly with each other and that they do not appear to associate with bullies or bullies’ friends. What is more, a study by Salmivalli, Lappalainen, and Lagerspetz (1998) suggests that defending behavior may relate, more than do other role behaviors, to the composition of a child’s friendship group. They sampled children twice over two years, first in sixth grade (ages 12-13) and again in eighth grade (ages 14-15). They found that a child’s current friendships with children who defend related positively to his or her current frequency of defending behavior, but that a child’s prior defending behavior did not predict current defending. In contrast, prior bullying and victim behavior predicted current bullying and victim behavior (Salmivalli et al., 1998). Of note was that predicting defender behavior using current friends’ roles alone was more reliable than was predicting bully, victim, and other roles using a combination of friends’ roles and prior behavior (Salmivalli et al., 1998). This
apparently strong link between social sphere and defender behavior—seemingly stronger than
the social-sphere tie to other role behaviors—may suggest a greater reliance of the defender role
upon social context, compared to other bullying-related roles.

In addition to each other, children who defend usually have friends who are identified as
victims and outsiders (Salmivalli, Huttunen, & Lagerspetz, 1997). Ironically, despite their
popularity among peers and camaraderie with like others, children who defend do not appear to
receive peer support for their behavior in a form comparable to that which children who bully
receive from “assistants” and “reinforcers.” Approximately 16 studies (e.g., Camodeca &
Goossens, 2005; Salmivalli et al., 1996) have identified roles in which children specifically
support acts of bullying either by physically assisting or otherwise reinforcing (i.e., cheering,
inciting, watching) children who bully, but researchers have not found such supporters for
children who defend. This appears unfortunate considering the conclusion above that defending
behavior may rely heavily on peer support.

Another contextual variable that predicts a child being in the defender role is a classroom’s
set of bullying-related norms, which are defined as “students’ expectations about the social
consequences of pro- or anti-bullying behaviors…in their classroom” (Salmivalli and Voeten,
2004, p. 248). These expectations may be set verbally or non-verbally, by teachers or students.
Norms that are anti-bullying appear to contribute to defender behavior (Salmivalli & Voeten,
2004). Interestingly, girls seem to rely more on classroom anti-bullying norms for their defender
role stability than do boys, even though girls appear more stable overall in the defender role than
do boys (Salmivalli, Lappalainen, & Lagerspetz, 1998).

It is fortunate that a relationship between gender and norms has been explored in relation
to defending behavior. However, the norms studied so far have not been gender-specific. In
addition, the apparent lack of defender-supportive roles, and the presence of bully-supportive roles, may either result from an actual lack of peer support for defending or from a lack of defender-focused research. A clear lack of research interest in defenders appears evident, giving practitioners, educators, and other concerned adults little empirical information about how to promote and support defending.

The preceding review shows some advancement in the study of defending behavior, including the examination of both individual and social-contextual variables. The study of social context helps to begin describing the conditions under which defending occurs; but social variables that have been studied are limited to peer ecology, often excluding adult influences. In addition, what has been reported about the social environment of children who defend raises new questions about the effect of gender socialization on defending. A detailed account of findings related to gender and defending will further suggest that there is a need to examine social gender norms in relation to defending.

Gender and Defending

This section reviews evidence that girls are more likely to defend than boys and that some variables relate to girls’ and boys’ defending differently. Because most defender-related research only examines defending as part of the spectacle of bullying, reports of gender differences in defending do not always include findings specific to the defender role. Researchers often explicitly state that significant gender differences are found for the defender role, even when not including a statistic to the role. However, some research reports include statistics specific to gender differences in defending. Presented here are findings of gender differences in defending. When available, relevant statistics are included to show the sizes of gender effects. Ages and grades are included to show the relevance of these gender results to the population of interest in the present study (i.e., children in middle school).
Typically, studies that have used versions of the defender scale have found girls more likely to be identified in the role of defender. Five studies state that more girls than boys occupy the defender role, without providing statistics specific to that role. Camodeca and Goossens (2005) found that, in seventh and eighth grade (mean age = 11), girls were categorized in the roles of defender, outsider, and victim significantly more often than boys. These authors did not report separate statistics for defenders, choosing to report the statistic for the three roles grouped together.

Goossens, Olthof, and Dekker (2006) compared two methods for determining threshold scores for categorizing children into specific roles. One categorization method included assigning children to roles based on relative threshold scores for each classroom, ensuring that each classroom had children representing every role. The other categorization method involved setting three absolute score thresholds (i.e., 10%, 15%, 20%) representing how many peers believed a participant should be categorized into one of the bullying related roles. The researchers used these relative and absolute thresholds to assign children from the same sample to roles at ages 8-12 and again at ages 10-14. At both data-collection points and for all threshold scores, girls were significantly more often categorized than boys as defenders. In this study, Chi-squares were offered for the overall effect for all roles, not for the defending role specifically. In a similar study using only relative threshold scores, Salmivalli and colleagues (1998) noted that girls (in eighth grade, ages 14-15) were significantly more likely to be defenders and outsiders than were boys, giving no specific estimation for the defending role.

Salmivalli et al. (1996) also reported an overall Chi-square indicating significant gender differences for the roles in general, not specifically for the defender role. However, they specifically reported the proportion of girls and boys (in sixth grade, ages 12-13) in the defender
role, showing that 30.1% of girls and only 4.5% of boys were categorized as defenders. In another study, Salmivalli and colleagues (1997) reported that 28.4% of the girls versus 4.6% of boys (sixth grade; ages 11-12) were classified as defenders, but did not test these differences against a selected probability of chance effects.

Four studies to date have reported findings that describe significant differences specifically between boys’ and girls’ defending. Salmivalli and Voeten (2004) found that, in grades four and five, girls were more likely to defend than were boys. In grade four (ages 9-10), the regression coefficient representing the higher prevalence of girls than boys defending was .53, \( SE = .13 \). In grade five (ages 10-11) the regression coefficient was .72, \( SE = .16 \). In grade six (ages 11-12) the regression coefficient was 1.14, \( SE = .22 \) (Salmivalli & Voeten, 2004). They further reported that gender was the strongest predictor of role behaviors, compared to several other variables (i.e., individual anti-bullying attitude, group anti-bullying norms, and group normative indifference to bullying). Salmivalli et al. (1999) reported that, in eighth grade (ages 14-15), girls had significantly higher defender scores than boys, \( F(1,271) = 31.76, p < .001 \). Menesini and colleagues (2003) found in a sample of Italian middles school students, aged 11-14, that girls were reported to defend significantly more often than boys, \( F(1,279 = 34.4) \).

Salmivalli, Kaukiainen, and Voeten (2005) found boys had significantly lower defending scores than girls according to both self- and peer-report, in grades four (ages 9-10) and five (ages 10-11). With the range of possible defender scores being \(-1\) to \(1\), self-reports in grade four (ages 9-10) yielded regression coefficients of \(-.33, SE = .06\), and in grade five (ages 10-11) the regression coefficient was \(-.21, SE = .08\), indicating the drop in self-reported defender score associated with being male. For peer-reports in grade four (ages 9-10), regression coefficients
were -.76, $SE = .11$, and in grade five (ages 10-11) -.75, $SE = .11$, indicating the drop in peer-reported defender score associated with being male.

Another finding that held true for both self- and peer-report was that girls were significantly more stable in the defender role than were boys (Salmivalli et al., 1998). In this study, boys’ categorization in the defender role in a particular year (sixth grade, ages 12-13) did not correlate with their presence in that role two years later (eighth grade, ages 14-15), while girls’ did, as evidenced by correlations found with peer-report, $r = .47, p < .001$, and self-report, $r = .48, p < .001$.

Some studies did not find that girls defend more often than boys. Sutton and Smith (1999) showed mixed gender results for defender behavior. Students in other studies typically rate all of their classmates on bullying-related role behaviors. However, participants in this study only scored same-gender classmates on role behaviors. Boys scored higher than girls (ages 7-10) on the defender scale, $t(191) = 2.05, p < .05$, but a table indicates that a higher percentage of girls than boys were actually categorized into the defender role. Of the remaining studies using the defender scale, Maeda (2003) tested for and did not find significant relationships between gender and defender role categorization in fifth- and sixth-graders (aged 10-13); and Salmivalli (1998) and Tani et al. (2003) did not consider gender effects in their study.

Unlike other studies, Rigby and Johnson (2006) did not use reported defending behavior as a dependent variable, but asked children whether they would object to bullying in two imaginary scenarios. Their participants were students in the Australian school system in primary school (years 6 and 7) and secondary school (years 8 and 9). In primary school, girls’ claims that they would interfere were stronger than those of boys in both verbal, $\chi^2(4) = 11.26, p < .05$, and
physical bullying scenarios, $\chi^2(4) = 13.85, p < .01$. There were no significant gender differences in claims of past intervention in bullying situations.

An audio-visual method for observing bullying events, designed by Pepler and Craig (1995) to be unobtrusive and naturalistic, was employed to observe defending in first- to sixth-grade children in Toronto in a 2-year study (Hawkins, Pepler, & Craig, 2001). Results showed more boys than girls were observed defending. This finding contradicts the survey research cited above in which girls appear to defend more than boys, and it appears that naturalistic observation is a more valid measure of defending behavior than child reports.

However, Hawkins and colleagues (2001) also noted that a majority (i.e., 61%) of the children present at observed bullying situations were boys, and that children were significantly more likely to intervene when a bully or victim shared their gender. When the number of boys and girls present in observed bullying situations was taken into account, no gender differences were evident in defending behavior. Nor was a significant relationship found between gender and type of defending (i.e., aggressive and nonaggressive). Although this finding does not contradict other studies finding girls to defend more than boys, it fails to support them.

It is, however, possible that the Hawkins et al.’s (2001) selection of children to be observed created a sampling bias. The authors only applied surveillance to students who were nominated by peers as bullies, victims, or bully-victims—children around whom bullying was thought most likely to occur (Hawkins et al., 2001). This procedure may have caused more of the sampling to be conducted among bullying circles than if children were selected at random for observation. It is possible that bullying circles differ from other social circles in defending frequency, type (i.e., physical, verbal), or timing (i.e., before, during, after bullying). In addition,
children were aware that they were being observed, which may have caused differences in actual defending behavior.

The finding that girls’ defending is more dependent than boys’ defending on classroom anti-bullying norms (Salmivalli et al., 1998) begins the process of determining the connection between social norms, gender, and defending. Furthermore, gender differences in the relationship between normative pressure to help victims and children’s stated willingness to defend have been found. Rigby and Johnson (2006) examined imagined or anticipated defending behavior in relation to gender and the expectations of others. Their results showed that a child’s reported willingness to intervene in an imagined bullying scenario varied according to his or her level in school (i.e., primary vs. secondary), gender, and expectations of selected others. Boys’ reports of willingness to defend were more related to friends’ expectations to defend than to their parents’ expectations, which were more related to girls’ expressed willingness to defend (Rigby & Johnson, 2006).

These findings suggest that the expectations of others affect girls’ and boys’ defending differently. Furthermore, girls perceived more pressure from parents and friends to help victims (Rigby & Johnson, 2006). More research is required to determine whether the expectations of others are internalized as gender identity in a way that influences reports of actual (i.e., not imagined) defending behavior. The present study investigated how gender, social pressure, and gender identity combine to predict defender behavior in children.

A review of the application of both individual and social context variables demonstrates that individual differences paint only a partial picture of defending behavior, and that knowledge of social context influences will help create a more detailed representation of defending behavior. Gender is an individual, arguably fixed variable that has been shown to strongly
predict defending behavior. However, gender is also a socially constructed variable, which may change as social environments change. It is this changeable aspect of gender that may be important in improving children’s gender-related behavior. Because caregiving, educating, and counseling are social activities intended to facilitate positive growth or change, the social components of the relationship of gender to defending behavior are essential for empowering adults who care about improving safety at schools.

**Social Identity Theory and Defending**

The overarching proposition of social identity theory (SIT; Tajfel & Turner, 1986) is that humans have a drive to achieve a positive self-view based on membership in a highly regarded group. Many types of groups can be considered important to a person’s identity, including religious, political, economic, racial, and other groups. Among those types of groups, one often stands out as salient for a particular person in helping define his or her identity. For example, a person may be more inclined to compare him- or herself to others based on racial group identity rather than religious group identity. Of interest in the present study was that SIT had been used to postulate the effects of one’s gender group identity.

“Gender identity is usually defined as an unarticulated, global sense of one’s maleness or femaleness that is acquired early in life and is considered to be relatively impermeable to change” (Lorenzi-Cioldi & Doise, 1990; p77). In the present study, gender identity was considered to be partly determined by principles of social identity theory. The present study examined the relationship between gender identity and defending behavior. SIT had been used in the past to explain attitudes of dominance and acts of bullying. If the theory applies broadly to processes related to bullying, it should have predicted results in this study related to defending behavior. Its application to gender identity helped determine which variables might have mediated or moderated the apparent relationship between gender and defending.
Various methods can be used to enhance group-based self-esteem when an in-group identity is not providing satisfactory esteem to its members. One can change groups or members can act to improve a group’s image. SIT postulates a “firm but flexible” group membership. The theory asserts that individuals not perceiving positive self-identity from an in-group’s identity will sometimes transfer groups. The possibility for individuals to change groups is called *social mobility* (Tajfel & Turner, 1986). However, there are times when it may be difficult to change groups. For example, some may feel that changing one’s gender grouping is difficult. In such a situation, a person can strengthen his or her own sense of personal identity by helping enhance his or her group’s status and then working to ensure continued membership in that group. Acting in ways that help enhance group status when individual social mobility is not possible is termed *social change* (Abrams & Hogg, 1990; Tajfel & Turner, 1986).

