Original

Adolescent Bullying Victimization and Life Satisfaction: Can Family and School Adult Support Figures Mitigate this Effect?∗

Rafael Miranda a,∗, Xavier Oriol b, Alberto Amutio c, and Harry Ortúzar d

a Departamento de Psicología, Universidad Continental, Huancayo, Perú
b Facultad de Educación y Ciencias Sociales, Universidad Andres Bello, Santiago de Chile, Chile
c Departamento de Psicología Social y Methodología de las Ciencias del Comportamiento, Universidad del País Vasco (UPV/EHU), Donostia-San Sebastian, España
d Universidad Tecnológica de Chile INACAP, Santiago de Chile, Chile

ARTICLE INFO

Article history:
Received 23 September 2017
Accepted 4 July 2018
Available online 30 July 2018

Keywords:
Bullying victimization
Adolescents
Adult home support
Adult school support
Life satisfaction

ABSTRACT

There are still few studies relating bullying victimization and life satisfaction (LS). This study aimed to assess the mitigating effect of adult figures support (at school and home) on the relationship between bullying victimization and life satisfaction experienced by adolescents. To this end, a sample of 5774 adolescents from 71 schools located throughout the violent neighborhoods of Lima (Peru) was evaluated. A moderation analysis was performed to assess the moderating role of support adult figures from home and school. The results show that the support of adults at home and school mitigate the negative effect of bullying victimization on life satisfaction, and this effect is larger in the case of adult home support. Adult support at home and school help students with high prevalence of bullying victimization maintain high levels of life satisfaction compared to adolescents with low support from adults. Finally, the need for adults at school and home to take joint measures to prevent and reduce the prevalence of this type of peer violence is discussed.

© 2018 Universidad de País Vasco. Published by Elsevier España, S.L.U. All rights reserved.

Bullying en la adolescencia y satisfacción con la vida: ¿Puede el apoyo de los adultos de la familia y la escuela mitigar este efecto?

RESUMEN

Existen pocos estudios que vinculen la victimización sufrida por bullying con la satisfacción con la vida. En este sentido, este estudio tiene como objetivo evaluar el efecto mitigador del apoyo de figuras adultas (padres, madres y adultos de la escuela) en los efectos de la victimización por bullying en la satisfacción con la vida en adolescentes. Con este fin, se evaluó a una muestra de 5774 adolescentes de 71 escuelas distribuidas en barrios violentos de Lima, Perú. Para ello, se realizó un análisis de moderación para evaluar el papel moderador de las figuras adultas de apoyo del hogar y de la escuela. Los resultados muestran que el apoyo de los adultos en casa mitiga la relación negativa entre la victimización y la satisfacción con la vida. Este efecto es mayor en el caso del apoyo proporcionado por los padres y madres. El apoyo brindado por los adultos tanto del hogar como de la escuela favorece que los adolescentes que padecen una alta prevalencia de victimización puedan mantener niveles superiores de satisfacción con la vida respecto a los adolescentes que perciben bajo apoyo de los adultos. Finalmente, se discute la necesidad de que adultos en la escuela y padres realicen acciones coordinadas para prevenir y disminuir la prevalencia de este tipo de violencia entre compañeros/as.

© 2018 Universidad de País Vasco. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.
**Introduction**

School bullying has increasingly gained attention in many western countries in recent years and has become a serious social issue, particularly as the media has covered a number of high profile cases of suicide that resulted from bullying. According to the U.S. Department of Health and Human Services (2013) more than 70% of students and an equal percentage of educational staff have witnessed bullying at schools, and almost one-third of middle school and high school students reported being bullied (Leland, 2015). Several studies have estimated that at least around 30% of children and adolescents are bullied at some point whilst at school, and between 5% and 10% are regularly bullied (Riggs & Brown, 2017; Rothon, Head, Klineberg, & Stansfeld, 2011). Precise estimates, however, are difficult given the fact that bullying is not always reported because of fear of retaliation (Nocero & Beckerman, 2014). The literature shows differences in aggressiveness and depression by gender in adolescent population. Concretely, most studies report a higher prevalence of bullying cases in boys rather than in girls (Hong & Espelage, 2012; Seals & Young, 2003). Bullying and victimization peak in prevalence and frequency in early adolescence (Claes, Luyckx, Baeten, Van de Ven, & Witteman, 2015), and most adolescents follow a declining trajectory of bullying and victimization from early to mid-adolescence (Barker, Arsenault, Brendgen, Fontaine, & Maughan, 2008).

