Interactive effects of guilt and moral disengagement on bullying, defending, and outsider behavior

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Abstract

We examined the moderating effect of guilt on the associations between moral disengagement and bullying, defending, and outsider behaviors in a sample of 404 students (203 boys; $M_{age} = 11.09$ years; $SD = 1.48$). Bullying, defending, and outsider behavior were assessed through peer nominations, whereas guilt and moral disengagement were assessed by self-reports. Results showed that moral disengagement was associated with high levels of bullying and low levels of defending. Guilt was negatively associated with bullying and positively with defending. A moderating effect for guilt was also found: Increasing levels of moral disengagement contributed to more bullying and outsider behavior, and to less defending, among students with low levels of guilt. The current research broadens the extant literature, showing the combined effects of guilt and moral disengagement on bullying-related behaviors.

*Keywords:* guilt, moral disengagement, bullying, defending, outsider behavior, moderation.
Interactive effects of guilt and moral disengagement on bullying, defending, and outsider behavior

According to the socio-cognitive theory, culturally and socially transmitted moral principles regulate children’s behavior, refraining them from immoral actions and providing immediate feedback on the actual conduct (Bandura, 1990; 1999; 2002). Socio-moral behaviors are the result of reciprocal influences between cognitive and emotional components of morality. For instance, the ability to understand that norm violations deserve punishment is an expression of increasing cognitive development (Malti & Latzko, 2010) and the cognitive process of constructing moral judgments is related to the anticipation of moral emotions, such as guilt (Eisenberg, 2000). Guilt can be experienced both in anticipation of moral transgressions, or after the occurrence of a violation, when children understand that their actual behavior contradicts the moral standards (Bybee, 1998). Anticipatory feelings of guilt restrain from temptations and norm transgressions (Eisenberg, 2000; Tangney, Stuewig, & Mashek, 2007), whereas guilt aroused after a moral violation promotes socially directed activities, such as making amends and restoring the damage done (Baumeister, Stillwell, & Heatherton, 1994). A tendency to avoid the responsibility for the moral violation and the painful feelings of guilt is associated with moral disengagement (Bandura, Barbaranelli, & Caprara, 1996).

Moral disengagement refers to a set of cognitive mechanisms leading individuals to selectively avoid moral censure and self-judgment on the actual behavior (Bandura, 1999; 2002). Moral disengagement activates four cognitive processes aimed at 1) re-
defining one’s own behavior according to personal purposes (*cognitive reconstructing*); 2) displacing personal responsibility for one’s own conduct among the members of the group (*diffusion of responsibility*); 3) minimizing the consequences of the blameworthy behavior (*distorting the consequences*); and 4) denying the human characteristics of the person at whom the immoral action is targeted, or considering the immoral behavior as provoked by the victim (*blaming the victim*).

Moral disengagement has been studied especially in relation to aggressive and delinquent behavior. It has been widely shown in the literature that aggressive individuals are prone to morally disengage, being scarcely troubled by feelings of guilt for their blameworthy actions (Bandura, 2002; Bandura et al., 1996). The theory of moral disengagement has been also used as a framework to understand the dynamics of school bullying (Pozzoli, Gini, & Vieno, 2012a; Thornberg & Jungert, 2014). However, an integrative perspective on both emotional (e.g., guilt) and cognitive (e.g., moral disengagement) components of morality, along with their unique and interactive associations with social behaviors during bullying episodes, has been scarcely investigated.

**Guilt and Moral Disengagement in Students Involved in Bullying Episodes**

Bullying has been described as an immoral behavior oriented at achieving personal goals, such as exerting power over peers and obtaining high status in the group (Gini, Pozzoli, & Hauser, 2011; Salmivalli & Peets, 2008; Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2009). Perpetrators of bullying are oriented to cognitively reconstruct their own actions, considering them as right and acceptable (Menesini et al., 2003; Pozzoli et al., 2012a). They are also prone to put the blame on others, instead of
assuming their own responsibility for harming their peers (Ahmed, 2008; Thornberg & Knutsen, 2011). In addition, students who show bullying behavior hardly manifest guilt for moral violations in daily social contexts (Menesini et al., 2003; Menesini & Camodeca, 2008).