Social change often involves comparing one’s in-group to a “superior” out-group on a dimension different from that on which the out-group excels. This strategy is called *social creativity*. When a group is outmatched on a particular attribute, social creativity allows that group to highlight an attribute on another dimension to boost in-group esteem. Take, for example, the assumption that males succeed more at domination than do females (Sidanius & Prato, 1999), which is corroborated by the ample findings that boys are more likely than girls to bully. Social creativity would allow girls to choose another dimension by which to show their value, one on which they may be considered superior to males. So, if relationship and empathy are considered positive female attributes (e.g., Hall & Halberstadt, 1980), then social creativity may involve girls emphasizing the relationally empathetic acts of befriending and supporting victims when girls are presumably outmatched on domination. In a sense, defending allows girls to gain ground by taking the higher ground.
Sometimes social change involves social competition, in which an in-group directly challenges the dominant status of another group in a way that could improve the status of the in-group vis-à-vis the salient out-group. The aim of social competition is either to win out over the out-group or to deconstruct the social assumptions that permit the dominant status of the out-group (Abrams & Hogg, 1990). Schmitt, Branscombe, and Kappen (2003) found that women are more likely to endorse social-dominance oriented beliefs when considering inequality that favors women. This finding accords with SIT’s concept of social competition, in which group members might favor direct rivalry with a relevant out-group to enhance group status. Perhaps then, defending can also be seen as a method of direct social competition. When a person defends, he or she may be challenging the bully—seeking to undermine his or her authority. If this is a cross-gender challenge, in which a girl is intervening with a male bully, it can be seen as bolstering the female gender group’s position over the male group through direct rivalry.

However, even if it is not a cross-gender challenge, female defending behavior may still be seen as social competition as defined by SIT. To be bullying, aggression must be committed by the powerful upon the powerless. In challenging the enforcement of power differences, defenders are challenging the very idea of hierarchy—the social concept that keeps one gender below another. Instead of competing to beat another group, girls who defend may be competing to equalize groups, thereby gaining increased relative status for their gender.

The salience of a particular in-group/out-group dimension is also important to personal positive self-concept. People belong to many in-groups and they stress some in-group memberships over others. Specific to gender identity, Lorenzi-Cioldi and Doise (1990) discuss how gender is a more salient identifying group for some people than for others. “Sex-typed individuals are males and females whose self-conceptions vary mainly along a stereotypical and
bipolar masculinity-femininity dimension. They make use of gender schema to a greater extent than individuals classified as androgynous or undifferentiated” (Lorenzi-Cioldi & Doise, 1990; p. 77). Therefore, some people may not work to enhance the status of their gender group so much as of another in-group (e.g., religious, academic, regional).

Therefore, in the present study, the increase of defending behavior according to these SIT strategies (i.e., social mobility, social creativity, social competition) was expected to be higher in girls who strongly identified with their female identity. Similarly, boys’ tendency to avoid defending behavior was expected to be less extreme if their most salient group identity was not gender-based. If males are thought to be dominating (Sidanius & Prato, 1999), a lower level of male identity would have predicted a lessened propensity to commit acts of domination (i.e., bullying) and to avoid counter behaviors (i.e., defending). Meanwhile, if females are considered sensitive, those females who were highly gender-typed would have been more likely to commit acts of sensitivity (i.e., defending) than females who did not hold their gender identity as primary.

The literature contains evidence of the effect of gender socialization variables upon views about dominance. Gender differences in people’s orientation toward social dominance appear to be moderated by one’s level of gender identity (Wilson & Liu, 2003), such that higher gender identity in males and lower gender identity in females is associated with greater favoring of social dominance. Schmitt, Branscombe, and Kappen (2003) find that, while men are significantly more oriented toward social dominance than are women, sexism scores mediate this relationship to the point of insignificance. Findings regarding people’s orientation toward social dominance can be interpreted as relevant to bullying, because the repetitively enforced power imbalance in the definition of bullying implies that it is an act of domination. Gender
socialization variables in the present study should, therefore, have also modified the relationship between gender and defending since defending was considered behavior that opposes domination.

It is not entirely an individual’s decision whether he or she changes in-groups, emphasizes a particular in-group attribute, competes directly with a salient out-group, or experiences a particular in-group membership as most salient. Social identity and the status of one’s in-group are based upon many people’s perceptions: that of the individual, those of other in-group members, and even those of out-group members (Tajfel & Turner, 1986). Groups include and exclude persons based on their behavior. For example, an in-group will likely retain an in-group member who bullies if the in-group has pro-bullying norms, and it will retain an in-group member who intervenes in bullying if the in-group has pro-fairness norms (Ojala & Nesdale, 2004; cf. Sentse, Scholte, Salmivalli, & Voeten, 2007). Groups also reward or punish behavior depending on whether it is thought to enhance or detract from group distinctiveness and favor. For example, disregarding pro-bullying and pro-fairness norms, in-groups will retain a member who bullies out-group members who appear too similar to the in-group, threatening group distinctiveness (Ojala & Nesdale, 2004). Therefore, physical enforcement of in-group boundaries is thought to occur.

This threat of violence or exile indicates that one’s behavior is strongly influenced by other people, whether they are in-group members or not. Consequently, using SIT to predict defending behavior requires being aware of the normative pressures that come from inside and outside of a participant’s in-group. Normative pressure (i.e., from mother, father, teachers, and friends) to help victims was the variable selected to measure such influences from inside and
outside the in-group. The present study included a comparison of the gender in-group and out-group normative pressure (i.e., from parents) for their relationship to defending behavior.

Various SIT strategies of self- and group-promotion framed predictions in the present study regarding gender differences in defending behavior. If strong support for SIT was to be construed from the findings of this study, normative pressure to help victims and gender identity should have modified the importance of biological gender in predicting defending behavior.

**Support for the Need for the Study**

Children in the defender role do not appear to stay in the defender role as time passes or as friends change. They often assume other roles, sometimes becoming victims of bullying (Brown, Birch, & Kancherla, 2005; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996; Sutton & Smith, 1999), other times becoming outsiders (Goossens, Olthof, & Dekker, 2006; Sutton & Smith, 1999) and sometimes becoming assistants and reinforcers of bullies (Sutton & Smith, 1999). Why might many children abandon the defending role in favor of roles thought to be less socially desirable? Why might many children remain in the bully role, though it is widely advertised as a problem? A contention of this dissertation was that the act of gathering and disseminating information about a behavior may increase the likelihood of that behavior occurring and that relative abundance of bullying research and intervention compared to that for defending should, therefore, be diminished.

Whether a behavior is productive or destructive, increasing awareness about it may promote it. A meta-analysis conducted by Paik and Comstock (1994) of 217 studies dating from 1957 to 1990 confirms the common claim that watching television violence increases aggressive behavior in the watcher. More related to the effect of research and intervention is Ringold’s (2002) discussion of the “boomerang effect” in which public campaigns intended to reduce unhealthy behaviors actually increase the probability of the behavior occurring.
Several mechanisms are offered to explain the boomerang effect. However, the one most in keeping with the tenets of social identity theory involves normalizing a negative behavior. Public health campaigns can prime awareness in the target audience of the prevalence of a negative behavior. Audience members might perceive this prevalence as confirmation that the negative behavior is normative within their group, and the need to conform to group expectations increases the occurrence of that behavior in those who have heard the warnings (Ringold, 2002).

Evidence exists that a more auspicious use of the boomerang effect can be attained by normalizing positive health behaviors to increase their likelihood (e.g., yoga; Rimal, Lapinski, Cook, & Real, 2005). Similarly, research, publicity, and interventions highlighting either bullying or defending may promote the target behavior. For example, activities designed to target and reduce bullying may unintentionally increase its occurrence. Fortunately, it might be that research, publicity, and intervention focusing on defending will promote that behavior. The present study was intended to add to the small body of work that highlights defending.

**Summary of Major Points**

Bullying appears to be a fairly common and harmful phenomenon. Research on bullying has evolved from narrowly focusing on the bully and victim to considering the social environment that perpetuates it—and from intervening on an individual level to intervening on a group level. This greater emphasis on social context has led to the identification of various bullying-related roles, including a role in which children defend victims. However, little is known about children who defend, and recommendations (Salmivalli, 1999) to recruit these children as peer leaders in interventions appear to have been largely ignored.

Nevertheless, research evidence about children who defend is available, which shows them to be empathic, moral, confident, and well-liked children. Importantly, children who defend are more likely to be girls than boys. Learning more about gender differences in defending behavior
may have implications for practitioners and educators. Social identity theory was considered an
apt framework for predicting the influence of social context on gender differences in defending
behavior. Defending behavior was expected to relate to socially constructed gender identity and
correlational findings were expected to help confirm this relationship. The next chapter
describes the procedures and instruments that were used to investigate these predictions.
CHAPTER 3
METHODOLOGY

Defending is an attempt to intervene in the process of bullying or to ameliorate its effects on a victim. Research on defending in schools suggests that girls are more likely than boys to defend victims. The purpose of the present study was to investigate whether one’s gender identity and normative pressure to help victims modify the relationship between gender and levels of defending behavior. This was considered a test of the suitability of social identity theory (SIT; Tajfel & Turner, 1986) for explaining gender differences in defending behavior.

The present study used a sample of middle school students in a town in the rural Southeastern United States. Children were administered a measure of defending, as well as measures of gender identity, normative social pressure to help victims, and biological gender. In other research, age appears to moderate the relationship between normative pressure to help victims and a child’s stated willingness to defend. Therefore, age was planned for use as a control variable if a correlation were suggested between it and defending. Analyses were conducted to test whether the relationship between gender and defending was mediated or moderated by the other predictor variables.

Participants

Various age groups have been studied in regard to their defender behavior. Studies requiring no reading-ability adaptation of the defender scale have included participants with ages ranging from 9 (Salmivalli & Voeten, 2004) to 15 years old (Salmivalli, 1998; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999; Salmivalli, Lappalainen, & Lagerspetz, 1998). Other scales used in the present study appear be most appropriate for use on a middle school sample. Therefore, students in sixth, seventh, and eighth grade were sought for participation.
Availability sampling was used. All students supplying informed consent from their parents were included in the study, if present on the day of data collection. To determine the minimum sample size, correlations between defender scores and other variables, as reported in prior studies, were examined. The multiple regression analysis involving the greatest number of variables involves the final questions in which a model is constructed of all variables and interactions discussed in other analyses. This analysis includes $k = 10$ predictor terms. The expected population partial correlation, $\rho = .26$, was determined using the most conservative data available for a predictive variable in a multiple regression analysis, which was the negative relationship between a child’s defending scores and his or her friends’ bullying scores (Salmivalli et al., 1998). On a power analysis table (Algina & Olejnik, 2003), selecting the nearest expected population partial correlation, $\rho = .25$, a specified minimum power, $1 - \beta = .70$, and a Type I error rate, $\alpha = .05$, for two-tailed tests indicated the need for a sample size of 104 participants, after adjusting for $k = 10$ possible predictor terms. Assuming a 20% response rate of parental informed consent for their children’s participation, the researcher sought to solicit participation from 525 students to achieve a sample size of 105. An accuracy table (Algina & Olejnik, 2003) indicated that a correlation from this sample size, $n = 105$, would estimate a population correlation within $\pm .15$ to $\pm .20$.

In order to strive for a demographically representative sample of middle school students, children from four middle schools were sampled. The first middle school was part of a K-12 university-affiliated research school, and the county school board in the same community manages the other three middle schools. The university-affiliated middle school population is thought to be demographically similar to the local population, but not representative in regards to behavior issues. This is because, though student admissions aim to build a demographically
representative student body, children are also screened to exclude those who evidence severe behavior problems. Limitations in generalizability of the results are discussed in chapter 5 within context of how comparable the three schools are to each other and how comparable the final sample is to middle school students in the region.

**Sampling Procedures**

Upon receiving approval from the university institutional review board, from local school administrators, and from teachers, the researcher sought informed consent from students and parents until an adequate number of students were eligible to participate in the study. Please see Appendix A for a draft of the informed consent document. The survey was administered to children in paper-and-pencil format. Data collection took several weeks.

Instructions and scales appeared in the survey packet in the following order: Participant Instructions for Survey, Right to Refuse, and Informed Consent (Appendix A); Defender Scale (Appendix B); Scale of Normative Pressure to Help Victims (Appendix C); Children’s Personal Attributes Questionnaire Feminine-Masculine Scale (Appendix D); Demographic Form (Appendix E); and Contact Instructions for Participants (Appendix F). The demographic form asked for date of birth, biological gender, and race/ethnic/cultural identification. The demographic form appeared after the other scales to avoid priming gender at the beginning of the survey. Birth dates were solicited as two items, asking the year first, to avoid the potential for respondents to make the error of writing the current year instead of their birth year.

When participants were finished, the researcher or a proxy collected each survey directly from each student, leaving each student with contact instructions for the principal researcher, the research advisor, and a local crisis center. If participants’ indicated confusion regarding any part of the survey, the researcher made note of such feedback anonymously.
Design

The study used a cross-sectional, correlational, multivariate survey design. Three predictor variables (i.e., gender, gender identity, and normative pressure to help victims) and one control variable (i.e., age) were assessed for their relationships to the dependent variable (i.e., self-reported defending). Gender was converted to a point-biserial format to permit correlational analyses. Bivariate analyses were conducted for all variables, as were multivariate analyses using every combination of the predictor variables possible. All relevant two-way interactions among the predictor and control variables were tested. These interactions were hypothesized in relation to SIT and to aid discussion of methodological limitations and suggestions for future research.

Causal interpretations were not made from results of the present study, but causal possibilities are used to suggest future causal research. In addition to correlational analyses described, primary factor analysis was conducted to test the defender scale for unidimensionality when administered as a self-report measure.

Measures

Reliability and validity information were presented here to show why the instruments selected for the study were optimal for measuring the constructs of interest. The constructs of interest were defending behavior, gender identity, normative pressure to defend, and biological gender. Defending behavior was assessed using the self-report defender scale (Salmivalli, 1998; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999; Salmivalli, Lappalainen, & Lagerspetz, 1998). Gender identity was assessed using the feminine-masculine scale of the Children’s Personal Attributes Questionnaire (CPAQ-FM; Hall & Halberstadt, 1980). Normative pressure to defend was assessed by adapting a series of questions developed by Rigby and Johnson (2006). Biological gender was asked on a demographic questionnaire.
The Self-Report Defender Scale

Self-reported defending was the dependent variable of interest in the present study. Refer to Appendix B to view the selected self-report defender scale. The defender scale is one of six scales on the Participant Role Questionnaire (e.g., Salmivalli et al., 1996; Salmivalli et al., 1998). The other scales on that questionnaire measure bullying, assisting, reinforcing, remaining outside, and being victimized. The other role scales were not used in the present study. Only the defender scale was considered appropriate for the present study. Analyses involved correlating defender scores with predictor variables.