**Bullying victimization and life satisfaction**

Bullying is broadly defined as a desire to hurt and the execution of a harmful action and can take a variety of forms, including verbal, social, physical, and more recently, cyberbullying (Leland, 2015; Rothon et al., 2011). Cyberbullying implies using information and communication technologies, mainly the internet and cell phones, to bully classmates (Garagordobil & Martínez-Valderrey, 2014, 2018). Being involved in bullying as a victim is related to emotional adjustment problems such as loneliness, anxiety, low self-esteem, and depression (Esla et al., 2004; Kochenderfer-Ladd, & Wardrop, 2001; Moore et al., 2017; Nansel et al., 2001) and other mental health problems. Therefore, several studies have focused on the effects of bullying on mental health, but less attention has been paid to the relation between bullying victimization and life satisfaction (Varela et al., 2017), although life satisfaction is a key predictor for positive adjustment in adolescence (Casas, 2011; Méndez-Giménez, Cecchini, Fernández-Ríos, Méndez, & Prieto, 2017). Life satisfaction (LS) is one of the cognitive components of Subjective Wellbeing (SWB) and is defined as the evaluation of overall quality of life (Diener, Suh, Lucas, & Smith, 1999). Over the last years, studies assessing life satisfaction and other SWB components during childhood and adolescence have increased, although research in this area continues to be a priority (Dex & Hollingworth, 2012; Dinisman, Montserrat, & Casas, 2012). In this sense, it is especially important to conduct investigations that allow us to identify the protective and risk factors that favor or reduce life satisfaction in children and adolescents (Dinisman & Ben-Arie, 2015). Most studies use a single item to assess LS. For instance, the Overall Life Satisfaction (OLS) scale developed by Campbell, Converse, and Rogers (1976) enquires about how satisfied people are with their life in general. More recently, Gadermann, Guhn, and Zumbo (2012) developed a scale based on the cognitive processes of children and adolescents that are related to life satisfaction. This scale established 5 items which are complementary to Diener’s single-item scale to assess this variable. According to the International Well-Being Group (2013), although this single-item scale is a very good instrument to assess SWB, the use of multi-item scales is also recommended to improve reliability.

Some studies conducted regarding bullying and life satisfaction in adolescence show that having suffered bullying is negatively related to life satisfaction (Navarro, Ruiz-Óliva, Larrañaga, & Yubero, 2015; Valois, Kerr, & Huebner, 2012) and people who are bullied have reduced life satisfaction compared to children who have not been victims (Flasphohler, Elffström, Vanderzee, Sink, & Birchmeier, 2009). This study aims to contribute to the existing literature on the relationship of these variables during adolescence by using a multi-item scale to assess LS.

**Can support figures mitigate the effects of bullying?**

From the socio-ecological perspective, understanding the influence of diverse factors on victimization/bullying dynamics as well as the relationships between the different actors involved becomes necessary for adopting effective preventive measures. Although a large number of studies have looked at bullying prevention strategies, few studies have examined processes that may already be operating to mitigate the negative effects of bullying (Rothon et al., 2011; Zhou, Liu, Niu, Sun, & Fan, 2017). One such process is social support. The consequences of bullying may be even more severe if there is a lack of socio-emotional support (Hong & Espelage, 2012; Wang et al., 2012). In this sense, the affective relationship that teachers establish with students is a key factor for school adaptation (Stasio, Savage, & Burgos, 2016; Hamre & Pianta, 2010; Hughes, Luo, Kwok, & Loyd, 2008; López-González, Amutio, Oriol, & Bisquerra, 2016) and for other variables related to adolescent adjustment, such as proper social functioning and academic achievement (Allen, Witt, & Wheelless, 2006; Wentzel, Battle, Russell, & Looney, 2010). This was confirmed by a study conducted by Wang, Brinkworth, and Eccles (2013) with 1400 youngsters, which showed that trust and positive affective relationships with teachers acted as moderators in the relationship between parent–children conflicts, depression and disruptive or dysfunctional behavior in 13- to 18-year-old adolescents.