In contrast to children who bully others, those who stick up for their victimized peers manifest feelings of guilt for moral transgressions (Menesini & Camodeca, 2008). They are also oriented to behave in line with moral standards, displaying low levels of moral disengagement (Gini et al., 2011; Menesini et al., 2003; Pozzoli & Gini, 2010). Beyond bullies and defenders, other students have been identified as being involved in bullying episodes (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). Several children shy away in front of bullying, or even witness passively bullying episodes. These children have been referred to as outsiders (Salmivalli et al., 1996). Research findings regarding the association between guilt and moral disengagement and outsider behavior are so far scarce and somewhat controversial. According to some studies, outsiders show low moral disengagement and, similarly to their peers with defending attitudes, they are prone to be emotionally concerned in moral situations. In addition, they also seem to recognize that bullying is an immoral behavior, even though they neither try to stop it, nor stick up for their victimized peers (Thornberg & Jungert, 2013). In contrast, other studies suggest outsider behavior to be characterized by moral disengagement and low proneness to experience feelings of guilt in social contexts (Menesini & Camodeca, 2008; Obermann, 2011a). Due to these controversial findings, further studies are needed in order to better understand how guilt and moral disengagement affect outsider behavior.
Finally, to the best of our knowledge, only one recent study investigated the combined contribution of emotional and cognitive aspects of morality in influencing bullying and defending in a sample of elementary school children (Thornberg, Pozzoli, Gini, & Jungert, 2015). This research showed that decreasing levels of moral emotions strengthened the relation between bullying and moral disengagement, whereas defending behavior decreased with decreasing levels of moral emotions in students who were also morally disengaged. However, Thornberg and colleagues (2015) combined sympathy, empathy, and guilt into a global index of moral emotions, whereas in the present research we consider the specific contribution of guilt in affecting social behaviors during bullying episodes. Besides, we consider how the relation between moral disengagement and guilt influence outsider behavior.

**The Present Study**

According to Bandura’s (1999) socio-cognitive theory, emotional and cognitive components of morality interact with each other in determining the actual conduct. Guilt affects decision-making, inhibiting immoral thoughts and immoral social behaviors (Bandura, 1999; Krettenauer, Colasante, Buchmann, & Malti, 2014). Therefore, aroused feelings of guilt should make it harder for moral disengagement to influence the actual conduct (Thornberg et al., 2015). Based on these assumptions, we have reasons to presume that guilt would have a role in moderating the association between moral disengagement and social behaviors during bullying episodes.

In the present study we expected that low guilt for moral transgressions and a tendency to justify bullying through moral disengagement would be associated with bullying behavior (Menesini & Camodeca, 2008; Obermann, 2011a; Pozzoli, et al.,
2012a; Thornberg & Jungert, 2014; Thornberg et al., 2015), whereas high levels of guilt and low levels of moral disengagement were hypothesized to be associated with defending behavior (Menesini & Camodeca, 2008; Thornberg & Jungert, 2014; Thornberg et al., 2015). Given the contrasting findings about the association between moral disengagement and guilt and outsider behavior, we do not formulate any hypotheses in this respect.

We also expected interaction effects, so that moral disengagement would have a stronger influence on (im)moral behaviors when a student has low, rather than high, levels of guilt. Specifically, low levels of guilt are expected to strengthen the associations between moral disengagement and bullying (Thornberg et al., 2015) and between moral disengagement and the scarce tendency to manifest defending behavior. Due to the controversial findings in the literature, we do not formulate any hypotheses in respect to outsider behavior.

