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DIRECT BULLYING AT SCHOOL AND DEPRESSIVE RISK IN EARLY ADOLESCENCE

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Abstract

Studies show that being bullied during the developmental age is associated with a risk of depression; however, little research has focussed on the link between direct bullying and depressive risk. This study aims to explore, in a suburban at-risk area, the differences between girls and boys in verbal and physical bullying and the differences in the depressive risk. This study also aims to explore whether there is a link between direct female bullying and depressive risk. Three-hundred Italians in early adolescence, selected within a high-risk community, completed the Peer-Victimisation Scale, the Bullying-Behaviour Scale and the Kovacs Children's Depression Inventory. We used the variance analysis to test for differences between girls and boys regarding depressive risk and verbal and physical bullying. Finally, we used the regression analysis to identify the predictors of depressive risk. Results show that the risk of depression among girls is significantly higher than boys. There were no significant differences between boys and girls with regard to verbal bullying, while physical bullying continues to be higher among boys. The regression analysis has shown that bullying, and not only victimisation, can be predictive of depression risk among girls, but not among boys. Collected data offers empirical evidences to devise interventions based on gender differences to prevent the occurrences of bullying, victimisation and the risk of depression during the developmental stage of early adolescence.

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Keywords: Bullying, victimisation, depressive risk, adolescence.
1. Introduction

Recent longitudinal studies have confirmed that having bullied others or being victims of bullying during the developmental age is associated with a high risk of psychopathological disorder in adulthood (Sigurdson, Undheim, Wallander, Lyderson, & Sund, 2018; Kretschmer, Tropf, & Niezink, 2018; Geoffroy, Boivin, Arseneault, et al. 2018). This can result in an increasing costs for the public health system and the society (Copeland, Wolke, Angold, & Costello, 2013; Nonnis, Cuccu, & Porcu, 2010). Bullying has been defined as a phenomenon that entails aggressive behaviour, causing distress and damage to others; it has been described as a deliberate action that endures over time and aims to cause damage; most importantly, victims struggle to oppose it (Olweus, 2010; Limber, Olweus, Wang, Masiello, & Breivik, 2018).

Bullying occurs because of the development of complex dynamics within interpersonal relationships and in different contexts, which make adolescents become either bullies or victims. However, depending on the situation, boys and girls can also alternate these roles. Every year, one third of the overall number of school-age young adolescents declares they have been victim of bullying at school (Bevans, Bradshaw, & Waasdorp, 2013). Bullying was particularly attested in in lower secondary school where parents declared that their children had been isolated, physically abused or had their personal possessions stolen. Bullying is categorised as direct when it involves physical or verbal abuse. In contrast, indirect bullying (e.g. being isolated or excluded from a group of friends or peers, having false rumours spread) is more difficult to pinpoint. Indirect bullying is more common among girls (Björkqvist, Lagerspetz, & Kaukiainen, 1994; Ostrov & Godleski, 2013) whereas direct (physical and verbal) bullying is more often attested among boys (National Institute of Child Health and Human Development Early Child Care Research Network, 2004). Various studies on verbal school bullying among adolescents shows that boys tend to be aggressors and girls tend not to get involved in verbal school bullying (Serra-Negra et al., 2015). A particular gap exists in our recent knowledge of verbal bullying among early adolescents living in high-risk urban communities. Some studies have shown that victimisation and peer teasing have been associated with immediate and long-term maladjustment outcomes (Kerr, Gini, & Capaldi, 2017; Kerr & Gini, 2017).

Other studies have shown that verbal abuses among Italian teenagers are widespread in schools (Bacchini et al., 2015) and it’s often difficult to distinguish between real bullying and the phenomenon of peer teasing.

1.1. School Bullying in high-risk communities

In high-risk urban communities, crime and economic disadvantage instead are a very great problem and in those economically disadvantaged neighbourhoods, we know that exposure to crime and exposure to violence during childhood can more easily expose teenagers to physical and verbal bullying among peers (Lister, Merrill, Vance, West, & Hall, 2015).