According to Claes et al. (2015) bullying and victimization increased the risk of engaging in non-suicidal self-injury (NSSI). The relationship of both bullying and victimization with NSSI was partially mediated by depressive mood. Additionally, the relationships of both bullying and victimization with NSSI and of depressive mood with NSSI were found to be moderated by parental support, indicating that these relationships were less pronounced in adolescents who experienced high parental support. In the same line, Ang (2015) found that cyberbullying is closely related to a poor emotional bond with the parents or caregivers. Therefore, the need to include both emotion-regulation training and family-based interventions into bully intervention programs to prevent NSSI is underscored. Research also demonstrates that family relationships have a profound influence on emotion regulation capacities (Baldry, 2004; López-González et al., 2016), which are central to an adequate individual functioning and prosocial behavior in adolescence. In this sense, the type of interactions that adolescents establish with significant people (parents, teachers), depending on their developmental stage, appears to act as important protective or risk factors for bullying victimization (Banzon-Librojo, Garabiles, & Alampay, 2017; Oriol, Miranda, et al., 2017; Rose, Nickerson, & Stormont, 2015).

**Present study**

Studies relating bullying victimization to life satisfaction are still scarce in the international literature. This study intends to assess life satisfaction in adolescents using a multi-item scale, in contrast to the majority of studies, which usually use the single-item measure of OLS created by Diener et al. (1999).
There is a significant body of literature referring to the effect of social support as a protective factor in bullying cases. However, these studies consider the relation of bullying with mental health problems rather than its relation with life satisfaction. Within the research conducted in subjective well-being in adolescence, the support of significant figures in the family and school domains has become increasingly relevant (Siedlecki, Salthouse, Oishi, & Jeswani, 2014). Thus, priority is given to exploring how the support of significant adult figures can mitigate the effect of bullying victimization.

In light of the above considerations, the following hypotheses are proposed: (1) bullying/victimization will negatively be related to the multi-item assessment of life satisfaction; (2) support perceived from adults at school will moderate the relationship between experienced bullying and life satisfaction; and (3) support from adults at home will have a greater moderating effect than school support in the relationship between bullying and life satisfaction. To test the hypotheses, the variables sex and age were used as control variables.

Method

Participants

The sample was selected from the baseline of the project Escuela Amiga, which was conducted by the Ministry of Education of Peru (MINEDU) in 2013. To participate in this project a total of 5774 students from 71 secondary education schools were considered, out of which the mean age of the sample was 14.19 years old (SD = 1.00) and 48.2% were men; 10.5% of students identify themselves as Afro-Peruvian and 4.6% have reported a physical disability.

Instruments

During the baseline stage of the project, the Ministry of Education of Peru elaborated an assessment instrument called CUBE (Cuestionario Único de Bienestar Escolar/The Single Survey of School Wellbeing). This instrument comprises 21 variables based on different international questionnaires, being the Life Satisfaction Scale developed by Gadermann et al. (2012) one of them. The variables of CUBE are grouped in seven dimensions: (1) socioemotional well-being, (2) socioemotional skills, (3) pro-social behavior, (4) school climate, (5) school violence, (6) peer support and (7) adult support. This instrument was piloted by the Ministry of Education of Peru and psychometrically validated by methodological consultants of the World Bank. The following variables were selected for this study from the different dimensions of this measure:

Life satisfaction: This scale is composed of 5 items: “In many senses, my life is similar to the life I would like to have”, “My life is excellent”, “I am happy with my life”, “Until now I have achieved the important things I want in my life” and “If I were born again, I would live the same way I have lived until now”. All these variables were measured through a 5-point Likert scale ranging from 0 to 4 (0 = Not at all, 1 = No, 2 = Somewhat, 3 = Yes, 4 = Very much). The scale presents a high level of reliability (α = .79). To calculate the composite reliability (CR) and the average variance extracted (AVE), a confirmatory factorial analysis (CFA) was performed with the data from the present study, using the maximum likelihood model for the estimation of the parameters. The results indicate that the CR is optimal (CR = .80) and the AVE is quite adequate (AVE = .49%). The CFA results showed an adequate fit: χ²/df = 4.17, CFI = .96, TLI = .98, RMSEA = .06.