Gender and age differences were also considered. According to the literature, social expectancies and gender stereotypes would prescribe girls, more than boys, to behave in accordance with moral norms and to be gentle and caring towards others (Bybee, 1998; Thornberg, 2010; Thorne, 1993). On the opposite, boys are less likely to be judged as blameworthy for their wrongdoings and are less expected to be emotionally concerned. These social expectancies may foster higher feelings of guilt, together with the need for reparative behaviors, in girls, compared to boys (Bybee, 1998). In addition, in comparison to girls, boys are more prone to morally disengage, for instance by attributing the cause of bullying to the victim (Thornberg & Knutsen, 2011). Therefore, in accordance with previous findings, we expected boys to score
higher on moral disengagement and lower on guilt in comparison to girls (De Caroli & Sagone, 2014; Olthof, 2012; Thornberg & Jungert, 2013; Thornberg & Jungert, 2014).

We also expected to find higher levels of moral disengagement and lower levels of guilt in older than in younger participants, because, in the transition from late childhood to early adolescence, social factors (i.e., group norms and peer pressure) could foster immoral thoughts and discourage feelings of concern (Caravita, Sijtsema, Rambaran, & Gini, 2014; Pozzoli et al., 2012a; Rigby & Slee, 1991). We also explored whether the associations between guilt and moral disengagement and bullying behaviors differed between boys and girls and between younger and older participants; nevertheless, we did not advance any hypothesis in this regard.

**Method**

**Sample and Procedure**

Participants were 404 children and adolescents (203 boys and 201 girls) aged between 9 and 14 years ($M = 11.09$ years; $SD = 1.48$), from nine schools in southern-central Italy. Students attended the fourth and fifth grade of elementary school ($N = 100$ and $N = 91$, respectively) and the sixth, seventh, and eight grade, corresponding to the Italian middle school ($N = 68$, $N = 76$, and $N = 69$, respectively). Although socio-economic status was not directly measured, as in all public schools in Italy, the sample included students from a wide range of social backgrounds (i.e., both low and working classes and upper middle classes). In terms of racial/ethnic background, the sample was mostly Caucasian, (with Italian background).

School principals and teachers gave their consent to the study, after they were presented with the research project. Parents were informed with a letter regarding the
goals and procedure of the study and they were asked to give a written consent for their children’s participation. Consent was agreed for half of the whole population contacted in the schools. Students were informed about the research project, were asked whether they wanted to participate, and were told that they could withdraw at any moment. However, none of them dropped out from the research.

The administration procedure took approximately one hour and was carried out by the first author of the present study. Participants filled in the instruments in classroom, in a single session, during their school schedule. In the Italian school system, students attend all lectures in the same classroom, thus, they have the same classmates through all their school schedules. Students were provided with a booklet, including several questionnaires, also regarding variables not considered in the present study. They were not asked to write down their own names, rather numbers were used to protect their own identity. The order of the instruments was randomized among participants. Students were asked to read each question carefully and to answer on the basis of their personal experience and thoughts. Confidentiality and anonymity of all information provided were assured.