In a recent study, Kerr, Gini, and Capaldi (2017) classified American boys from higher delinquency neighbourhoods as perpetrators of teasing, victims, perpetrator-victims, or uninvolved. Relative to uninvolved boys, means or odds were higher for: suicide attempt among perpetrator-victims;
all three groups for depressive symptoms and clinically significant symptoms; arrest for perpetrators and perpetrator-victims; number of arrests and violent arrest among perpetrator-victims; and patterned tobacco use among perpetrators and perpetrator-victims. Overall, childhood involvement in teasing predicted serious adverse outcomes in adulthood, in some cases beyond childhood risks.

In another study conducted in the US, Holditch Niolon et al. (2015) have shown that girls were more likely than boys to report perpetrating verbal/emotional abuse and physical abuse, and boys were more likely to report physical abuse. Further empirical studies (Espelage & Holt, 2013) offer convincing evidence of the association of bullying with depression and suicidal ideation (i.e., thinking or letting others know their suicidal intentions). Most importantly, they stress that bullies and victims are at high risk of depression and suicidal ideation (Brunstein Klomek et al., 2011).

1.2. School Bullying and depressive risk in early adolescence

In developing individuals, depression rarely reveals itself in all those symptoms that are typical of adulthood, and this makes it more difficult to detect and make a diagnosis. Tendency to act or “acting-out” is one of the main symptoms of depression in adolescents (Blain-Arcaro & Vaillancourt, 2017; Hill, Mellick, Temple, & Sharp, 2017) leading to self-injurious behavior or harming others. In their attempt to investigate the correlation between bullying and depression further, researchers have reached general agreement in concluding that those who were victims of bullying during their childhood are more likely to be at risk of depression, be they either boys (Brunstein Klomek et al., 2008; 2011) or girls (Kaltiala-Heino, Frojd, & Marttunen, 2010; Ledwell & King, 2013).

Copeland et al.’s (2013) longitudinal research study is particularly interesting as it includes a follow-up survey. At first, these researchers focused on 9-16 year old children that had been referred to as bullies, victims or bully-victims. A follow-up analysis of the same sample of subjects when they were aged 19-26 years has revealed that, as adults, they all have had problems due to their previous life experiences as bullies or victims. This study reports that victims tend to suffer from agoraphobia, anxiety, and panic disorder; bullies display a higher risk of antisocial behaviour; bully-victims are at higher risk of depression, panic disorder and agoraphobia (girls only) and suicide tendencies (boys only).

Copeland et al. (2013) also demonstrates that victimization during childhood is prospectively associated with anxiety disorders whereas bullying is likely to lead to antisocial behavior in adulthood. Interestingly, this study also attests an increased risk of both anxiety and antisocial behavior in male bully-victims when they reach adulthood. In contrast, girls have rarely been categorized as victims (3.6%) and even more rarely as bullies (0.6%) or bully-victims (0.2%). Yet, female victims have shown an increased risk of psychopathological disorder and suicidal tendencies in adult age.

Copeland et al. (2013) maintain that being victims of bullying has direct, pleiotropic and long-term consequences. Moreover, they state that being bully-victims has a stronger effect on the development of severe depression and suicidal tendencies.

2. Problem Statement

About female bullying, most studies focus on the depressive risk of victims (i.e. Sentse, Prinzie, & Salmivalli, 2017) and few studies focus on the depressive risk of female bullies. This is probably due to
the fact that more empirical evidence has firmly shown the relation between bullying and externalizing behaviour among boys (Shaw, Dooley, Cross, Zubrick, & Waters, 2013). Espelage and Holt (2013) have furthermore highlighted the presence of component variables associated with suicide tendencies and suicidal ideation not only among physically aggressive male and female bullies in lower secondary school, but also among verbally aggressive male and female bullies and victims, if compared to adolescents who never experienced bullying. Roland (2002) has analysed the possible link between depression and aggressiveness to find that female depressed adolescents tend to blame themselves or others, thus further confirming that the symptoms of depression and bullying in girls are connected (Pedditzi & Lucarelli, 2014).