Adult family support: This variable assesses the perception the student has about the support of adults at home. It comprises 3 items (e.g., “At Home, there is at least one adult who really cares about me”) measured through a 5-point Likert scale ranging from 0 to 4 (0 = Not at all, 1 = No, 2 = Somewhat, 3 = Yes, 4 = Very much). The reliability of this scale was high (α = .80), CR = .80 and AVE = .76.

Adult school support: This scale assesses the perception the student has about the support of adults at school through 3 items (e.g., “At school, there is a teacher or some other adult… who believes I will do well in life”), with a 5-point Likert scale ranging from 0 to 4 (0 = Not at all, 1 = No, 2 = Somewhat, 3 = Yes, 4 = Very much). This scale also presents a high level of reliability (α = .82), CR = .82 and AVE = .78.

Bullying victimization: This variable was built from traditional aggression and cyberbullying reports. In the same way as the scales aimed to assess the prevalence of bullying victimization, this scale asks adolescents whether they have suffered any type of bullying during the last week and how many times, in order to verify if aggression is continuous over time. The questions used for this scale were: (1) “One student pulled or pushed you hard to bother you”, (2) “One or several students punched you or kicked you”, (3) “A student threatened to hurt you or to beat you”, (4) “A student insulted you” and (5) “At least one student made fun of you through some electronic means (e-mail, Facebook, text message, Twitter, etc.).” The variables were measured using a 3-point Likert scale (0 = “Never”, 1 = “Once”, 2 = “Twice or more times”). The scale presents a Cronbach’s alpha of .71, CR = .72 and AVE = .58%. Also, CFA shown adequate fit: χ²/df = 5.44, CFI = .97, TLI = .93, RMSEA = .07.

Procedure

This study ex post facto was carried out through the application of a survey to students of the Escuela Amiga Project led by the Ministry of education of Peru. In this project, fourth-grade primary students and second-grade secondary students from 71 educational institutions located in neighborhoods with high levels of violence from Lima Metropolitana were surveyed. The ethical considerations of the project were approved by MINEDU and endorsed by the ethics committee of the Innovation for Poverty Action (IPA), organization that provided technical assistance to MINEDU in the elaboration of written informed consents for parents and school principals, and informed consents for students that were verbally explained prior to proceeding to data collection. In this sense, the objective of the project was disclosed prior to the application of the questionnaire and students were informed that they were free not to answer the questionnaire in case they did not want to. In addition, as part of the ethical considerations proposed, IPA and MINEDU created protocols for monitoring data collection. Regarding the application protocol, the Ministry of Education and the NGO IPA trained the interviewers on the application of the instrument and the implementation of an emotional containment protocol in case a student was affected by the content of the questionnaire. According to this protocol, in the event that a student experienced a situation affecting his emotional well-being, the survey supervisor should approach to his or her desk and ask the student how he or she was feeling. In case of detecting any situation of emotional discomfort, the student was immediately referred to the psychologist or guardian, who remained in another separate room from where the survey was applied.

Data analysis

The collected data were analyzed using descriptive statistics and correlation. To test the proposed moderation models, all continuous variables were mean-centered. Any significant interactions were further probed by examining the effect sizes, simple regression equations, and simple slopes. Changes in R² for the model once the interaction term had been taken into account were used as a measure of the variance accounted for by the interaction above and
Table 1 shows the mean, standard deviation, range and correlations between variables. Correlations were significant among all variables. As expected, life satisfaction correlates negatively with bullying and positively with adult support. Furthermore, there are negative and significant correlation between bullying, life satisfaction and age.

Before performing the moderation analysis, the regression assumptions were tested. The scores referring to bullying were first centered, whereas the variables corresponding to adult support (school, family) were kept untouched to avoid multicollinearity (Aiken, West, & Reno, 1991).