**Measures**

**Behaviors during bullying episodes** were assessed by peer nominations (Pozzoli & Gini, 2010; Pozzoli et al., 2012a). The following written definition of the term “bullying”, adapted from Olweus (1993), was provided: “Being bullied means that a student is repeatedly beaten, kicked and pushed away by a peer, or a group of peers. It’s also bullying when a child is repeatedly excluded, threatened, or badly teased and he/she is not able to defend himself/herself. It’s not bullying if two students of about the
same strength quarrel or fight”. An oral definition of bullying was also provided. Specifically, the researcher gave examples of bullying and more general aggressive behaviors (e.g., arguments and disagreements among children, teasing, and rough play). The three bullying-related behaviors considered in the present study (i.e., bullying, defending, and outsider behavior) were assessed by four items each, covering different types of bullying. Children were provided with a class roster, including the names of all their classmates. To protect anonymity, each student’s name corresponded to a number on the list. Children were asked to write down the number matching the classmates who fit each behavior. They were asked to nominate an unlimited number of classmates, including themselves, who bullied their peers (e.g., “Among your classmates, who teases some kids calling them nasty nicknames, threatening, or offending them?”), who stood up for the victimized children (e.g., “Among your classmates, who stands up for the kids who are excluded from the group?”), and who showed outsider behavior (e.g., “Among your classmates, who stands by when some kids are hit or strongly pushed away?”). Students were also asked to nominate peers who were victimized, however this scale was not used in the present study. The nominations obtained by each student were averaged across the four items composing each scale. The resulting scores were then divided by the number of nominators in each classroom, in order to adjust for classroom sizes. Reliabilities were as follows: bullying (α = .85), defending behavior (α = .86), and outsider behavior (α = .59). Although the reliability of the outsider scale was low, the item-total correlations ranged from \( r = .23 \) to \( r = .49 \) (\( p \text{'s} < .001 \)), which can be considered acceptable. Descriptive statistics are displayed in Table 1.
The Moral Disengagement Scale for Bullying (Caravita, Gini, & Pozzoli, 2012) was administered in order to investigate moral disengagement in bullying situations. A 27-item version was administered to middle school students, whereas an abbreviated and modified 17-item version was administered to elementary school children (Caravita et al., 2012). Participants expressed on a 5-point Likert scale the degree of agreement with each item (1 = completely false; 5 = completely true). High scores indicated high tendency to morally disengage. Examples of items are as follows: “Teasing a classmate is not really hurtful”; “Victimized children usually deserve being bullied”. Moral disengagement scores were computed for each participant, by averaging their responses across all items (α = .78 and α = .88, for elementary and middle school versions, respectively). Table 1 displays descriptive statistics.

Guilt proneness was assessed with five hypothetical vignettes from the Shame and Guilt Questionnaire (Olthof, Schouten, Kuiper, Stegge, & Jennekens-Schinkel, 2000; Italian adaptation by Camodeca & Menesini, 2007). A sample vignette is as follows: “A friend of yours is well-liked by all of your classmates, who always invite him/her at parties. You are a bit jealous and during recess you spread ugly rumors about him/her. The day after no one wants to play with him/her. Then, you realize that your friend is very sad. How do you feel?”. We asked students to imagine themselves in each situation, considering, on a 5-point Likert scale, how much guilty they would feel (1 = not at all; 5 = highly). Guilt scores were computed for each student by averaging responses across the five items. Reliability (α = .65) was in line with previous works, using the same or similar instruments (Camodeca & Menesini, 2007; Rieffe, Camodeca,
Pouw, Lange, & Stockmann, 2012). Mean and standard deviation are shown in Table 1.

**Statistical Analyses**

Analyses were performed using SPSS software version 22.0. Descriptive statistics, correlations, and t-tests assessing gender differences were calculated for all study variables. We tested guilt as moderator of the relation between moral disengagement and bullying-related behaviors through hierarchical regression analyses. Bullying, defending, and outsider behavior were entered in the model as outcome variables. Given that they were not normally distributed, we used the Van der Waerden ranking procedure to normalize them. Normalized scores were used in the regression analyses. The predictors were mean centered and their product term was based on centered variables. At step 1 of the regression model, we included age and gender as control variables. Guilt and moral disengagement were entered in the second step and the interaction term between them was entered in the third step. In step 4, the two-way interactions of guilt x age, moral disengagement x age, guilt x gender, and moral disengagement x gender were entered. In step 5, we tested the three-way interactions of age x guilt x moral disengagement and of gender x guilt x moral disengagement. As none of these interactions (steps 4 and 5) were significant, we dropped them out from the final model.

In order to interpret the significant interactions and analyze the slopes, regression analyses were conducted on high and low levels of guilt, with moral disengagement as independent variable and bullying-related behaviors as outcomes. Therefore, guilt was dichotomized into above and under the mean scores and moral disengagement was standardized into z-scores. Regression lines in the figures show the
impact of low (-1 SD below the mean), medium (the mean), and high (+1 SD above the mean) moral disengagement on bullying-related behaviors.