Various revisions of the defender scale exist, using both peer- and self-report to estimate defending behavior. Evidence is here presented supporting the self-report use of the defender scale to estimate defending behavior as a continuous variable. As described below, self-reports and peer-reports on defender scales have been found to correlate positively; and because of this relationship, data from previous peer-report administrations provides some support for the use of the self-report defender scale. Also described below is also supportive evidence derived directly from self-report use of the defender scale. Finally, the author presents reasons that the selected version of the self-report defender scale (Salmivalli, 1998; Salmivalli et al., 1998; Salmivalli et al., 1999) is most appropriate version for the present study.

Defending is prevalent enough in child populations to measure without prohibitive sample sizes. Studies using the original defender scale scoring method (Salmivalli et al., 1996) estimate the proportion of defenders in various populations to range between 15.6% and 27.5% (Goossens, Olthof, & Dekker, 2006; Maeda, 2003; Salmivalli, 1998; Salmivalli et al., 1996; Salmivalli et al., 1998; Sutton & Smith, 1999). Studies exploring alternative scoring methods return a wider prevalence range for defenders: 5% (Goossens et al., 2006) to 46.1% (Sutton & Smith, 1999).
Criterion-related validity for the defender scale has been shown in relation to variety of individual characteristics: “genuine” self-esteem, aggression, moral sensibility, anti-bullying attitudes, empathy, self-control, social cognition, emotion regulation, trait agreeableness, and various self-concept dimensions. In addition, criterion-related validity has been established in connection with various social context variables: popularity, having defenders as friends, and classroom anti-bullying norms. Furthermore, factor analysis of peer-report scales (Camodeca & Goossens, 2005; Goossens et al., 2006; Salmivalli, Huttunen, & Lagerspetz, 1997; Salmivalli et al., 1998; Sutton & Smith, 1999; Tani, Greenman, Schneider, Fregoso, 2003) confirm that the defender scale measures a single behavioral role dimension that is distinct from other bullying-related behavior roles (i.e., bully, assistant, reinforcer, and outsider). Self-report defender scale scores correlate significantly and positively with peer-report defender scores, $r = .46, p = .01$, and negatively with peer-report bully, $r = -.14, p = .01$, reinforcer, $r = -.21, p = .01$, and assistant, $r = -.19, p = .01$, scales (Salmivalli et al., 1996).

The scale is appropriate for use on middle school students. Norming of the first version of the defender scale employed a sample of fourth- through sixth-graders, and the scale was designed for use on children aged 10 through 14 (Violence Institute of New Jersey, 2007). Other versions of the scale, including the selected version, have been administered to children in middle school grades, international equivalent grades, or on children of middle school age (Gini, 2006; Gini et al., 2007; Goossens et al., 2006; Maeda, 2003; Salmivalli, 1998; Salmivalli et al., 1996; Salmivalli et al., 1997; Salmivalli et al., 1998; Salmivalli et al., 1999; Salmivalli, Kaukiainen, & Voeten, 2005; Salmivalli & Voeten, 2004).

The version of the defender scale chosen for the present study was a six-item scale used in three studies (Salmivalli, 1998; Salmivalli et al., 1998; Salmivalli et al., 1999). Self-report data
were available from two of those studies (Salmivalli et al., 1998; Salmivalli et al., 1999). All three studies were conducted with eighth-grade participants. This version of the defender scale had been used more often than other versions. In addition, it appeared to be the only self-report defender scale used in a study that includes a factor analysis (Salmivalli et al., 1998), confirming that the defender scale measured a unified construct separate from the constructs measured by the other bullying scales in the same questionnaire. However, it was possible that only peer-report data was used in the factor analysis, because peer-report was the authors’ primary interest in that study. Factor analysis of item responses to the selected scale were conducted for the present study.

Internal reliability for the selected scale was reported (Salmivalli et al., 1998) as a range containing coefficient alphas of all of the bullying role scales, $\alpha = .84$ to $\alpha = .94$, but these reliabilities may have been for peer-report use of the scale. Internal reliability based on self-report use of the selected scale was analyzed in the present study. Test-retest reliability, had been researched for the selected self-report defender scale. Test-retest reliability over two years for the selected self-report defender scale was significant, $r = .37, p < .001$, and identical to that reported for the corresponding six-item peer-report defender scale (Salmivalli et al., 1998).

Self-report defender scores on the selected scale correlate significantly and in expected ways with several variables. For girls, though not for boys, self-report defender scores correlated positively with peer evaluated self-esteem, $r = .30, p < .001$ (Salmivalli et al., 1999). In addition, expected gender differences (i.e., similar to peer-report) occur in the two-year stability of self-reported defender behavior, in that girls have significantly stable defender scores, $r = .48, p < .001$, while boys do not (Salmivalli et al., 1998).
Although peer-report and self-report use of the defender scale may estimate defending behavior in different ways, some evidence supports self-report use of the defender scale. Using self-report, results of a study by Salmivalli and colleagues (1998) have shown that children who retain the same classmates over two years have stable defender scores, $r = .55, p < .01$, while students acquiring different classmates do not; but the finding is opposite using peer-report. The self-report-based defender scale findings are more consistent than the peer-report-based defender scale findings are with the same study’s self- and peer-report stability findings for other roles.

Evidence of a possible limitation of the self-report defender scale exists in findings suggesting that children may be inflating their own defender scores (Salmivalli et al., 1996; Salmivalli et al., 1998; Sutton & Smith, 1999). Self-assessment, therefore, may be subject to a “social desirability” bias. Evidence contradicting a social desirability bias exists. For example, peer-identified defenders appear to underestimate their own defending behavior (Sutton & Smith, 1999). In addition, defender role stability does not seem to be different for self- and peer-assessment (Salmivalli et al., 1998). Furthermore, scores on an arguably undesirable behavior, reinforcing, are higher for self-report than peer-report (Salmivalli et al., 1996). Moreover, peer-reported bullies more often identify themselves as bullies, reinforcers, and assistants than as any other role; whereas peer-reported defenders more often identify themselves as defenders or outsiders (Salmivalli et al., 1996). Finally, peer- and self-reported defending have been shown to correlate significantly with each other (Salmivalli et al., 1996). Therefore, it does not appear that social desirability bias explains all of the differences apparent between self- and peer-reported defending. A direct test of social desirability bias was not within the scope of the present study.

Hawkins and colleagues (2001) found that children are significantly more likely to intervene in a bullying situation when a bully or victim shares their gender. To explore this
potential relationship for use as a possible control variable and for interpretation in an SIT context, half of the participants were asked to complete the defender scale in reference to situations in which they witnessed a boy bullying another boy, and the other half completed the scale in reference to situations during which they witnessed a girl bullying another girl. This situation-specific prompt was accomplished by rotating two forms of the survey among participants, regardless of participant gender. Thus, participants were assigned to recalling actual situations in which they either shared the gender of the bully and victim, or did not.

**Gender Identity**

To measure participants’ level of gender socialization (i.e., gender identity), the researcher administered the long form of the Children’s Personal Attributes Questionnaire Feminine-Masculine Scale (CPAQ-FM; Hall & Halberstadt, 1980). Please see Appendix D for a copy of the CPAQ-FM. The CPAQ-FM is one of three scales contained on Hall and Halberstadt’s (1980) questionnaire. The other two scales in the questionnaire, Feminine (CPAQ-F) and Masculine (CPAQ-M), were not considered appropriate to the questions of the present study. Those scales measure masculinity and femininity as gender attributes that can coexist in a person of any sex; while the present study investigated a social drive to see gender groups as having mutually exclusive attributes, as described in gender applications of SIT. Regarding the appropriateness of the CPAQ-FM for measuring this tendency, Hall and Halberstadt (1980) state “It is not surprising that the Feminine-Masculine scale should show more marked gender differences than the two unipolar scales, which by definition consist of attributes that are socially desirable for *both* males and females” (p. 279), whereas the one-dimensional CPAQ-FM scale contains attributes considered differentially desirable for males and females. Similarly, the research questions of the present study regarded whether defender behavior was differentially desirable on a social level for girls and boys.
Higher scores on the CPAQ-FM denote higher masculinity and lower femininity, and lower scores denote the opposite (Hall & Halberstadt, 1980). In a study of children aged 8-11, the internal consistency of the CPAQ-FM was low, $\alpha = .53$ (Hall & Halberstadt, 1980). Internal consistency of the scale was also examined in the present study. The CPAQ-FM scale has significant and good test-retest reliability, $r = .46$, over one year (i.e., grades 3-4 in the first year, grades 4-6 in the next year; Hall & Halberstadt, 1980).

Evidence supports criterion-related validity for the scale. CPAQ-FM scores correlate significantly, $r = .86$, with scores on the adult version of the scale, when both are completed by a single adult group (Hall & Halberstadt, 1980). CPAQ-FM scores also correlate significantly with mothers’ descriptions of their children on the CPAQ-FM, $r = .33$, in third- through sixth-graders. Furthermore, the CPAQ-FM scale significantly correlates positively with the masculine scale, $r = .51$ (Hall & Halberstadt, 1980). In addition, the CPAQ-FM discriminates gender in expected directions, such that higher (i.e., more masculine) scores occur in boys, with reported effect size of $.90 \, SD$ in a sample of children in grades three through six. This discriminative effect emerged also for older children using shorter versions of the scale (Hall & Halberstadt, 1980). As expected by the scale’s developers, higher masculinity scores on the CPAQ-FM significantly predicted higher scores on some self-concept dimensions for both boys and girls.

In the same article, studies using the short version of the CPAQ-FM, which correlates positively with the long form revealed expected relationships between girls’ scores on the scale and scores on two other scales: observer-rated assertiveness, $r = .36$, and observer-rated dependency, $r = -.40$. In addition, discriminant validity was supported by the confirmation of a hypothesized weak correlation between the scale scores and intelligence scores (Hall & Halberstadt, 1980).
Normative Pressure to Help Victims

Rigby and Johnson (2006) used a four-item scale (Rigby, 2005) to determine a child’s perception that his or her mother, father, friends, and teacher would expect him or her to support a victim or support a bully in a given bullying situation. Lower scores on this scale represent a perceived expectation to support a bully and higher scores represent a perceived expectation to support a victim. Each of the four items asks a child to indicate the expectations of a single source (e.g., mother) of normative pressure. Participants are asked to omit a question regarding parental expectations if that parent is not living. The scale appears to function as four single-item subscales in the studies where it has been used (Rigby, 2005; Rigby & Johnson, 2006), and no internal consistency data is available for the scale as a whole. An expanded version of the scale was created for the present study. Internal consistency for the entire scale was examined in the present study, as were internal consistencies of subscales derived from expanding each of the single items. Please see Appendix C for a copy of the scale of normative pressure to help victims, adapted for the purposes of this study.

The original scale, or procedure, was administered to children in their primary school years (i.e., sixth and seventh, mean age 11.5 years) and secondary school years (i.e., eighth and ninth, mean age 13.5) in Australian schools (Rigby & Johnson, 2006). The reported mean ages correspond to expected ages for sixth-, seventh- eighth-, and ninth-graders in US schools; therefore the findings were transferable to the sample of the present study.

Findings related to the scale appear to accord with SIT when it is presumed that a female identity includes a social norm of compassion while a male identity contains a norm of power. The level of normative pressure in the Rigby and Johnson (2006) study differed by a child’s gender and the identified source of normative pressure. In primary school, significantly more girls than boys thought their fathers and friends would expect them to support a victim. In
secondary school, significantly more girls than boys thought their friends would expect them to support a victim (Rigby & Johnson, 2006). Claims by children that they would support a victim in a bullying scenario varied by gender and normative pressure. For boys in primary, \( r = .47 \), and secondary school, \( r = .38 \), but not for girls, normative pressure from friends correlated significantly with willingness support a victim. For girls in primary school, but not for boys, normative pressure from mothers, \( r = .21 \), and fathers, \( r = .36 \), correlated significantly with commitment to support a victim. This effect held for girls in secondary school for normative pressure from both mother, \( r = .25 \), and father, \( r = .35 \), and a relationship was found in secondary school between boys’ expected pressure from their fathers and their willingness to support a victim, \( r = .25 \) (Rigby & Johnson, 2006). It also appeared in the study that, with exception, boys’ willingness to help victims was more related to friends’ expectations, while girls’ willingness to help victims was more related to parental expectations.

Because the relationship between normative pressure and claims of willingness to oppose bullying differed by gender in Rigby and Johnson’s (2006) study, gender differences were expected in the relationship between normative pressure and actual reported defending. Correlational analyses included tests to determine whether an interaction exists between normative pressure (i.e., for each source) and gender when predicting defender scores.

An extensive search conducted by this author suggests that the scale of normative pressure to help victims was apparently the most thoroughly validated procedure for assessing the specialized construct necessary for the present study: that of social pressure to defend, as exerted by adults and other children. For the purposes of this study, adaptations were included to permit the measurement of internal reliability of the measure of normative pressure from each independent source (i.e., mother, father, friends, and teachers). The original studies showed
photographs of bullying scenarios, thus assigning students to different situations, and asked the children to respond to the normative pressure items. In the present study, each of the four items were administered four times as applied to four different bullying scenarios derived from the textual prompt consistently used with the defender scale, and photographs were used.

The reason for replacing photographs with prompts derived from the defender scale was to ensure that all scales related to bullying were based on the same definition of the phenomenon. However, the definition describes four broad categories of bullying, providing the opportunity to prompt children to respond to normative pressure scale items in four different bullying situations: direct physical, direct verbal/social, indirect physical, and indirect social/verbal. This adaptation likely added to the reliability of measuring normative pressure to defend, but also allowed for the measurement of internal consistency for each source (i.e., mother, father, friends, and teachers). The adapted scale consisted of 16 total items instead of 4, and 4 items for each pressure source instead of 1.