3. Research Questions

Our research questions concern the differences, regarding direct bullying and depressive risk, between boys and girls living in high-risk communities and the relationship between female direct bullying and depressive risk. The present study aims to explore the following specific questions:

- Are there significant differences between boys and girls regarding direct bullying, victimization and depressive risk?
- Are bullying, victimization and gender significant predictors of depressive risk in adolescence?

4. Purpose of the Study

This study aims to explore, in a suburban at-risk area, the differences between girls and boys in verbal and physical bullying and the differences in the depressive risk. This study also aims to explore whether there is a link between direct female bullying and depressive risk.

5. Research Methods

The present research is a descriptive study and it uses the inquire method. It is based on a survey carried out using some questionnaires on direct bullying and depressive risk.

5.1. Participants Error! Bookmark not defined.

This research study has involved 300 adolescents aged between 12 to 15 years (M = 12.83; SD = .82) attending Italian lower secondary school.

The sample comprised 44% male (N=132) and 56% female subjects (N=168) and it was balanced in terms of gender and age: at the time of the survey, 52 % participants were in year 2 (N=156; M = 12.41 years old; SD = .80) while 48% participants attended year 3 (N=144; M = 13.28 years old; SD = .60).

The sampling procedure took place in Sardinia, an Italian island and region that are considered to be at high risk of school dropout and unemployment (ISTAT, 2015). In particular, we have chosen to conduct this survey in some schools that are located in a sub-urban areas of Cagliari, where the risk of school drop-out, psychological and social malaise, crime, drug abuse and unemployment is high. 13 questionnaires were not properly completed and they were eliminated (7.6%).
The anonymous questionnaires aiming to detect a link between bullying and the risk of depression have been administered in randomly selected classes and the research was conducted according to the APA guidelines for ethical research in psychology.

5.2. Measures

In order to measure the risk of depression, we have made use of the Kovacs’s (1992) Children’s Depression Inventory – CDI, to cater for the specific case of Italy. This measure comprises 27 items that seek to detect symptoms relating to mood, feelings, self-esteem and social behaviour.

Each item includes three answers relating to “ideas or emotions you have had in the last two weeks”. Several studies conducted by means of the Kovacs CDI have returned consistent and reliable results. The pathological cut-off point is set at 17-19. This is equal to the 90th percentile of a wide sample of students aged between 8 and 15 years. More recently, Timbremont, Braet and Dreessen (2004) have further demonstrated the empirical validity of CDI in predicting the risk of depression in early age.

The Peer-Victimization Scale (Neary & Joseph, 1994) and the Bullying Behaviour Scale (Austin & Joseph, 1996) have been used to evaluate bullying and victimization at school. The former comprises 6 multiple choice items that seek to investigate whether students have been victims of bullying: 3 items describe instances of direct physical bullying and 3 items describe instances of direct verbal bullying. The latter is also made up of 6 multiple choice items that aim to measure whether the subject is a bully and what form of bullying they perpetrate: 3 questions relate to direct physical bullying and 3 to direct verbal bullying.

Both scales are based on a 4-point evaluation score (1 = never; 2 = sometimes; 3 = often and 4 = always). Hence, scoring can vary from 1 to 4 and the cut-off point is set at 2.5. Internal coherence has demonstrated to be satisfactory, with a Cronbach Alpha equal to 0.83 in the victimization scale and 0.82 in the bullying scale.

5.3. Statistical Methodology

We have verified the internal coherence of the scale in the questionnaires we intended to use (Cronbach Alpha = .86 for the bullying scale and .82 for the victimising scale). We have subsequently carried out a one-way analysis of variance according to the Bullying Behaviour Scale so as to detect significant gender differences in bullying and victimization.