Results

Descriptive statistics of the study variables are displayed in Table 1, along with t-tests assessing gender differences. Girls were more prone than boys to manifest defending behavior and feelings of guilt, whereas boys tended to bully their peers more than girls. Correlations between age and study variables showed that guilt decreased with age ($r = -0.14; p < .01$), whereas moral disengagement increased with age ($r = 0.15; p < .01$). Bullying behaviors were not significantly correlated with age.

Correlations among study variables are shown in Table 2. Bullying behavior correlated negatively with guilt and positively with moral disengagement, whereas the opposite pattern was found for defending behavior.

[Table 2]

Results of the hierarchical regressions (Table 3) indicated that gender was negatively associated with bullying and positively associated with defending, whereas age was not associated with bullying-related behaviors. Guilt was negatively associated with bullying behavior. At step 3, the interaction terms between guilt and moral disengagement were significant for bullying, defending, and outsider behavior. The analysis of the slopes indicated that at low levels of guilt, bullying and outsider behavior increased with increasing levels of moral disengagement ($\beta = 0.31; p < .001$, Figure 1, and $\beta = 0.23; p < .01$, Figure 2, respectively), whereas defending behavior decreased with increasing moral disengagement ($\beta = -0.19; p < .01$, Figure 3). At high levels of guilt, the associations between moral disengagement, bullying, defending, and outsider
behavior were all non-significant.

[Table 3]

[Figures 1-3]

Discussion

The present study was the first to analyze the moderating role of guilt in the relation between moral disengagement and bullying, defending, and outsider behavior, in a sample of children and adolescents. The findings stress the importance of combining cognitive (i.e., moral disengagement) and emotional (i.e., guilt) components of morality in the study of bullying-related behaviors.

In accordance with previous studies, bullying behavior correlated with guilt (negatively) and with moral disengagement (positively) (Menesini & Camodeca, 2008; Pozzoli et al., 2012a). However, moral disengagement did not contribute to bullying in the regression, when entered together with guilt. This result seems to partially be in contrast with previous findings about an association between moral disengagement and bullying (Barchia & Bussey, 2011; Caravita et al., 2012). However, as highlighted by Gini, Pozzoli, and Bussey (2014), it is likely that moral disengagement interacts with other risk factors in determining bullying behavior. This assumption is consistent with the present findings, pointing to low levels of guilt as a possible individual risk factor. Actually, we found an association between moral disengagement and bullying only among students with low guilt, indicating that low levels of guilt make it easier to violate moral standards, increasing the impact of moral disengagement on harassing behavior.

Although we did not find any significant correlations between outsider behavior,
guilt, and moral disengagement, the interaction between guilt and moral disengagement contributed to outsider behavior in the regression analysis. It is likely that students who scarcely feel guilty may easily avoid the moral conflict of whether helping or not helping the victim, convincing themselves that their victimized peers deserve to be bullied (Forsberg, Thornberg, & Samuelsson, 2014; Thornberg, 2011).

Coherently with our hypothesis, the findings of the present study showed a negative correlation between defending and moral disengagement and a positive correlation between defending and guilt. These results consolidate previous literature (Menesini & Camodeca, 2008; Thornberg et al., 2015), indicating that defending behavior represents a proactive form of morality (Kollerová, Janošová, & Říčan, 2015). In addition, low levels of guilt and high moral disengagement produced a combined effect in reducing the proneness to help the victim, perhaps by leading students not to recognize bullying as an immoral action. Given that guilt has been associated with positive social behaviors and responsibility for others’ welfare, it is likely that poor feelings of this moral emotion may constitute a risk factor for weakening social bonds in adolescents who are also prone to morally disengage (Baumeister et al., 1994; Sheikh & Janoff-Bulman, 2010).

High levels of guilt did not interact with moral disengagement in predicting bullying-related behaviors. In the case of defending, for instance, a recent study by Thornberg and colleagues (2015) showed that high levels of moral emotions, such as empathy, sympathy, and guilt, were sufficient in motivating defending behavior, independently from moral disengagement. The authors suggested that moral emotions tend to overrule the association between defending and moral disengagement, which
was confirmed in the present study.