Furthermore, because the terms “friends” and “teacher” may be too broad to describe those persons most socially significant to participants, the terms “best friends” and “favorite teachers” have been substituted. Both terms were stated in the plural to ensure that the scale prompted children to assess group pressures as opposed pressure from a selected individual, thus keeping closer to constructs described in SIT. Moreover, the predominant age-group of best friends was asked in the demographics questionnaire to ensure that child-on-child pressure was assessed, and the predominant gender of best friends and favorite teachers was ascertained in order to determine if gender in-group pressure and gender out-group pressure differed in their relationship to defending behavior. These intended improvements to the assessment of
normative pressure to help victims were assessed for reliability, and for validity via a factor analysis and content analysis.

Age

Age appears related to scores of defending and to normative pressure to help victims. Thus the age of a participant was anticipated as a controlling variable (see demographics form, Appendix E). In Rigby and Johnson’s (2006) study, seeming age effects appeared in boys regarding normative pressure to help victims, such that “primary school” boys’ willingness to object in a bullying situation did not correlate to pressure from either parent, but “secondary school” boys’ willingness to object did correlate with pressure from their fathers. Older girls in the study were also significantly more likely than the younger girls to perceive that their mothers, fathers, and friends expected them to support a victim (Rigby & Johnson, 2006). These age effects in past research suggested that it could have been important to control for the effects of age on the predictor variables’ relationships to defending behavior in the present study.

Though significant correlations between each source of pressure and defending were reported by gender and age group in Rigby and Johnson (2006), it was not reported whether the correlations differed significantly by gender and age group. The present study tested for interactions between age and gender for each normative pressure source.

Various increases and decreases, related to age or grade level, appear to occur in the number of children identified as defenders in studies. Salmivalli and Voeten (2004) found that children in the fifth and sixth grades were less likely to be defenders than children in the fourth grade. Conversely, Salmivalli and colleagues (1998) found that students were more likely to be defenders in the eighth grade than they were in the sixth grade. Therefore, age and grade level were planned as control variables in the event that defending correlated with age or differed by grade level.
Analyses

Various correlational analyses were employed in the study. For all analyses described, assumptions of homoscedasticity, linearity, conditional normality, and independence were tested, and corrections made where appropriate and feasible. Zero-order correlational analyses were conducted between defending and all predictor and control variables (i.e., participant gender, gender identity, normative pressure to help victims, shared gender between participant and bully or victim, normative pressure source gender for parents, and age). In addition, zero-order relationships were tested between participant gender and various proposed mediating variables in order to diagram paths of mediation from gender through each of the other predictor variables.

Multiple regression analyses were also conducted. The first multiple regression analysis included participant gender as the predictor variable and gender identity as the mediating variable, with defending as the dependent variable. All paths (i.e., predictor-dependent, predictor-mediating, mediating-dependent) are described as correlations, including correlations between predictor and dependent variables before and after adding the mediating variable.

The effect of mediation was analyzed using a method described by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) including a test for significance; and a SAS program (Taborga, Cheong, & MacKinnon, 2000) was employed to carry out the analyses. This method was used for all mediation analyses. Possible causal inferences are discussed tentatively.

In addition, four multiple regression analyses included participant gender as the independent variable and normative pressure to help victims from each pressure source (i.e., mother, father, friends, teachers) as mediating variables, with defending as the dependent variable, controlling for gender identity.

Another multiple regression analysis included participant gender as the predictor variable and shared gender between the participant and the bully or victim as the mediating variable, with
defending as the dependent variable. Shared gender was numerically coded for point-biserial calculations so that the two possibilities (i.e., participant was same gender as bully or victim or participant was not the same gender as bully or victim) were regarded as levels for correlational analysis.

Still another multiple regression analysis was conducted to examine a potential interaction between normative pressure to help victims and the gender match between the person providing the pressure and the participant (i.e., a variable representing whether the participant and the person providing normative pressure were in the same gender in-group). In-group status was numerically coded for point-biserial calculations so that the two possibilities (i.e., gender in-group or gender out-group) were regarded as levels for correlational analysis. Evidence of an interaction between the two variables were to be construed as supporting the prediction, based on SIT’s concept of in-group favoritism, that perceived normative pressure from in-group (i.e., same gender) persons and out-group (i.e., opposite gender) persons would have different relationships to one’s behavior. A similar analysis explored whether the age (i.e., child, mixed, adult) of a participant’s best friends would moderate the relationship between normative pressure and defending.

Finally, “all possible subsets” regression analysis was conducted to determine if gender was diminished in or excluded from the best predictive combination of the predictor variables and hypothesized interaction terms. A significant change in the relationship between biological gender and defending were to be considered an important step toward asserting that social influences may influence defending in concert with or more directly than biological gender.

Methodological Limitations

Certain limitations were anticipated in the present study. Several were expected from the use of surveys to collect behavioral data. The self-report defender scale score may possibly
represent not only actual defending behavior, but also a participant’s likelihood of responding in a socially desirable way. In addition, the scale of normative pressure to help victims measures only a child's perception of the expectations of his or her significant relations. These perceptions may be different from expectations reported by those significant relations, if such data were to be collected.

Causal interpretations of results obtained in this study were made in all possible causal directions, and implications for practice based on the results were phrased and read with tentativeness, describing alternative explanations for significant findings. Research that manipulates gender identity salience and a child’s perception of normative pressure to help victims is needed for causal conclusions. It was considered that this correlational study could serve as a springboard for such causal research.

It was expected that random selection of participants would not be conducted, due to the desirability of achieving an adequate sample size with a possibly low return rate of informed consent by parents. As such, results were probably susceptible to a bias reflecting differences between families who would complete and return the required informed consent forms and those who would not. Such differences would possibly affect responses to survey items. Possibilities such as this were to be considered when interpreting results of the present study, particularly if an extremely low return rate required the researcher to settle for a convenience sample.
CHAPTER 4
RESULTS

This chapter presents results of surveys administered to students in four middle schools in a rural southeastern university county. The dependent variable addressed in the surveys regarded a child’s tendency to defend victims of bullying, while the candidate predictor and moderating variables were gender, gender identity, normative pressure from parents, friends, and teachers to help victims of bullying, and demographics. Demographics are reported first, followed by reliability and validity information about the measurement instruments, inspection of potential control variables, and finally the results of analyses pertinent to the study’s research questions.

Sample Demographics

Participants were 274 students from three public middle schools and one university affiliated research middle school in a rural county in the Southeastern United States. Examination of the difference in betas (DFBETAS), or the difference in the parameter estimate caused by the removal of an observation, indicated no undue influence of outliers, and therefore no participants were excluded from the study. Participants were excluded from a specific analysis if missing data was applicable to that analysis.

One hundred sixty-eight participants (61%) were female and 101 (37%) male. Five participants (2%) did not indicate their gender. Eighty-nine students (32%) were in 6th grade, 64 (23%) in 7th, and 121 (44%) in 8th. The mean age of participants was 12.97 years ($SD = .97$, Median age = 13.07). Students’ ages ranged from 10.55 to 14.95 years. Twenty-four participants did not indicate an age.

Students were permitted to endorse as many racial-cultural identities as they thought appropriate from a list including African American, White, Asian, Pacific Islander, Hispanic/Latino(a), Native American/American Indian, Alaskan Native, and Other. Because of
multiple selections from several children, counts total greater than the total sample size (N=274). A total of 75 students (27%) identified as African American, 175 (64%) as white, 19 (7%) as Asian, 5 (2%) as Pacific Islander, 45 (16%) as Hispanic/Latino(a), 20 (7%) as Native American/American Indian, 3 (1%) as Alaskan Native, and 31 (11%) as Other. The numbers of children choosing a single identifying category were 51 (19%) African American, 130 (47%) White, 8 (3%) Asian, 1 (.4%) Pacific Islander, 20 (7%) Hispanic/Latino(a), 1 (.4%) Alaskan Native, and 2 (1%) Other. No participant identified solely as Native American/American Indian. Fifty-five (20%) participants selected multiple racial-cultural identities. Six students (2%) did not indicate a racial-cultural identity.

The sample makeup seems to resemble the population of the county sampled, with the important exception of gender. The U.S. Census Bureau (2008a) estimates the proportion of females and males aged 10 to 14 in the county sampled to be 48% and 52% respectively. Analysis of U.S. Census Bureau (2008a) data provides the following percentages for racial/categories (i.e., either alone or in combination with others) for children in the sampled county between ages 10 and 14 as of July 2007 indicate to be 33% Black or African American, 64% White, 5% Asian, .08% Native Hawaiian or Pacific Islander, 7% Hispanic, and 1% American Indian or Alaskan Native. Those selecting themselves to be in a single category were 31% Black/African American Alone, 62% White Alone, and 3% Asian Alone, excluding groups comprising less than 1% of the population. For all ages, 6.2% of the population was “some other [single] race” (U.S. Census Bureau, 2008b).

**Reliability and Validity of Instruments**

For each instrument, the assessment of reliability and validity were required. One reason for these analyses was the absence of certain analyses in past uses of some of the instruments. Another reason was that the use of an instrument for the particular aims of any study is likely to
be unique in some way. Knowledge of instrument psychometrics for a particular use allows for informed discussion of results. Therefore, internal reliability and factor structure was assessed for each variable in this study that was measured by a scale.

Internal consistency was calculated for the Self-Report Defender Scale, Normative Pressure to Help Victims, and the Children’s Personal Attributes Questionnaire Feminine-Masculine Scale (CPAQ-FM). Factor analysis was also conducted to explore whether instruments represented a single dimension where appropriate (i.e., Defender Scale, CPAQ-FM) and several dimensions where appropriate (i.e., Normative Pressure). Factor analyses have not been conducted in prior studies either on the Self-Report Defender Scale or on the measure of Normative Pressure used in this study.

**Defender Scale**

Cronbach’s coefficient alpha for internal consistency was computed for the self-report defender scale using SAS 9.1 statistical analysis software, the software used for all analyses in this study. Internal consistency for standardized Defender Scale scores was sufficient, $\alpha = .692$. In addition, removing any item from the scale appeared to reduce internal consistency or not increase it. Principal factor analysis for the scale suggested that it is appropriate to interpret the scale as representing a single factor. This support for the scale’s unidimensionality is tentative due to the sample size required for a reliable factor analysis.

**Children’s Personal Attributes Questionnaire Feminine-Masculine Scale**

Internal consistency for the CPAQ-FM was low, $\alpha = .419$. Principal factor analysis was also run on the Children’s Personal Attributes Questionnaire Feminine-Masculine scale (CPAQ-FM) to investigate whether the scale appears to represent a single construct when used on the current sample. This analysis was conducted both for the complete 13-item scale and for the more internally consistent 9-item scale. Using the proportion criterion, three factors were
retained for the complete scale. The retention of multiple factors did not support the unidimensionality of the CPAQ-FM.

Analyses of the effect of deleting each scale item indicated that deleting four variables (i.e., “I believe very strongly in God,” “I am interested in what goes on outside my home and in the world,” “I like math and science a lot,” and “When something very bad happens, I get very upset and forget what is the best thing to do.”) would result in a scale with a higher internal consistency, $\alpha = .559$. As in the full scale, principal factor analysis did not support the unidimensionality of the CPAQ-FM with items deleted, as two factors were retained using the proportion criterion.

The short CPAQ-FM as described by Hall and Halberstadt (1980) resembles the present study’s modified shorter form tested above, but with additional items removed: “It is very important to me to have my parents or other grownups take care of me so nothing bad can happen to me,” “It is very important to me that people think that I am good,” “I like to take charge of things,” and “I am very good at getting my way with my friends.” For the present study, the internal consistency, $\alpha = .452$, for Hall and Halbertstadt’s (1980) short form was higher than that of the long form, but lower than that of this study’s modified form. Principal factor analysis indicated the retention of a single factor, supporting the unidimensionality of Hall and Halbertstadt’s (1980) short CPAQ-FM. This unidimensionality of construct was not considered necessary for the purposes of the present study, as the scale was intended to measure adherence to stereotypes associated differentially with femininity and masculinity, even if those stereotypes encompass more than one construct.

Sufficient internal consistency is a prerequisite to discussions of validity. An internally inconsistent scale cannot be said to measure a particular construct. Therefore, the decision was
made to employ the modified form of the CPAQ-FM because it had the highest internal consistency. In selecting the form of the CPAQ-FM to be used in analyses, issues of content and criterion validity were considered, as well as issues of internal consistency.

It is difficult to argue for the removal or inclusion of any items of a gender identity scale based on content validity alone. For example, an item such as “I like to take charge of things,” may sound stereotypically masculine in some areas and eras. However, in a 21st-century university-centered county, in which examples of female leadership are plentiful, such an item may lose its connection to gender. This example may be arguable, though, because many people may experience biases in favor of male leadership, even in the community described. The content effects of removing items from a scale published in 1980, therefore, were not clear, at least in terms of how the items related to gender identity directly. However, Chapter 5 contains a detailed description of factors represented by items in all three scales, arguing the content equivalence of this study’s modified scale to Hall and Halberstadt’s (1980) two forms.

Criterion validity of items was explored by correlating forms of the scale with gender, and by correlating individual items with gender. Analyses showed that correlations between gender and the three forms of the scale do not differ by more than .04. In addition, a scale consisting only of items that significantly predict gender had the lowest internal consistency of all the scale forms and did not predict gender better than the other scales. Criterion validity, as measured by those analyses, was not helpful in determining which version of the scale was most appropriate for use in the present study.

The best evaluation of the effect on construct validity of removing items from the long CPAQ-FM may come from examining the short form created by the developers. As noted above, the items removed to create the modified CPAQ-FM were half of those removed by Hall
and Halberstadt (1980) to create the short form of the scale, only more items were removed to create the short scale. The modified scale, therefore, returns four items that were removed from the long CPAQ-FM by its authors when they created the short CPAQ-FM. This similarity to both scales supports the notion that the content of the modified scale fully covers the construct domain conceptualized by the developers. A comparison of factors represented by items in the three scales will be presented in Chapter 5.

**Normative Pressure to Help Victims**

An adapted procedure was used to measure a child’s normative pressure to help victims of bullying. This modified scale was used to determine a child’s perception of the expectations of his parents, friends, and teachers that he or she help victims or help bullies. The original procedure consisted of four one-item “subscales.” The adaptation of the scale provided a sixteen-item scale with four subscales in which the expectations of four people or groups of people (i.e., mother, father, best friends, and favorite teachers) were reported for four bullying situations (i.e., hitting and shoving, name-calling and teasing, ostracizing, and stealing). This adaptation of the original procedure necessitated preliminary reliability and validity analysis of the instrument as used in the study.