Table 3 shows the results of the interaction between adult home support and bullying. Model 1 only incorporates the control variables age and sex, which were significantly negative in the case of sex: $\beta = -2.4, p < .01$. This implies that life satisfaction is higher in the case of women. In model 2, the variables bullying and adult home support were included as factors associated with life satisfaction and both were significant. This model added 21% of explained variance to the model: $F(df1, df2) = 431.02 (4, 5528)$, $p < .01$. Finally, model 3 includes the interaction between adult home support and bullying to predict life satisfaction in students. The interaction was significant and negative ($\beta = -0.19, p < .01$), so the respective effects of bullying and adult home support were significantly predictive of life satisfaction.

Table 1 shows the frequency of self-reported bullying by type of aggression, divided in traditional bullying and cyberbullying. Overall, 74.4% of students suffered bullying. This result is consistent with the results of other studies (Garaigordobil & Martínez-Valderrey, 2018). Regarding traditional bullying, 69.2% reported this type of aggression and 31.3% reported cyberbullying. When comparing by sex, men present a higher prevalence of traditional bullying ($\chi^2 = 94.37, p < .001$). However, there is no significant difference regarding cyberbullying. In addition, significant differences were found in cyberbullying when comparing early and late adolescence by $\chi^2 = 6.95, p < .05$.

Table 3 shows the results of the interaction between adult home support and bullying. Model 1 only incorporates the control variables age and sex, which were significantly negative in the case of sex: $\beta = -2.4, p < .01$. This implies that life satisfaction is higher in the case of women. In model 2, the variables bullying and adult home support were included as factors associated with life satisfaction and both were significant. This model added 21% of explained variance to the model: $F(df1, df2) = 431.02 (4, 5528)$, $p < .01$. Finally, model 3 includes the interaction between adult home support and bullying to predict life satisfaction in students. The interaction was significant and negative ($\beta = -0.19, p < .01$), so the respective effects of bullying and adult home support were significantly predictive of life satisfaction.

**Results**

Table 1 shows the frequency of self-reported bullying by type of aggression, divided in traditional bullying and cyberbullying. Overall, 74.4% of students suffered bullying. This result is consistent with the results of other studies (Garaigordobil & Martínez-Valderrey, 2018). Regarding traditional bullying, 69.2% reported this type of aggression and 31.3% reported cyberbullying. When comparing by sex, men present a higher prevalence of traditional bullying ($\chi^2 = 94.37, p < .001$). However, there is no significant difference regarding cyberbullying. In addition, significant differences were found in cyberbullying when comparing early and late adolescence by $\chi^2 = 6.95, p < .05$.

Table 2 shows the mean, standard deviation, range and correlations between variables. Correlations were significant among all variables. As expected, life satisfaction correlates negatively with bullying and positively with adult support. Furthermore, there are negative and significant correlation between bullying, life satisfaction and age.

Before performing the moderation analysis, the regression assumptions were tested. The scores referring to bullying were first centered, whereas the variables corresponding to adult support (school, family) were kept untouched to avoid multicollinearity (Aiken, West, & Reno, 1991).

Table 3 shows the results of the interaction between adult home support and bullying. Model 1 only incorporates the control variables age and sex, which were significantly negative in the case of sex: $\beta = -2.4, p < .01$. This implies that life satisfaction is higher in the case of women. In model 2, the variables bullying and adult home support were included as factors associated with life satisfaction and both were significant. This model added 21% of explained variance to the model: $F(df1, df2) = 431.02 (4, 5528)$, $p < .01$. Finally, model 3 includes the interaction between adult home support and bullying to predict life satisfaction in students. The interaction was significant and negative ($\beta = -0.18, p < .01$), so the respective effects of bullying and adult home support were significantly predictive of life satisfaction.

Figure 1 represents the moderating relationship for life satisfaction. As can be observed, the slope in the regression of students that experience more support from the adults at home is more pronounced, implying that students with higher levels of adult support and low levels of bullying have more possibilities of enhanced levels of life satisfaction. In contrast, students with lower levels of adult support at home experienced less life satisfaction even in the cases in which bullying levels were low.

Table 4 shows the results of the moderating effect over bullying of adult school support. The results of model 1 are the same as those shown in Table 3. In model 2, the variables adult’s school support and bullying are significant, demonstrating that adult school support has a positive effect on life satisfaction ($\beta = .27, p < .01$). In the case of bullying, the effect is negative and significant ($\beta = -.38, p < .01$).