As to gender differences, boys showed lower levels of guilt and defending behavior, and higher levels of bullying, in comparison to girls (Salmivalli et al., 1996; Thornberg et al., 2015; Walter & Burnaford, 2006). We could speculate that socialization processes may more strongly encourage girls than boys to show interpersonal sensitiveness, leading them to feel responsible for immoral and harmful behaviors (Bybee, 1998). This may result in a higher tendency to manifest guilt and being concerned for others’ wellbeing.

Regarding age trends, we found that, with age, moral disengagement increased, whereas guilt decreased. These results may be due to contextual factors, such as the growing importance attached to peer group norms during the transition from childhood to adolescence. In this respect, we may assume that the social influence exerted by peers may discourage feelings of guilt for immoral actions, enhancing moral disengagement tendencies (Forsberg et al., 2014; Pronk, Olthof, & Goossens, 2014). Despite these findings, however, no gender or age differences were found in the associations between the study variables, indicating that moral disengagement and guilt are associated with involvement in bullying in the same way for girls and boys, as well as for younger and older adolescents.

**Strengths, Limitations, and Implications for Future Research**

Limitations of the present study need to be acknowledged. The cross-sectional design prevents from making causal inferences regarding the relationships among the study variables. To overcome this limitation, longitudinal designs are needed, also in order to draw developmental trajectories in respect to cognitive and emotional
components of morality and bullying-related behaviors.

Although the results were in the expected direction, we acknowledge that low active parental consent may have limited the generalizability and representativeness of our findings. We also recognize that the reliability of the outsider scale was low. It is likely that outsiders’ behavior was subtler to detect than bullying and defending. Also the different phrasing of the items about outsiders’ actions (including different verbs, as “stands by”, “does not care”, “does his/her own business”, “does not meddle in”) could have yielded different nominated children.

We argue that a fine-grained analysis of each moral disengagement domain and its relation with other moral emotions (e.g., shame, empathy, pride) could help to better explain behaviors during bullying episodes. Further variables not considered in the present study may affect guilt and moral disengagement, influencing behaviors during bullying situations. For instance, social norms shared in the peer group could either weaken or strengthen moral disengagement and, consequently, influence the tendency to condemn or approve bullying and the likelihood of manifesting different bullying-related behaviors (Pozzoli et al., 2012a; Caravita et al., 2014).

Future studies should also analyze if socialization processes within the peer group may overcome moral standards learnt in the family and to what extent different contexts can interact with each other in determining different behavioral and developmental outcomes (Pozzoli, Ang, & Gini, 2011; Pozzoli & Gini, 2012; Pozzoli, Gini, & Vieno, 2012b; Roos, Salmivalli, & Hodges, 2011). The wider social context could also exert its influence on moral disengagement attitudes. For instance, some authors reported that the level of criminality and violence affect moral reasoning and
moral emotions, leading children who come from a violent background to be more morally disengaged, in comparison to children coming from fairer social contexts (Bacchini, Affuso, & De Angelis, 2013; Menesini et al., 2003). Thus, we argue that individual and contextual variables have to be taken into account in order to better explain developmental trajectories of guilt and moral disengagement in children and adolescents involved in bullying.

The strengths of the study include a large sample of children and adolescents and the use of a multi-informant approach, employing peer and self-reports. Further, we considered both cognitive (i.e., moral disengagement) and emotional (i.e., guilt) components of morality in a single study, in order to explain the conduct of children and adolescents who were differently involved in bullying episodes.