Principal factor analysis retained five factors using the proportion criterion. Using varimax orthogonal rotation for easier interpretation of factor loadings and searching for factor loadings of .5 or higher allowed for the clear selection of all items into a factor. Factor 1 included items indicating normative pressure from the mother and father in two direct bullying situations (i.e., hitting/shoving and name-calling/teasing). Factor 2 included all items related to normative pressure from favorite teachers. Factor 3 included all items related to normative pressure from best friends. Factor 4 included items indicating normative pressure from both parents as related to ostracizing. Factor 5 included items indicating normative pressure from both parents as
related to stealing. These factors largely resembled the subscales as used in Rigby (2005), Rigby and Johnson (2006), and as intended for use in this study. However, instead of indicating unique expectations from mother, father, friends, and teachers, perceived parental expectations seemed to cluster together. Parental expectations clustered together based on the type of bullying described rather than on parental gender as the researcher expected. Even so, in the design for the current study, perceived parental expectations were assessed, as planned, separately for mother and father in order to address the study’s research questions.

Internal consistency was examined for the total NPHV score, for each NPHV factor, and NPHV from each parent. Internal consistencies were $\alpha = .903$ for total NPHV, $\alpha = .872$ for NPHV from parents regarding direct bullying, $\alpha = .855$ for NPHV from teachers, $\alpha = .829$ for NPHV from friends, $\alpha = .871$ for NPHV from parents regarding ostracizing, and $\alpha = .899$ for NPHV from parents regarding stealing. NPHV from mother and father were $\alpha = .834$ and .828 respectively. The factors must be interpreted with caution due to the sample size required for reliable factor analysis.

**Descriptive Statistics**

Descriptive data for the dependent and independent variables appear in Table 4-1. Possible score ranges were 0 to 2 for defending, 1 to 4 for the CPAQ-FM, and 4 to 20 for normative pressure. Higher scores denote more frequent defending, more masculine gender identity, and a higher normative pressure to defend victims. Table 4-2 shows the frequency of students determined to be in the same age or gender in-group as their best friends, and the same gender in-group as their favorite teachers, as well as the frequency of students assigned to the two bullying situations (i.e., same gender as bully and victim, different gender as bully and victim). Table 4-3 displays the percents of students reporting that significant persons in their lives expect them to support victims of bullying.
This study carried the intent of determining whether pressure from child-aged friends explained defending behavior. Some students indicated friendship groups that included only children, some only adults, and some a mix of children and adults. Only three participants indicated having friendship groups consisting entirely of adults. Removing these three participants did not appear to make a difference in analyses related to friends’ normative pressure. Therefore, it was considered safe to remove these observations from subsequent analyses related to normative pressure from friends, thus ensuring the inclusion only of participants whose friendship groups had children in them.

**Relationships of Defending Scores to Controls and Predictors**

Assumptions of homoscedasticity, linearity, and conditional normality were tested by examining studentized residual plots, studentized residual numerical data, and the nature of the dependent variable. Independence was examined by testing for differences in defending scores among the four different schools and two different school types (i.e., public vs. university-affiliated). In addition, tolerance and variance inflation rates were observed to detect multicollinearity of predictors in a model. Unless otherwise stated, assumptions were met for each of the analyses discussed. No significant differences were found in defending scores either among schools or school types.

**Defending Score Relationships to Control Variables**

Control variables of interest to the study were student age, student grade level, and whether or not a bullying situation depicted a bully and victim that was the same gender (i.e., bullying situation in-grouping). Though not an anticipated control variable, a variable of interest for further discussion of the study’s generalizability was a student’s racial-cultural identity. As with all dichotomous independent variables in the study, point biserial formatting of the variable
“bullying situation in-grouping” allowed for inclusion of such dichotomous variables in regression analyses.

Zero-order linear regression was conducted to explore the relationship between the continuous or dichotomous control variables and the independent variable: defending. Analysis of variance was conducted to determine if grade-level differences and differences among racial-cultural identities, both individual and combined, occurred in defending scores. No relationship was found between defending and age. Nor were defending scores found to relate to the “gender sameness” of the participant to the bully and victim in scenarios participants were asked to recall. No differences in defending scores emerged among grade levels. Therefore, the anticipated inclusion of age, grade level, and bullying situation in-grouping as control variables in analyses was not carried out.

Individual racial-cultural identities were analyzed both as dichotomous identities (e.g., African-American vs. not African-American) and in comparison to other racial-cultural identities (e.g., African-American vs. White). Membership in any racial-cultural identity did not predict defending scores, nor were differences in defending scores found among racial-cultural identities. The implications for the generalizability of the study with regard to racial-cultural identities will be explored in Chapter 5.

**Defending Score Relationships to Predictors, Mediators, and Moderators**

The first of this study’s research question asks, “Does gender, gender identity, or normative pressure to help victims (i.e., from mother, father, friends, or teacher) predict defending behavior?” Zero-order regression analyses were conducted to explore the relationships between defending and gender, normative pressure, and gender identity. For point-biserial formatting, female participant gender was coded 0 and male gender was coded 1. A significant negative relationship was found between defending and being male, $r(266) = -.13, p <$
A significant negative relationship was found between defending scores and masculine gender identity using the modified CPAQ-FM, $r(250) = -.13, p < .05$. Significant positive relationships were found between defending and normative pressure from mother, $r(266) = .29, p < .0001$, from father, $r(260) = .32, p < .0001$, from best friend(s), $r(260) = .44, p < .0001$, and from favorite teacher(s), $r(265) = .24, p < .0001$. Please see Table 4-4 for a summary of these relationships. These analyses support an affirmative response to research question one, such that defending was more likely in females than in males, in children with more feminine gender identity, and in children who believed that their mothers, fathers, best friends, and favorite teachers expected them to support victims of bullying.

**Mediation Analyses**

Evidence of mediation occurs when three conditions are met: first, evidence of a significant relationship between the predictor and presumed mediator must exist; second, a significant relationship between the presumed mediator and the dependent variable must be evident, when the predictor is controlled for; third, a significant zero-order relationship between the predictor and dependent variable must become non-significant when controlling for the mediator (Baron & Kenny, 1986).

Mediation analyses were carried out with defending as the dependent variable, gender as the predictor, and, each in turn, gender identity and normative pressure as mediators. The exclusion of observations due to missing data in responses from the CPAQ-FM, normative pressure from mother, and normative pressure from best friends scales resulted in the disappearance of the significant relationship between gender and defending. In order to restore this significant relationship to view and so permit the testing of proposed mediators, missing responses from items in those scales were replaced by the average response for each item, and observations were not excluded.
This study’s second research question asks, “Does gender identity mediate the relationship between gender and defending behavior?” Figure 4-1 shows that, though the other two conditions are met, gender identity does not significantly predict defending when controlling for gender. Therefore, support for research question two cannot be inferred.

The third research question asks, “Does normative pressure to help victims (i.e., from mother, father, best friends, or favorite teachers) mediate the relationship between gender and defending behavior?” As shown in Figure 4-2, only normative pressure from best friends meets all three of Baron and Kenny’s (1986) criteria for a mediating variable. Limitations emerge because causal inferences are not applicable. However, the finding constitutes tentative support for the prediction that normative pressure from friends mediates the relationship between gender and defending behavior.

**Moderation Analyses**

Several moderation analyses were planned in order to explore research questions and to provide inferential results that help compare results of this study to data reported in past studies. Results related directly to the present study’s research questions are presented first, followed by those which are used for purposes of comparison to other research.

The fourth research question asks, “Does gender in-group pressure differ from gender out-group pressure in its relationship to defending behavior?” This fourth research question requires the testing of gender in-grouping as a moderator between normative pressure and defending behavior. Baron and Kenny (1986) explain that moderation is tested by regressing a dependent variable (e.g., defending) on a predictor (e.g., normative pressure), a moderator (e.g., gender in-grouping), and an interaction between predictor and moderator (e.g., normative pressure X gender in-grouping). In order to infer a moderating influence, the interaction term must significantly predict the dependent variable and the inference is clearer if the moderator
correlates with neither the predictor nor the dependent variable (Baron & Kenny, 1986). Gender in-grouping was conceived for this study as a continuous variable, ranging from low gender in-grouping to high gender in-grouping. That is, a student’s valued friendship group might consist entirely of persons of his or her gender, or partially, or not at all. This concept only mattered where mixed gender in-grouping was possible (i.e., friends, teachers). Regressing defending scores on normative pressure, gender in-grouping, and an interaction of the two revealed no moderating effect of gender in-grouping for normative pressure from mother, father, best friends, or favorite teachers in predicting defender scores.

The fifth research question asks, “Does the presence of adults in a friendship group moderate the relationship between normative pressure and defending?” No evidence for a moderating effect of best friends’ age emerged in the relationship between defending and normative pressure from mother, father, best friends, or favorite teachers.

A moderating effect was found in planned interaction analyses that were carried out for comparison to previous findings, and not necessarily for application to social identity theory. The relationships between defending and normative pressure from mother, father, best friends, and favorite teachers were examined to see if any of them varied as a function of participant gender. A significant interaction was indicated, though not meeting Baron and Kenny’s (1986) criteria for added clarity, for friend pressure and teacher pressure. Friend pressure predicted defending more strongly in boys, \( r(96) = .62, p < .0001 \) than in girls, \( r(159) = .30, p < .0001 \). Teacher pressure did not predict defending for girls, but did so for boys, \( r(96) = .35, p < .001 \). Figure 4-3 depicts interactions between gender and normative pressure.

The same moderation analyses were conducted with participant age as the moderator, normative pressure from all measured sources as predictor variables, and defending as the
dependent variable. A significant moderating effect emerged, again not especially markedly clear according to Baron and Kenny (1986), for pressure from friends such that the relationship between defending and friend pressure was higher for children above the sample’s mean age, $r(129) = .47, p < .0001$ than for children at or below the mean age, $r(109) = .35, p < .001$. Please see Figure 4-4 for a graph of the interaction between age and normative pressure from friends.

**Combining Variables in Predicting Defending**

The sixth research question asks, “When all independent variables are combined to predict defending behavior, is the predictive value of participant gender changed?” Because this analysis contained many variables, many observations had missing data. The number of observations removed for missing data was large enough to make the planned analysis invalid for exploring this research question, because the relationship between gender and defending was not significant prior to adding in the remaining variables. Replacing a large amount of missing data also appeared an unsound choice.

The planned regression analysis of all possible subsets suggested that the combination of 16 of the predictors yielded the largest adjusted squared multiple correlation coefficient available for the study’s variables. Gender was included among the 16 retained predictors. However, multicollinearity was evident in the high variance inflation factors of several variables: gender, father pressure, teacher pressure, and almost all interactions. With the exception of gender, variables were removed one at a time in decreasing order of variance inflation rate until a model with no evident multicollinearity emerged. Because all possible subsets regression selects variables at a more liberal significance level than .05, variables left in each model were tested for significant contribution to the explanation of the variance in defending scores, using a probability cutoff of .05 with a Bonferroni adjustment for family-wise comparisons. The final model contained one significant predictor, the term representing an interaction between age and
normative pressure from friends. Table 4-5 shows results from each successive model. This process did not select a better model for predicting defending scores than the single variable representing normative pressure from best friends.

**Summary**

This chapter presented the findings of single and multiple regression analyses to answer six research questions concerning the relationship between children’s defending behavior and their gender, gender identity, and normative pressure to defend from significant persons. In one analysis, the central relationship, that between gender and defending, was not significant before adding mediators, so that conclusions regarding the mediating power of the added predictors could not be made. For the remaining questions, tentative findings were reported. Chapter 5 presents a discussion of these results, including limitations and suggestions for future research. In addition, implications for counseling theory and practice are discussed.
Table 4-1. Descriptive statistics for dependent and independent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N^a</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defending (dependent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>166</td>
<td>1.13</td>
<td>.40</td>
<td>0.00</td>
</tr>
<tr>
<td>Boys</td>
<td>101</td>
<td>1.02</td>
<td>.45</td>
<td>0.00</td>
</tr>
<tr>
<td>Normative pressure from mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>165</td>
<td>16.99</td>
<td>2.45</td>
<td>9.00</td>
</tr>
<tr>
<td>Boys</td>
<td>100</td>
<td>16.67</td>
<td>2.47</td>
<td>12.00</td>
</tr>
<tr>
<td>Normative pressure from father</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>116</td>
<td>16.77</td>
<td>2.53</td>
<td>9.00</td>
</tr>
<tr>
<td>Boys</td>
<td>98</td>
<td>16.28</td>
<td>2.54</td>
<td>12.00</td>
</tr>
<tr>
<td>Normative pressure from friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>163</td>
<td>15.51</td>
<td>2.73</td>
<td>9.00</td>
</tr>
<tr>
<td>Boys</td>
<td>98</td>
<td>14.26</td>
<td>2.68</td>
<td>8.00</td>
</tr>
<tr>
<td>Normative pressure from teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>167</td>
<td>17.91</td>
<td>2.58</td>
<td>4.00</td>
</tr>
<tr>
<td>Boys</td>
<td>97</td>
<td>17.71</td>
<td>2.51</td>
<td>8.00</td>
</tr>
<tr>
<td>CPAQ-FM long form</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>149</td>
<td>2.41</td>
<td>.33</td>
<td>1.62</td>
</tr>
<tr>
<td>Boys</td>
<td>99</td>
<td>2.65</td>
<td>.34</td>
<td>1.77</td>
</tr>
<tr>
<td>CPAQ-FM modified (this study)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>149</td>
<td>2.40</td>
<td>.44</td>
<td>1.33</td>
</tr>
<tr>
<td>Boys</td>
<td>99</td>
<td>2.70</td>
<td>.45</td>
<td>1.67</td>
</tr>
<tr>
<td>CPAQ-FM Short Form</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>149</td>
<td>2.52</td>
<td>.50</td>
<td>1.40</td>
</tr>
<tr>
<td>Boys</td>
<td>99</td>
<td>2.93</td>
<td>.53</td>
<td>1.60</td>
</tr>
</tbody>
</table>

^aDifferences in sample size indicate exclusion of observations with missing variables. Sample sizes broken down by gender do not sum to equal sample sizes not broken down by gender.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best Friends’ age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly children or teens (not mostly adults)</td>
<td>180</td>
<td>66</td>
</tr>
<tr>
<td>An even mix of children and adults</td>
<td>82</td>
<td>30</td>
</tr>
<tr>
<td>Mostly adults (18 or over)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>(Missing data)</td>
<td>(9)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Best Friends’ Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same gender as participant (in-group)</td>
<td>107</td>
<td>39</td>
</tr>
<tr>
<td>Mixed</td>
<td>151</td>
<td>55</td>
</tr>
<tr>
<td>Different gender as participant (out-group)</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>(Missing data)</td>
<td>(7)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Favorite Teachers’ Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same gender as participant (in-group)</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Mixed</td>
<td>156</td>
<td>57</td>
</tr>
<tr>
<td>Different gender as participant (out-group)</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>(Missing data)</td>
<td>(8)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Assignment of bullying gender scenario (rotated)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same gender as bully and victim (in-group)</td>
<td>134</td>
<td>49</td>
</tr>
<tr>
<td>Different gender as bully and victim (out-group)</td>
<td>135</td>
<td>49</td>
</tr>
<tr>
<td>(Missing data)</td>
<td>(5)</td>
<td>(2)</td>
</tr>
</tbody>
</table>
Table 4-3. Percents of students reporting parents, best friends, and favorite teachers as expecting them to help victims in various bullying situations, by participant gender.