Finally, model 3 included the interaction between adult school support and bullying. The interaction resulted significantly negative

---

**Table 1** Percentage of bullying by sex and adolescence stage

<table>
<thead>
<tr>
<th>Victimization</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
<th>Early</th>
<th>Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullying</td>
<td>74.4%</td>
<td>80.0%</td>
<td>68.7%</td>
<td>73.8%</td>
<td>75.9%</td>
</tr>
<tr>
<td>Traditional bullying</td>
<td>69.2%</td>
<td>74.9%</td>
<td>69.5%</td>
<td>68.8%</td>
<td>70.4%</td>
</tr>
<tr>
<td>Cyberbullying</td>
<td>31.3%</td>
<td>32.8%</td>
<td>30.6%</td>
<td>30.6%</td>
<td>34.2%</td>
</tr>
</tbody>
</table>

* The correlation is significant at the .05 level.
* The correlation is significant at the .01 level.

---

**Table 2** Descriptive analysis and correlations of the variables of this study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (DE)</th>
<th>Range</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bullying</td>
<td>.44 (.33)</td>
<td>0–2</td>
<td>–</td>
<td>–.15*</td>
<td>–.16*</td>
<td>–.20*</td>
<td>.04</td>
<td>–.17*</td>
</tr>
<tr>
<td>2. Adult school support</td>
<td>2.75 (.78)</td>
<td>0–4</td>
<td>–</td>
<td>–</td>
<td>–.42*</td>
<td>–.32*</td>
<td>.00</td>
<td>.04</td>
</tr>
<tr>
<td>3. Adult family support</td>
<td>3.33 (.76)</td>
<td>0–4</td>
<td>–</td>
<td>–</td>
<td>–.44*</td>
<td>–.11*</td>
<td>–.02</td>
<td>–</td>
</tr>
<tr>
<td>4. Life satisfaction</td>
<td>2.54 (.81)</td>
<td>0–4</td>
<td>–</td>
<td>–</td>
<td>–.08*</td>
<td>–.14*</td>
<td>–.08*</td>
<td>–</td>
</tr>
<tr>
<td>5. Age</td>
<td>14.18 (1.08)</td>
<td>0–18</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. Sex</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

* The correlation is significant at the .05 level.
* The correlation is significant at the .01 level.

---

**Table 3** Regression model for students’ life satisfaction by adult home support

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Student age</td>
<td>-0.07</td>
<td>-6.30</td>
<td>-0.03</td>
</tr>
<tr>
<td>Student sex</td>
<td>-0.24*</td>
<td>-11.10</td>
<td>-0.27*</td>
</tr>
<tr>
<td>Bullying</td>
<td>-0.33*</td>
<td>-12.64</td>
<td>-0.36*</td>
</tr>
<tr>
<td>Adult home support</td>
<td>.44</td>
<td>34.53</td>
<td>.52*</td>
</tr>
<tr>
<td>Bullying * Adult home support</td>
<td>.03</td>
<td>18.7</td>
<td>-1.82</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F (df1, df2)$</td>
<td>77.02 (2, 5530)*</td>
<td>431.02 (4, 5528)*</td>
<td>355.25 (5, 5527)*</td>
</tr>
</tbody>
</table>

* $p < .05$.
* $p < .01$. 
Table 4
Regression model for students’ life satisfaction by adult school support

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
<td>β</td>
<td>t</td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Student age</td>
<td>−.07</td>
<td>−3.30</td>
<td>−.07</td>
<td>−6.72</td>
<td>−.07</td>
<td>−6.73</td>
</tr>
<tr>
<td>Student sex</td>
<td>−.24</td>
<td>−11.10</td>
<td>−.32</td>
<td>−15.43</td>
<td>−.32</td>
<td>−15.47</td>
</tr>
<tr>
<td>Bullying</td>
<td>−.38</td>
<td>−13.77</td>
<td>.27</td>
<td>23.58</td>
<td>.31</td>
<td>18.72</td>
</tr>
<tr>
<td>Adult school support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying × Adult school support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.03</td>
<td></td>
<td>.16</td>
<td></td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>F(df1, df2)</td>
<td>77.02(2, 5530)</td>
<td></td>
<td>259.30(4, 5528)</td>
<td></td>
<td>209.67(5, 5527)</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$.  ** $p < .01$.  