A further one-way analysis of variance has been carried out to verify the existence of significant differences between male and female subjects regarding the risk of depression.

Finally, we have carried out a linear regression analytical procedure. We use a single confidence level specified on a priori basis (95% of confidence level). At first, we use a single multiple regression model to try to predict “risk of depression,” combining as predictors “victimization” and “bullying”. At a later time, in order to have more specific data regarding the gender differences associated with risk of depression, we introduced the third predictor "Sex" to try to predict “risk of depression,” combining as predictors “victimization” and “bullying”. Finally, we have carried out a linear regression analytical procedure. We use a single confidence level specified on a priori basis (95% of confidence level).
6. Findings

6.1. Bullying, victimization, risk of depression and gender

Error! Bookmark not defined. Results show that 8% (N=24) of the sample under scrutiny bullied other students (58.3% boys and 41.7% girls); 10% were bullied (N=30; 50% boys and 50% girls). In addition, 14% of our respondents resulted to be above the CDI cut-off point, thus attesting significant levels of emotional and relational disorder related to depression (62% girls and 38% boys).

The one-way analysis of variance has revealed what is statistically significant: boys (n = 132, M = 1.326, SD = .466) are more prone to use direct physical bullying [F (1, 300) = 5.223; p = .024], than girls (n = 168, M = 1.173, SD = .331). Moreover, verbal bullying among boys (n = 132; M = 1.651, SD = .599) is not significantly higher [F (1, 300) = 1.011; p = .127, n.s.], than girls (n = 168, M = 1.600, SD = .471).

As for victimization, no significant differences between male and female students could be detected, [F (1, 300) = .424, p = .516, n.s.]. Boys (n = 132, M = 1.515, SD = .588) and girls (n = 168, M = 1.666, SD = .624) suffer of verbal victimization and we have not found gender differences [F (1, 300) = 2.352; p = .127, n.s.]. Even in the physical victimization, we have not found gender differences [F (1, 300) = .424; p = .516, n.s.]. However, the risk of depression among girls (n = 168; M = 12.385, SD = 6.770) is significantly higher, F (1, 300) = 5.619; p = .019, than boys (n = 132, M = 9.582, SD = 7.288).

6.1. Bullying and victimization as predictive of depression risk

Error! Bookmark not defined. A first regression analysis used “victimization” and “bullying” as predictive criteria of the “risk of depression”. Within the total sample (n = 300), only Victimization statistically predicted a risk of depression, R² = .173, adjusted R² = .161, F (2, 300) = 14.355, p < .001, 95% CI (2.850, 7.046). The findings have demonstrated that victimization can aptly explain 16.1% of the variance (Beta = .416). A further regression analysis was carried out even considering “Sex”, “Bullying” and “Victimization” as predictors of risk of depression. The results have shown that bullying among girls, and not only victimization, can indeed be predictive of this risk (Beta = .466), and can also explain its 20.0% of variance, R² = .217, adjusted R² = .200, F (3, 300) = 12.554, p < .001, 95% CI (.885, 5.404). Including the predictor “gender” within the same model of regression analysis we observed that not only victimization but also bullying are able to predict the risk of depression among girls.

Table 01. Criteria: risk of depression

<table>
<thead>
<tr>
<th>Scales</th>
<th>Model B</th>
<th>B</th>
<th>95% CI</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-4.522</td>
<td></td>
<td>(-10.195, 1.150)</td>
<td>-1.577</td>
<td>.117</td>
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<tr>
<td>Bullying</td>
<td>2.986</td>
<td>.186</td>
<td>(.449, 5.523)</td>
<td>2.328</td>
<td>.021</td>
</tr>
<tr>
<td>Victimization</td>
<td>4.509</td>
<td>.337</td>
<td>(2.435, 6.582)</td>
<td>4.300</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>3.145</td>
<td>.217</td>
<td>(.885, 5.404)</td>
<td>2.752</td>
<td>.007</td>
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<tr>
<td>R²</td>
<td>.217</td>
<td>R</td>
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<tr>
<td>F</td>
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<td>ΔR²</td>
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<td>Adjusted R Square</td>
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<tr>
<td>ΔF</td>
<td>12.554</td>
<td>Sig F Change</td>
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Regression Analysis (N=300; sig. <.05)
6.2. Discussion