<table>
<thead>
<tr>
<th></th>
<th>Mother</th>
<th>Father</th>
<th>Friends</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>92</td>
<td>90</td>
<td>85</td>
<td>95</td>
</tr>
<tr>
<td>Boys</td>
<td>91</td>
<td>88</td>
<td>66</td>
<td>92</td>
</tr>
</tbody>
</table>

Table 4-4. Pearson product-moment correlations between predictors and defending scores (two-tailed tests).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r$</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological gender (0 = female, 1 = male)</td>
<td>-.13*</td>
<td>266</td>
</tr>
<tr>
<td>Gender identity (CPAQ-FM modified form)</td>
<td>-.13*</td>
<td>250</td>
</tr>
<tr>
<td>Girls</td>
<td>.05 ns</td>
<td>147</td>
</tr>
<tr>
<td>Boys</td>
<td>.17 ns</td>
<td>98</td>
</tr>
<tr>
<td>Normative pressure from mother</td>
<td>.29***</td>
<td>266</td>
</tr>
<tr>
<td>Girls</td>
<td>.22 *</td>
<td>162</td>
</tr>
<tr>
<td>Boys</td>
<td>.38**</td>
<td>99</td>
</tr>
<tr>
<td>Normative pressure from father</td>
<td>.32***</td>
<td>260</td>
</tr>
<tr>
<td>Girls</td>
<td>.31****</td>
<td>158</td>
</tr>
<tr>
<td>Boys</td>
<td>.32 **</td>
<td>97</td>
</tr>
<tr>
<td>Normative pressure from best friends</td>
<td>.44****</td>
<td>260</td>
</tr>
<tr>
<td>Girls</td>
<td>.30****</td>
<td>159</td>
</tr>
<tr>
<td>Boys</td>
<td>.63****</td>
<td>96</td>
</tr>
<tr>
<td>Normative pressure from favorite teachers</td>
<td>.24****</td>
<td>.265</td>
</tr>
<tr>
<td>Girls</td>
<td>.15 ns</td>
<td>164</td>
</tr>
<tr>
<td>Boys</td>
<td>.36 ***</td>
<td>96</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001, ****p < .0001, ns = not significant
Table 4-5. Semi-partial correlations to defending behavior for variables in best initial model by R-square selection, followed by subsequent models created by successively disqualifying predictors for high multicollinearity (VIF).

<table>
<thead>
<tr>
<th>Predictor Terms</th>
<th>Initial Model</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>No high VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.16</td>
<td>-.15</td>
<td>-.16</td>
<td>-.18*</td>
<td>-.18*</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying/victim in-group</td>
<td></td>
<td>-.07</td>
<td>-.08</td>
<td>-.09</td>
<td>-.09</td>
<td>-.08</td>
</tr>
<tr>
<td>Bully/victim gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father pressure</td>
<td>-.12</td>
<td>.17</td>
<td>.11</td>
<td>.11</td>
<td>.15</td>
<td>.15</td>
</tr>
<tr>
<td>Friend pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher pressure</td>
<td>.15</td>
<td>.06</td>
<td>.08</td>
<td>.10</td>
<td>.10</td>
<td>.16</td>
</tr>
<tr>
<td>CPAQ</td>
<td>.08</td>
<td>.08</td>
<td>.09</td>
<td>.09</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Mother gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>.11</td>
<td>.10</td>
<td>.08</td>
<td>.08</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American</td>
<td>-.09</td>
<td>-.09</td>
<td>-.08</td>
<td>-.07</td>
<td>-.07</td>
<td>-.06</td>
</tr>
<tr>
<td>Alaskan Native</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other race/culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother pressure X gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father pressure X gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend pressure X gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher pressure X gender in-group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender X mother pressure</td>
<td>.14</td>
<td>.15</td>
<td>.05</td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender X father pressure</td>
<td>-.16</td>
<td>-.15</td>
<td>a</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gender X friend pressure</td>
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<td>.18*</td>
<td>.15</td>
<td>.15</td>
<td>.19*</td>
<td>a</td>
</tr>
<tr>
<td>Gender X teacher pressure</td>
<td>.08</td>
<td>.04</td>
<td>.02</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age X mother pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age X father pressure</td>
<td>.14</td>
<td>a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age X friend pressure</td>
<td>.13</td>
<td>.11</td>
<td>.14</td>
<td>.13</td>
<td>.13</td>
<td>.28*</td>
</tr>
<tr>
<td>Age X teacher pressure</td>
<td>-.15</td>
<td>-.08</td>
<td>-.10</td>
<td>-.10</td>
<td>-.10</td>
<td>-.16</td>
</tr>
<tr>
<td>Model adjusted R²</td>
<td>.25</td>
<td>.23</td>
<td>.21</td>
<td>.21</td>
<td>.21</td>
<td>.18</td>
</tr>
</tbody>
</table>

All models had a significant adjusted R². *Significant correlation after Bonferroni adjustment, when controlling for other variables in model. *Missing correlations indicate variable was removed from model, and all subsequent models.
Figure 4-1. Mediation diagram showing zero-order correlations (and semi-partial correlations) with gender as the predictor, gender identity as the mediator, and defending as the dependent variable. N=268. *p < .05, ****p < .0001

Gender \[ \rightarrow \] Defending
\[ -0.13^* \] (0.9)
\[ 0.33^{****} \] (0.09)

Gender Identity
CPAQ-FM
(Modified)

Figure 4-2. Mediation diagrams showing zero-order correlations (and semi-partial correlations) for normative pressure from A) Mother, N=266. B) Father, N=258. C) Friends, with substituted data, N=262. D) Teachers, N=263. *p < .05, **p < .01, ***p < .001, ****p < .0001

Gender \[ \rightarrow \] Defending
\[ -0.12^* \] (0.12)
\[ 0.03 \] (0.18**)
Normative Pressure
(Mother)

Gender \[ \rightarrow \] Defending
\[ -0.13^* \] (0.10)
\[ -0.10 \] (0.32****) (0.11****)
Normative Pressure
(Father)

Gender \[ \rightarrow \] Defending
\[ -0.13^* \] (0.05)
\[ -0.20^{**} \] (0.40****) (0.38****)
Normative Pressure
(Best Friends)

Gender \[ \rightarrow \] Defending
\[ -0.14^* \] (0.13*)
\[ -0.04 \] (0.23****) (0.23**)
Normative Pressure
(Favorite Teachers)
Figure 4-3. Interactions between participant gender and normative pressure from A) best friends and B) favorite teachers predicting defending scores. Abscissa scales begin at four, and not zero, in order to depict the range of possible scores from identified scales.
Figure 4-4. Interaction in predicting defending scores between age and normative pressure from friends. Abscissa scale begins at four, and not zero, in order to depict the range of possible scores from the identified scale.
As summarized in Chapters 1 and 2, the relationship between gender and a child’s tendency to defend victims of bullying has been explored in thirteen studies that are known to this author. Nine of those studies find that girls appear more likely than boys to defend. However, no theory has been explored in relation to this apparent link between gender and defending. This study tested whether facets of social identity theory (SIT; Tajfel & Turner, 1986) explained the relationship between gender and defending, by examining gender identity and normative pressure to help victims as potential mediating variables. A theoretical framework for understanding the relationship between gender and defending will help counselors, teachers, parents, and policymakers to encourage helpful behaviors in both genders. In addition, this researcher’s attempt to explore the applicability of SIT to gender differences in defending offers a new theoretical direction for future research.

**Overview of Study and Discussion of Findings**

This study surveyed 274 middle school children, 168 of whom were girls, 101 of whom were boys, and 5 of whose gender was unknown. The proportion of girls to boys in the sample was different than that reported for the studied population by the U.S. Census Bureau (2008a), which estimated the ratio to be nearly 1:1. The proportion of participants in selected racial-cultural identities was similar to the proportion in the population of the county being sampled. Though participants did not directly represent the population sought in terms of gender, the sample’s racial/cultural demographics did not pose a barrier to the generalizability of the results of the study, although other barriers may exist. Students completed a survey packet including scales of self-reported defending, self-reported gender identity, and a child’s perception of expectations (i.e., normative pressure) from his mother, father, best friends, and favorite teachers.
to help victims of bullying versus supporting perpetrators, when witnessing four styles of bullying. Included in the instrument packets were forms that described two varying situations: one in which a boy is bullying another boy, and another in which a girl is bullying another girl. Forms were passed out in an alternating manner regardless of the sex of the participant. This pattern of instrumentation distribution resulted in half of students reading of a bullying situation in which they were “gender in-grouped” with the bully and victim, and the other half being “gender out-grouped.” In addition, a demographics form asked the age grouping of each student’s best friends, and the gender composition of each student’s best friends and favorite teachers. This allowed for the investigation of age and gender in-grouping as moderators in the relationship between normative pressure and defending behavior. Zero-order and multiple regression analyses were carried out to explore all relationships pertinent to research questions.

Hypothesized control variables were not used because they did not correlate with the independent variable, defending. In addition, defending did not differ among the four different schools sampled or between school types (i.e., public vs. research), and therefore evidence of violating the assumption of independence was not obtained from those analyses. Furthermore, the dependent variable was continuous and distributions did not appear skewed or kurtotic, allowing for more confidence that the assumption of independence had been met. Studentized residual plots appeared to be shapeless, maintaining support for assumptions of linearity, homoscedasticity, and conditional normality.

In predicting defending behavior, interactions between normative pressure and gender, and between normative pressure and age, were carried out for descriptive purposes and for comparison to results of Rigby and Johnson (2006). Although authors of this prior study did not test for interactions, their reports showed higher predictive power of parental pressure among
girls than among boys, higher predictive power of friend pressure among boys, and no apparent
differences for teacher pressure. The present study finds higher predictive power for both friend
and teacher pressure among boys than for girls, and no differences for parental pressure. In
addition, interaction analyses in the present study found that the relationship between defending
and friend pressure increased with age, a moderating effect not explored in Rigby and Johnson’s
(2006) report. Although replication of these results are necessary, it appears that social norms
may be influential for boys and older students, and that targeting the social environments of
those two groups may improve interventions intended to encourage defending behavior.

**Gender**

Results indicated a somewhat weak significant negative relationship between defending
and gender indicating that girls were more likely to self-report defending behaviors than were
boys. This relationship was tenuous enough that the removal of observations with missing data
for other variables resulted in the apparent loss of a significant relationship between gender and
defending. This occurred in three cases: when removing observations because of missing
responses to the CPAQ-FM (i.e., gender identity) scale, and doing the same for the scales of
normative pressure from mothers and normative pressure from best friends. It did not occur
when removing observations for missing responses to scales of normative pressure from father or
favorite teachers. This represents a conditional corroboration of results from previous studies
reporting gender’s link to defending behavior.

The seeming change in the relationship between gender and defending when removing
some observations, but not when removing others, may imply a systematic difference that was
not explored in this study, especially considering that the relationship was restored when missing
responses were replaced with the means for those responses and deleted observations were
retained. Schafer and Graham (2002) view the treatment of missing data as an opportunity to
make inferences about the “missingness” of data as relates to a particular population, rather than to retain observations otherwise deleted. They do, however, acknowledge that “mean substitution” may accurately estimate missing responses. Importantly, in this study, substituting missing observations made it possible to conduct planned analyses to address their corresponding research questions without the apparent alteration of correlation coefficients caused by removing observations.

The evident fragility of the relationship between gender and defending is not consistent with Salmivalli and Voeten’s (2004) finding that gender was the most powerful predictor of defending in comparison to various bullying-related attitudes and norms. However, about 30% of the studies reviewed by this researcher fail to find a relationship between gender and defending. The present study is more consistent with the remaining studies that do find a relationship. Future research might explore cultural reasons for the differences among studies in the reported strength of relationships between gender and defending, as these studies have been conducted in various countries. In addition, methodological differences vary from study to study, including how defending is measured.

**Gender Identity**

The long form of the CPAQ-FM (Hall & Halberstadt, 1980) gender identity scale was originally intended for use in the present study. However, the long form had extremely low internal consistency as indicated in Chapter 4. Removing several items to create this study’s modified form increased internal consistency appreciably, without altering the overall content dimensions covered by Hall and Halberstadt’s (1980) long and short forms.

Evidence of the similarity in content between this study’s modified form and the original long and short forms comes from two previous studies (Absi-Semaan, Crombie, & Freeman, 2008; Thomson & Zand, 2005), which included factor analyses of the long and short forms. All
but one of the items removed from the long scale in the present study to make the modified scale were also removed by Absi-Semaan and colleagues (2008) for failing to meet clear factor loading criteria. Moreover, there were no item content dimensions (i.e., factors) included in Hall and Halberstadt’s (1980) forms of the scale that were not also represented in the present study’s modified form. All three forms had items representing “low emotionality,” “leadership,” “independence,” and “interpersonal” factors described by Absi-Semaan and colleagues (2008) and Thomson and Zand (2005). Furthermore, the items removed from the long form to make the present study’s modified form were only a portion of the items removed by the scale’s authors to make their short version of the scale. All results were obtained using the present study’s modified form of the scale.