Findings also suggest that intervention programs aimed at preventing bullying should be based on moral education. For instance, discouraging the tendency to justify bullying, while fostering guilt for moral violations as well as for inaction in front of bullying situations, may be a good strategy to stop bullying and increase students' sense of responsibility towards their victimized peers (Thornberg et al., 2015). Furthermore, given that bullying is a group phenomenon and moral disengagement is affected by socialization processes (Caravita et al., 2014), successful interventions should include the whole group of peers, in order to change the moral atmosphere within each classroom and the whole school. Finally, specific interventions on moral education should improve students' moral reasoning (e.g., challenging students to reflect upon unfairness of bullying and outsider behavior), with the aim to improve their sense of personal responsibility and ethical values.
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Table 1. *Mean Scores and Standard Deviations of Study Variables, and T-Values for Gender Differences.*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Full sample</th>
<th>Boys</th>
<th>Girls</th>
<th>t (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td>4.03 (0.74)</td>
<td>3.89 (.76)</td>
<td>4.17 (.70)</td>
<td>-3.89 (401)***</td>
</tr>
<tr>
<td>MD</td>
<td>2.18 (.63)</td>
<td>2.23 (.65)</td>
<td>2.12 (.60)</td>
<td>1.78 (398)</td>
</tr>
<tr>
<td>Bullying</td>
<td>.07 (.11)</td>
<td>.10 (.13)</td>
<td>.04 (.05)</td>
<td>5.10 (397)***</td>
</tr>
<tr>
<td>Outsider</td>
<td>.12 (.16)</td>
<td>.12 (.16)</td>
<td>.11 (.16)</td>
<td>.55 (397)</td>
</tr>
<tr>
<td>Defending</td>
<td>.16 (.14)</td>
<td>.12 (.11)</td>
<td>.20 (.15)</td>
<td>-5.42 (397)***</td>
</tr>
</tbody>
</table>

*Note.* MD = Moral disengagement; Outsider = outsider behavior.

**p < .001.
Table 2. *Correlations among Study Variables.*

<table>
<thead>
<tr>
<th>Variables</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Guilt</td>
<td>-.43***</td>
<td>-.25***</td>
<td>.00</td>
<td>.15**</td>
</tr>
<tr>
<td>2. MD</td>
<td>-</td>
<td>.19***</td>
<td>.05</td>
<td>-.13*</td>
</tr>
<tr>
<td>3. Bullying</td>
<td>-</td>
<td>-</td>
<td>.27***</td>
<td>-.14**</td>
</tr>
<tr>
<td>4. Outsider</td>
<td>-</td>
<td>-</td>
<td>-.07</td>
<td>-</td>
</tr>
<tr>
<td>5. Defending</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* MD = Moral disengagement;

Outsider = outsider behavior.

*p < .05; **p < .01; ***p < .001.
Table 3. Regression Coefficients of Guilt and Moral Disengagement Predicting Bullying, Outsider, and Defending Behaviors.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Bullying $R^2(\Delta R^2)$</th>
<th>$\Delta F$</th>
<th>(\beta)</th>
<th>95% CI</th>
<th>Outsider $R^2(\Delta R^2)$</th>
<th>$\Delta F$</th>
<th>(\beta)</th>
<th>95% CI</th>
<th>Defending $R^2(\Delta R^2)$</th>
<th>$\Delta F$</th>
<th>(\beta)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.04(.04)</td>
<td>8.02***</td>
<td>.01</td>
<td>1.38</td>
<td>.06(.07)</td>
<td>3.64***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>-.19</td>
<td>[.26, -.09]</td>
<td>-.08 [-.18, .02]</td>
<td>.25*** [.15, .34]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>-.05</td>
<td>[.09, .03]</td>
<td>.01 [-.06, .07]</td>
<td></td>
<td>-.03</td>
<td>[-.08, .05]</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Step 2</td>
<td>.09(.05)</td>
<td>10.28***</td>
<td>.02</td>
<td>1.65</td>
<td>.08(.02)</td>
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*Note.* MD = Moral disengagement; Outsider = Outsider behavior. Gender was coded as -1 (boys) and +1 (girls).

*p < .05; **p < .01; ***p < .001.
**Figure 1**

The Moral Disengagement x Guilt Effect on Bullying Behavior.
Figure 2.

The Moral Disengagement X Guilt Effect On Outsider Behavior.
Figure 3.

The Moral Disengagement X Guilt Effect On Defending Behavior.