The sample investigated here displays problems relating to bullying, victimization and risk of depression and the findings of the present study are consistent with previous research (Copeland et al. 2013; Ferrara, Bottaro, Cutrona, Quintarelli, Spina, et al., 2015; Menesini, Nocentini, & Palladino, 2017). Direct bullying has been detected among boys and girls (58.3% boys and 41.7%). Most importantly, the phenomenon of verbal bullying among girls has demonstrated to score similar if compared to that of males. This may be linked to the high psychosocial risk that characterises the sample of lower secondary school students under scrutiny. As for the risk of depression, the findings reported here show that girls are more at risk of depression than boys. Our findings have shown that 14% of the sample scores above the CDI cut-off point. Previous empirical research has detected a level of prevalence equal to 8.3% regarding depression among adolescents. Yet, it seems difficult to report an exact estimation of this phenomenon due to the co-morbidity of depression and other psychiatric disorders (40%–70% of cases). Previous international epidemiological research has highlighted the need for further investigation of depressive disorders as connected to variables such as age. In other words, future research should concentrate on how the prevalence of depression increases from early age to adolescence: from 1% to 2.5% in pre-puberty, from 4.3% to 18.5% in adolescence (approximately 24% increase for girls and 11.6% for boys; Garber, 2000). Unlike in early age when there are not significant differences between male and female children in terms of mood disorder, in adolescence the risk of depression becomes prevalent among girls, with a ratio of 2:1 (Garber, 2000; Rapoport, Ismond, 1996). The findings of the present study have confirmed this tendency and they have also shown a doubling percentage in the odds of depression among girls (i.e., those who are above the CDI cut-off point) in comparison to the male sample. The linear regression analysis conducted on this sample has also revealed that peer bullying and victimization can be predictive of the risk of depression among girls. Female direct bullying in this sample can be predictive of the risk of depression and not only victimization. Despite the limited number of participants, our study has yielded interesting findings regarding gender differences with respect to bullying and depression in girls. These findings should be the object of further analysis.

7. Conclusion

The data collected here offers empirical evidence to devise interventions based on gender differences to prevent the occurrences of bullying, victimization and the risk of depression during the developmental stage of early adolescence. In terms of follow-up procedures, i.e., measures taken to prevent school bullying, the results of our study suggest that such measures may differ, bearing in mind that bullying and victimization can predict the risk of depression, especially among girls, and that the factor of risk should not be underestimated, especially among adolescents who suffer from abuse. For such girls, we must consider programs specifically aimed at fostering self-esteem, making them aware of relational tactics, and encouraging them to become assertive in their relationships with their peers (Pedditzi, Nonnis, & Massidda, 2016).

Furthermore, since the results of this study indicate that bullying among girls is a predictor of depression, some measures may be created to promote awareness among young adolescents and teach them how to handle aggressive behaviour and empathize with their peers.
Among young adolescents, measures may also be created to promote awareness of the risks associated with abusive behaviour and the benefits derived from learning new methods for assertive and pro-social communication. As for anti-bullying politics, we should consider establishing informational activities that help people consider risk factors and means of protection connected to bullying and depression, underscoring the fact that among girls, the risk factor affects not only victims but also bullies. This kind of campaign should cater to teachers, parents, paediatricians, and various staff members involved in youth education in order for them to avoid underestimating the problem of bullying and its connections to risk of depression. These results can also impart a greater understanding of adolescent bullying that goes beyond the common stereotype that bullies are exclusively aggressive and antisocial.

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References