Gender accounted for 11% of the variance of gender identity scores. Males scored as more masculine, and females as more feminine, on the scale. Being female or more feminine predicted more frequent defending. Gender and gender identity, when modeled separately, each accounted for about 2% of the variance in defending scores. Neither variable predicted defending when both were included in the model.

**Normative Pressure to Help Victims**

The title of this variable connotes that high scores on the instrument denote higher normative pressure (i.e., high expectation) to help victims, but fails to communicate that low scores indicate high normative pressure to help bullies, and middling scores convey pressure to do nothing. More pertinent to interpreting correlational results is that the title of the measure also does not reveal that items in the scales asked students what others would expect them to do, not necessarily what others would pressure them to do or what behavior others would exemplify as a norm.
Normative pressure explained more variance in defending scores than did any other variable in the study, with all normative pressure sources significantly explaining variance in defending behavior, when controlling for gender. Specifically, mother’s pressure explained 3%, father’s pressure explained 10%, best friends’ pressure explained 14%, and favorite teachers’ pressure explained 5% of the variance in defending scores. Controlling for normative pressure resulted in reducing the predictive value of gender for defending, except in the case of teachers. However, only best friends’ normative pressure was predicted by gender. Gender accounted for about 4% of the variance in scores on normative pressure from friends. Girls were more likely than boys to report that friends expected them to help victims of bullying. Thus, friends’ normative pressure was the only variable to show evidence of being a mediator.

An attempt to combine all predictor terms in order to predict defending scores resulted in the retention only of a predictor term representing an interaction between age and normative pressure from friends, though it did not account for a higher amount of variance in defending scores than did normative pressure from friends alone. Therefore, not only was normative pressure from friends the only variable found to mediate the relationship between gender and defending, but it was also the most robust and powerful predictor of defending scores in the study. Furthermore, normative pressure from best friends was not moderated by the age or gender makeup of friends providing normative pressure, and neither was pressure from parents or teachers.

If the above findings hold in future studies, it may imply that friends of any gender and age, even adult friends, have perhaps more of an influence on middle school students’ defending behavior than parents or teachers, a child’s gender, or a child’s gender identity. However, considering another direction of causality reveals that children who defend may be more likely to
see others’ expectations as pro-defending, a prospect not explored in this study. It is possible that gender influences defending and that defending then influences friends’ expectations. Even so, the relationship between defending and friend pressure is much stronger than that between defending and gender.

**Implications for Theory**

Although the study’s findings lend veracity to the notion that social influences are conspicuously related to children’s tendency to help the victims of bullying, the study’s findings only partially support using a gender identity application of social identity theory (SIT; Tajfel & Turner, 1986) to explain gender differences in this helpful behavior. Importantly, gender identity did not predict defending behavior when controlling for gender. On the other hand, gender identity predicted defending behavior as well as gender did and gender did not predict defending behavior when controlling for gender identity. The study’s findings may lend support to SIT’s relevance in understanding gender differences in defending behavior, if not confirming gender identity as a mediator between sex and defending.

Gender sameness of the participant to the mother, father, best friends, or favorite teachers did not moderate the relationship between normative pressure from those people and defending behavior. This expected moderation was to explore whether pressure from the same gender persons was differentially influential than pressure from different gender persons. Based on SIT’s principal of social competition, members of an in-group should act in concert to better themselves in comparison with a salient out-group, paying more attention to in-group norms than to pressure from out-group persons. However, this reading of SIT ignores the possibility that out-group people might pressure a person toward the same behaviors as his or her in-group members would, in order that the out-group can promote its own distinctiveness. Social competition may not necessarily require that in-group pressure differ in influence from out-group
pressure. Conversely, the notion of in-group favoritism does suggest a higher influence from in-

group members than that from out-group members upon a participant, and so a lack of support
for gender applications of social identity is concluded from this finding, even though future
clarifications are needed.

What is clearer about the study’s findings is that normative pressure from any source
appeared to be a more powerful predictor of defending than gender, and that friend pressure
appeared to mediate gender’s influence on defending. Males and females appeared differentially
expected to defend and they also reported different frequencies of defending behavior. This
finding supports the gender identity aspect of SIT in explaining variations in defending behavior.

Taken together, the study’s findings imply that gender identity and normative pressure
predict defending behavior, and that friends’ expectations may mediate the relationship between
gender and defending in middle school students. These findings parallel those from adult
populations in which gender identity moderates gender differences in social dominance
orientation (Wilson & Liu, 2003) and that sexism scores mediate the relationship between gender
and social dominance orientation (Schmitt et al., 2003). Thus, a gender reading of SIT in
understanding defending behavior appears partially supported by the results of this study.

This conclusion of partial support for gender applications of SIT assumes that normative
pressure and gender identity caused defending behavior and not the reverse. Furthermore, one
would have to assume that self-esteem is gained by responding in conformance to social gender
norms in order to infer support for SIT from the results of this study. In addition, the study did
not test factors that cause variances in gender identity, except for gender itself. Further
possibilities are discussed in the sections concerning the study’s limitations and implications for
future research, which follow implications for practice.
Implications for Practice

Defending, as defined and measured in this study, not only involves opposition to bullying, but also support to victims; and so pro-defending interventions in schools may provide more relief than anti-bullying interventions. This study promotes new ways of thinking about promoting defending. Based on the present study’s findings regarding applying a gender identity theory to defending behavior, counselors and educators may consider looking at peer pressure and gender stereotyping as areas of intervention. In this study, parents and favorite teachers did not appear to have differential expectations for girls and boys to defend, but favored peers did.

According to this study’s findings, normative pressure from parents, teachers, and friends may be very influential upon a student’s defending behavior, regardless of the influential person’s gender. The outlook for normative pressure to defend appears more favorable in this study than in Rigby and Johnson’s (2006) study. In the present study, 66% to 85% of participants reported that their friends expected them to support victims of bullying, whereas the range was 35% to 74% in Rigby & Johnson (2006). Percents of reported expectations from parents, friends, and teachers are shown by gender on Table 4-3 for the present study.

The present study’s findings may expand and refine Ahmed and Braithwaite’s (2004) conclusion that cooperation between families and schools may best help relieve school bullying problems. Determining which family members and school professionals should be solicited to participate in interventions, and where the target area for intervention should be, may be prerequisites to planning interventions. It may be that organized efforts by pro-defending, influential parents and teachers should focus on intervening with the closest friends of children assessed as potential defenders of victims.

Similar to findings about bullying in Salmivalli and colleagues’ (1997) study of social networks, defending may be a friendship-group supported activity, and those researchers’
recommendations regarding restructuring peer groups may be seconded by findings of the present study. If promoting defending behavior in schools is an important goal, then it might serve well for school personnel to play a more deliberate role in child friendship group formation. Past interventions have often used peer mentors, who befriend troubled students or mediate disputes. These peer-mentoring programs have shown varying levels of success in decreasing bullying behavior. This researcher believes that peer-mentors may be more effective if selected for their higher tendency to defend, a practice that does not appear to have been tried.

Furthermore, classrooms, break times, extracurricular clubs, and other opportunities to introduce children to each other can be organized to intentionally disconnect children who bully from those who support their bullying, negate the solitude of victims, and increase interaction between pro-defending and neutral students. Furthermore, friendships in middle schools often begin in earlier grades, and perhaps friendship group formation should begin at that level, and continue throughout the later grades. This is not merely a use of peer mediators to help students in disputes and personal dilemmas, but a broader intervention, in which children are intentionally—although not rigidly—organized in groups that dilute the most negative peer influences.

However, gender, gender identity, and gender-based pressure were the predictors focused on in the present study. Being female and having a more feminine gender identity predicted increased levels of defending compared to being male and having a more masculine gender identity, respectively; and best friends expected girls to defend more, and boys to defend less. Considering additionally the finding that pressure from best friends and favorite teachers were much more related to defending behavior in boys than in girls, it seems possible that interventions intended to bring boys’ level of defending up to the level of girls’ may create
meaningful improvements in programs designed to increase defending behavior in schools. Given these findings, parents and teachers might wish to examine and break down gender stereotypes that lead boys to defend less than girls, and which may lead friends to expect less defending out of boys. More proactively, male stereotypes can be reframed to suggest defending as emerging from male characteristics, such that boys will come to expect themselves to defend, as will their friends. This may be difficult. For example, it is not easy to conceive of how aggression and dominance stereotypes about males can be reframed to encourage non-aggressive, non-dominating support for victims. In order to do so, a deeper qualitative analysis of gender stereotypes than could be conducted in this study will be necessary.

These implications are made with the intent that practitioners and their allies understand how little is known about defending, and with a recommendation that counselors, educators, and policymakers begin to become familiar with the research on defending. Furthermore, school pro-defending interventions can also be explorations, using a scientist-practitioner approach to uncover more information about defending than existing research provides.

**Limitations of the Study and Implications for Research**

A discussion of the study’s limitations will precede a discussion of implications for research, as some research implications flow naturally from the limitations. This section reviews limitations related to the type of study, availability of data, and instrument psychometrics.

**Limitations**

The current study was a correlational study in which predictors were not manipulated by the researcher. Therefore, directional assumptions of causality in mediation diagrams can be misleading. Though gender cannot be said to be caused by any of the predictors of interest, the mediator and independent variable in any of the analyses can be meaningfully reversed in direction. Furthermore, this study relies on self-report for all variables, gender, gender identity,
others’ expectations, and demographics of participants and their significant others. Of primary concern is the inherent confound in asking students to guess at the expectations of their significant others. A person’s gender or level of defending behavior could easily influence how a person thinks others expect him or her to behave.

Furthermore, the study is cross-sectional, involving a single observation of the sample as opposed to more than one sampling over a space of time. A cross-sectional design prevents the assessment of stability of the behaviors or measurements, as well as the relationships and treatment effects, relevant to the study. For example, analyses of the present study cannot help determine the stability of defending scores, or that of the relationship between defending scores and scores of normative pressure from best friends.

In addition, reporting on either one’s own defending behavior or others’ expectations may be subject to a socially desirable response because children may want to make themselves look good in the eyes of researchers or be afraid to be caught reporting negatively on their mothers, fathers, friends, and teachers. Systematic inaccuracies in reporting the age and gender of one’s best friends are also possible and the implications of these upon interpreting the study’s results are unknown.

The sample size obtained to conduct this study was considered small for purposes of factor analysis of instruments and for analyzing differences among racial/cultural identities, schools, and grade levels. In addition, boys were underrepresented in the sample, compared to the population studied. Furthermore, schools, grade levels, and school types did not contribute the same number of observations. Sample sizes from the four different schools ranged from 52 to 87 participants. The number of participants from different grade levels ranged from 64 in the seventh grade to 121 in the eighth grade. The number of students from the two types of schools
was 52 from the university-affiliated research middle school and 222 from the public middle
schools. These schools were selected based on the researcher’s ability to contact representatives
of each school, which was partly based on the researcher's relationships with persons in the
community. Therefore, certain types of schools may have been recruited, or volunteered to
participate, even though variety was sought.

Unintentional patterns of selection may also have occurred at the classroom and individual
levels. Classroom groups were selected partially based on school personnel willingness and
availability and the relationships between the researcher’s school contacts and the teachers
solicited for classroom participation. Student participation was based somewhat on their
willingness to volunteer, parent’s completion of consent forms, and the students’ return of
completed parental consent forms. At least two students complained of having left their
completed parental consent forms at home. Students who participated in the study may have
been meaningfully different from students who did not. Similarly, students with missing
responses to certain items on the questionnaire may be meaningfully different from both students
who left other items blank and students who responded to all items completely. For example, 24
students left out the necessary data to compute their ages, and between one and six responses
were missing for all items on the gender identity measure. Not only do these missing responses
raise concerns about the characteristics of students leaving items blank, but also about the clarity
of items.

Internal reliability was not consistent across scales. Cronbach’s alphas ranged from .56 for
the gender identity scale to .69 for the defending scale to between .83 and .86 for normative
pressure subscales. Differences among scales’ internal reliability may underestimate their
relationships to each other, or bias analyses of the contribution of multiple predictors. The low
internal reliability of the gender identity scale, in particular, makes discussions about its validity difficult.

An important assumption of this study is that defending behavior is effective, prosocial, and nonviolent. As such, implications for practice were framed with a pro-defending point of reference. However, defending might sometimes be ineffective, antisocial, or violent. A final limitation of the study comes from the use of the terms “defending” and “defender,” which may imply to some the establishment of affinity with victimized students and enmity against those who bully, or at least the protection of the victimized child but not of the child who bullies. The assumption that caregiving by peers is required for victims but not for children who bully is not substantiated by prior research that describes undesirable consequences of bullying for children in both positions.

Implications for Research

Opportunities to answer questions that are raised by the present study and its limitations may stimulate further research. For example, causal studies can be designed to manipulate levels of normative pressure from mother, father, best friends, and favorite teachers to help victims. Textual prompts can place participants in different groups including pressure to support bullying, pressure to do nothing, and pressure to help victims. For example, students can be given instructions that include text reading either, “Recent research indicates that most students want their friends to support victims of bullying,” or “Recent research indicates that most students want their friends to support bullies.” Then group differences could be evaluated for a causal connection to defending scores, if random sampling and assignment are conducted. Thus, the directional assumptions of the present study’s mediation analyses could be supported or contradicted. Adequate debriefing would be recommended for minors participating in such a study, as some will be asked to believe they are expected to support aggressive behaviors.
Furthermore, causal effects can be assessed better through the use of multiple measurements over time. Therefore, adaptations of the present study that include multiple observations of the same sample, or a subset thereof, can assist in describing the relationship between normative pressure and defending behavior. In addition, repeated measurements will assist in determining the stability of relationships and variables pertinent to the study. For example, the stability of defending behavior has been examined in other cultures (e.g., Salmivalli et al., 1998), but not in the United States.

Studies exploring the susceptibility of the self-report defender scale to social desirability bias can help develop a self-report instrument with even better demonstrated reliability and validity to measure actual defending behavior. Further efforts to define defending might accompany the refinement of this measure. The more clearly and consistently researchers begin to assess defending, the more confidence research consumers can be that findings from various studies are related to an agreed-upon construct. Use of such an instrument may extend to practice implications, aiding in the assessment of schools and individual students, and possibly guiding individual counseling and school-wide intervention efforts.

The same type of validation effort can be conducted regarding the measurement of normative pressure to help victims, which also seems vulnerable to socially desirable responding. In addition, a rewording of scale items is needed to clearly reflect the construct alluded to in the title. The word “expect” is interpretable as both “want” or “anticipate,” and wording should be chosen that reflects others’ social influence on an individual’s behavior, not others’ predictions of a person’s behavior based on what they have seen him or her do in the past (see Appendix D). In point of fact, the normative pressure measurement procedure used in the present study was adapted from a four-item procedure created by Rigby (2005) who did not allege it to have the
properties of an intentionally developed scale. In a time when researchers recommend the exploration of socio-ecological contexts of bullying and defending, a valid way to measure social influences on those behaviors could contribute to both research and practice.

Replication of the present study is recommended with specific improvements. Prerequisite to replication is further development of defending, gender identity, and normative pressure scales with better demonstrated validity, representing widely agreed-upon definitions of the phenomenon while maintaining regional applicability. Furthermore, researchers may wish to follow Schafer and Graham’s (2002) suggestion to incorporate theoretically-grounded predictions about what missing values might occur in their studies, and what those missing values might imply about their populations of interest.

Assumptions about defending behavior’s effectiveness may be tested by examining the influence of changes in defending scores upon measures of relevant variables such as school safety and academic achievement. Qualitative research is recommended to determine the perceived effects of defending from the point of view of students, teachers, and counselors. Changing the terms “defender” and “defending” to a term that does not connote taking sides is recommended, particularly for qualitative studies, but also for the purpose of representing a broader set of behaviors that involve helping victims without necessarily opposing children who bully.

Obtaining large sample sizes also will aid in the assessment of effects of nested populations: individuals within classrooms within schools within systems within the population of interest. Random selection of participants and random assignment to conditions of gender identity, normative pressure, and bullying situations (i.e., gender of bully and victim, type of bullying behavior) are recommended for future studies.
Summary

This chapter presented an overview of the study, a discussion of the findings, implications for theory and practice, limitations of the study, and finally implications for research. It was concluded by this researcher that gender identity and gender stereotypes, as envisaged by some readings of social identity theory, could have an effect on children’s helping behaviors toward victims of bullying. Results also suggested that valued friends of any age or sex may play a crucial role in the gender differences apparent in children’s defending behavior, and that parents and favored teachers might be able to play a conscious role in shaping the way friends shape friends’ behavior. Research directions for the future should focus on cultivating agreement among researchers on the definition and effects of defending in schools, on experimentally testing the causal assumptions of the present study, and on creating instruments related to defending, social pressure, and gender identity that can be used by practitioners and educators to improve school atmosphere and safety.
Dear Parent/Guardian:

My name is James R. Porter. I am a doctoral student in the Department of Counselor Education at the University of Florida, conducting research on Children’s Responses to School Bullying, under the supervision of Dr. Sondra Smith-Adcock. The purpose of this study is to help determine if social environments help encourage or discourage children from helping victims of bullying. The results of the study may help parents, teachers, counselors, and school administrators better understand the kind of social environments that are related to children’s helpful behaviors. These results may not directly help your child today, but may benefit future students and families. With your permission, I would like to ask your child to volunteer for this research. Children will remain anonymous in this study, as will all people in their social environments.

Students will be asked anonymously about their responses to bullying in different situations and about their social groups. The questionnaires will be distributed, explained, and collected by me or a trained proxy (teacher, counselor, or other qualified volunteer) at your child’s school during (added here will be the period agreed upon by researcher and school personnel). The 30-minute procedure will take place once during the month of September, October, or November. Children will not place their names on any questionnaire materials. Questionnaire packets will be number-coded in case forms are separated. Once a questionnaire is collected, it cannot be traced back to the student or to a child’s parents, friends, teachers, or classmates. Results will be reported in the form of group averages and other group data. No individual information will be reported. Participation or non-participation in this study will not affect the children’s grades or placement in any programs. Children will not be required to miss class work or will be permitted to make up any missed work.

You and your child have the right to withdraw consent for your child’s participation at any time without consequence. Children do not have to answer any questions they do not wish to answer. There are no known risks or immediate benefits to the participants. Participants will be compensated twice by being permitted to choose from an assortment of thank-you gifts agreed upon by researchers, teachers, school staff, and administrators. Your child will be able to choose from this assortment first upon handing me your signed consent form, and again upon completing the questionnaire packet. Group results of this study should be available in December upon your request.

If you have any questions about this research protocol, please contact me or my faculty supervisor, Dr. Smith-Adcock, at 392-0731. Questions or concerns about your child's rights as a
research participant may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

James R. Porter, M.Ed., Ed.S., Principal Investigator

I have read the procedure described above. I voluntarily give my consent for my child, ________________________________, to participate in James R. Porter's study of children’s responses to school bullying. I have received a copy of this description.

____________________________ ___________  ______________________________ ___________
Parent / Guardian                    Date                                      2nd Parent / Witness            Date
Dear Student,

Your parents have agreed to let you participate in this research study if you also voluntarily agree. This is not a test or a quiz. There are no wrong answers. This is not a part of school and your grades will not be affected whether you agree to participate or not.

This is a questionnaire, a series of questions for you to answer anonymously, that will help me to understand people’s behavior during bullying situations. I am very interested in reading your responses. If you agree to participate, please answer questions with complete honesty. PLEASE DO NOT PLACE YOUR NAME ANYWHERE ON THE QUESTIONNAIRE. THAT WAY, YOU CAN BE ABSOLUTELY ANONYMOUS AND YOUR ANSWERS CANNOT BE TRACED TO YOU. Your privacy is very important to me.

If later you feel it would help to discuss any feelings that come from participating in this research study, please follow the instructions that I will leave the last page with every participant when I collect the questionnaires.

Participation in this study is entirely voluntary. Everyone who completes the questionnaire will receive their choice of *(List assortment of compensation items here)*, just as you received for returning your parents’ signed permission to us. If at anytime during the questionnaire you feel you no longer wish to participate, you may stop at any time. However, I think that you will find the questions interesting and that you will be eager to have your answers counted with everyone else’s.

If you have trouble understanding any of the items, please raise your hand and I will help clarify the item as best as I can. When you are finished with the questionnaire, please check over each item on the questionnaire to make sure there are no items left blank unintentionally. After this, please close your packet and turn it facedown so that I will know when everyone is finished. Out of respect for the privacy of your classmates, please do not look at anyone else’s desk until I collect all packets. The entire questionnaire takes about 20-minutes or less.

If you agree to participate in the study, please sign below and I will give you your questionnaire packet. Please keep one copy of this letter.

James R. Porter, M.Ed., Ed.S., Principal Investigator

____________________________ ___________
Signature    Date

I ________________________________ voluntarily agree to participate in James R. Porter's study of Children’s Responses to School Bullying. I have received a copy of this description.
APPENDIX C


Bullying is one child being exposed repeatedly to harassment and attacks from one or several other children; harassment and attacks may be, for example, shoving or hitting the other one, calling him/her names or making jokes about him/her, leaving him/her outside the group, taking his/her things, or any other behavior meant to hurt the other one. It is not bullying when two students with equal strength or equal power have a fight, or when someone is occasionally teased, but it is bullying when the feelings of the same student are intentionally and repeatedly hurt.

Please keep the above definition in mind when answering questions about your behavior when bullying takes place.

THINK BACK TO TIMES WHEN YOU HAVE SEEN ONE BOY BULLYING ANOTHER BOY. Evaluate your own typical behavior in that situation by circling “0” for “never,” “1” for “sometimes,” or “2” for “often” for the following items.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comforts the victim in the bullying situation.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Tells others to stop bullying.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Says to the others that bullying is stupid.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Tries to make the others stop bullying.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Comforts the victim afterward.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Encourages the victim to tell the teacher about the bullying.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Bullying is one child being exposed repeatedly to harassment and attacks from one or several other children; harassment and attacks may be, for example, shoving or hitting the other one, calling him/her names or making jokes about him/her, leaving him/her outside the group, taking his/her things, or any other behavior meant to hurt the other one. It is not bullying when two students with equal strength or equal power have a fight, or when someone is occasionally teased, but it is bullying when the feelings of the same student are intentionally and repeatedly hurt.

Please keep the above definition in mind when answering questions about your behavior when bullying takes place.

THINK BACK TO TIMES WHEN YOU HAVE SEEN ONE GIRL BULLYING ANOTHER GIRL. Evaluate your own typical behavior in that situation by circling “0” for “never,” “1” for “sometimes,” or “2” for “often” for the following items.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comforts the victim in the bullying situation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Tells others to stop bullying.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Says to the others that bullying is stupid.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Tries to make the others stop bullying.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Comforts the victim afterward.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Encourages the victim to tell the teacher about the bullying.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

NORMATIVE PRESSURE TO HELP VICTIMS (ADAPTED FROM RIGBY & JOHNSON, 2006)

Tell what various people would EXPECT YOU to do when each type of bullying takes place by circling the number that indicates how strongly they would expect you to support the bully or the victim. (Please omit any question about a parent that parent is no longer alive.)

SITUATION 1 of 4: Imagine that you are witnessing a bullying situation, and that there are others witnessing it also. You see ONE CHILD SHOVING OR HITTING THE OTHER ONE.

<table>
<thead>
<tr>
<th></th>
<th>Strongly support the BULLY</th>
<th>Support the bully</th>
<th>Do nothing</th>
<th>Support the VICTIM</th>
<th>Strongly support the VICTIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. My father would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My best friend(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My favorite teacher(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

SITUATION 2 of 4: Imagine that you are witnessing a bullying situation, and that there are others witnessing it also. You see ONE CHILD CALLING THE OTHER CHILD NAMES OR MAKING JOKES ABOUT HIM/HER.

<table>
<thead>
<tr>
<th></th>
<th>Strongly support the BULLY</th>
<th>Support the bully</th>
<th>Do nothing</th>
<th>Support the VICTIM</th>
<th>Strongly support the VICTIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. My father would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My best friend(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My favorite teacher(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Tell what various people would EXPECT YOU to do when each type of bullying takes place by circling the number that indicates how strongly they would expect you to support the bully or the victim. (Please omit any question about a parent that parent is no longer alive.)

SITUATION 3 of 4: Imagine that you are witnessing a bullying situation, and that there are others witnessing it also. You see ONE CHILD KEEPING ANOTHER CHILD FROM BEING PART OF A GROUP.

<table>
<thead>
<tr>
<th></th>
<th>Strongly support the BULLY</th>
<th>Support the bully</th>
<th>Do nothing</th>
<th>Support the VICTIM</th>
<th>Strongly support the VICTIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. My father would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My best friend(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My favorite teacher(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

SITUATION 4 of 4: Imagine that you are witnessing a bullying situation, and that there are others witnessing it also. You see ONE CHILD TAKING ANOTHER CHILD’S THINGS.

<table>
<thead>
<tr>
<th></th>
<th>Strongly support the BULLY</th>
<th>Support the bully</th>
<th>Do nothing</th>
<th>Support the VICTIM</th>
<th>Strongly support the VICTIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother would expect me to:</td>
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<td>4</td>
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<td>2. My father would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My best friend(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My favorite teacher(s) would expect me to:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX F
CHILDREN’S PERSONAL ATTRIBUTES QUESTIONNAIRE FEMININE-MASCU LINE SCALE (HALL & HALBERSTADT, 1980)

Please indicate how true of you each of the following statements is. Circle one number for each item. (Please note that lower numbers mean “Very true of me” and higher numbers mean “Not at all true of me.”)

<table>
<thead>
<tr>
<th></th>
<th>Not at all true of me</th>
<th>A little true of me</th>
<th>Mostly true of me</th>
<th>Very true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I believe very strongly in God*</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>It is hard to hurt my feelingsab</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I am often very pushy with other peopleab</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>It is very important to me to have my parents or other grown-ups take care of me so nothing bad can happen to me.*a</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I am very interested in what goes on outside my home and in the world.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I like math and science a lot.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I am a quiet person*ab</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>It is very important to me that people think I am good*a</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I like to take charge of thingsa</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>I cry when things upset me*ab</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>I am not good at fixing things or working with tools*ab</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>When something very bad happens, I get very upset and forget what is the best thing to do*</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>I am very good at getting my way with my friends.a</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*Item reverse coded. aItems included in the present study’s modified form of the scale. abItems included in Hall and Halberstadt’s (1980) short form of the scale.
Please tell us a little about yourself. Answer the following questions honestly by circling the response that is most true or by writing in the answer.

1. Sex: Male Female
2. What year were you born?
3. On what month and day is your birthday? Month_________________________ Day______
4. I am in grade: 6 7 8
5. I identify most with the following group (circle as many as apply to you):
   - African American
   - White
   - Asian
   - Pacific Islander
   - Hispanic/Latino(a)
   - Native American/American Indian
   - Alaskan Native
   - Other
6. My best friend(s) are (circle one):
   - Mostly children or teens (not mostly adults)
   - An even mix of children and adults
   - Mostly adults (18 or over)
7. My best friend(s) are (circle one):
   - Mostly Male
   - Mixed
   - Mostly Female
8. My favorite teacher(s) are (circle one):
   - Mostly Male
   - Mixed
   - Mostly Female
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

James R. Porter received his Doctor of Philosophy from the University of Florida in the spring of 2009. He obtained both a Master of Education and a Specialist in Education degree in mental health counseling from the University of Florida. He earned Bachelor of the Arts degrees in theater and psychology from the University of South Florida. He took a break from his time as a student to work as an actor in the Tampa Bay area and to serve a term of enlistment in the United States Marine Corp.

James thrives on face-to-face counseling, believing that therapy is a collaborative effort in which both client and counselor have much to offer. James also enjoys statistical analysis, and hopes to expand his career in dual directions that involve direct counseling and rigorous research related to peace building and conflict resolution. James lives in Gainesville, Florida with his wife and daughter.