Figure 1. Regression and interaction of ‘life satisfaction’ and ‘adult home support’ by bullying level.

Figure 2. Regression and interaction of ‘life satisfaction’ and ‘adult school support’ by bullying level.

According to the first hypothesis, a medium-high negative relationship is observed between bullying and the multi-item measure of life satisfaction employed. Although the direction of this influence cannot be inferred, a possible interpretation for it is that, effectively, experiencing bullying has a negative impact on life satisfaction. These results are in agreement with previous studies that used a single item to assess life satisfaction (OLS) and in which negative relationships between bullying victimization and life satisfaction were observed (Blood et al., 2011; Martin & Huebner, 2007; Valois, Paxton, Zullig, & Huebner, 2006). These findings point to the need of more studies on the relationship between bullying victimization and other assessment measures for the cognitive component of SWB, as well as for the affective component.

Regarding the second hypothesis, the results show that school support favors the decrease of the bullying victimization effect over life satisfaction. It must also be noted that when the support of adults is high, adolescents who reported having suffered a high prevalence of bullying during the last week showed slightly higher life satisfaction scores, even compared to those students with a low prevalence but receiving less support from adults. Another interesting aspect is that in the group of adolescents with low support, the difference between life satisfaction under high or low prevalence of bullying, is not as pronounced as in the group that perceives high support. The explanation for this result might be the compensatory mechanisms generated by homeostasis to maintain life satisfaction levels within a range, as pointed out by the study of Cummins, Li, Wooden, and Stokes (2013). In other words, life satisfaction levels can go down significantly when a person is confronted with a violent situation, but the homeostatic forces make this person develop resilience before these negative affective experiences. Therefore, groups with high and low prevalence of bullying victimization perceiving low support have constant low levels of life satisfaction, so the differences between them are not as pronounced as those found in groups that perceive high support. This finding highlights the importance that adult school support has in bullying situations in relation to satisfaction with life.

In line with Cummins et al. (2013), the results show that external factors like perceived support favor the stability and recovery of homeostasis, and that life satisfaction levels are consequently higher. The results also confirm the importance that all adults at school, and not only the teachers, show positive support to students, as this support acts as a protective factor against the aggressions students may suffer from their classmates. Other studies have shown that the quality of interactions and perceptions teachers have of students helps reducing peer violence (Oriol, Miranda, et al., 2017; Saarento, Kärnä, Hodges, & Salmivalli, 2013; Troop-Gordon, 2017) and that the support offered by teachers is deemed a fundamental indicator of subjective well-being during this development stage (Oriol, Torres, Miranda, Bilbao, & Ortúzar, 2017). Importantly, it also reinforces the idea that all adults and not only teachers are important to prevent bullying and, as shown.

Discussion

Descriptive results show a prevalence of bullying victimization around 74% in adolescence. Specifically, traditional bullying has a higher prevalence than cyberbullying, as pointed out by the international literature (Modecki, Michin, Harbaugh, Guerra, & Runions, 2014). The majority of adolescents of the sample indicated having suffered traditional bullying, although they also reported having experienced bullying through electronic devices.
by the results, to mitigate the effect that bullying from classmates has on life satisfaction (Gutiérrez, Tomás, Romero, & Barrica, 2017; Wood, Smith, Varjas, & Meyers, 2017).

As for the third hypothesis, results indicate that adult home support has a moderating effect on the relation between bullying victimization and life satisfaction. Furthermore, this interaction has a stronger moderating effect than the one observed from adult school support. Even though bullying occurs at school, our findings highlight the idea that adults at home are fundamental support figures to help adolescents recover from peer violence. In addition, the results reaffirm the need of schools to undertake joint measures to prevent and address peer violence (Valdés-Cuervo, Martínez-Ferrer, & Carlos-Martínez, 2018). Finally, as in the case of support from adults at school, the findings show a lower oscillation of life satisfaction values in the group of low support in relation to the prevalence of bullying victimization, which stresses even more the importance of adult support at home and school for increasing life satisfaction in adolescents regardless of the levels of bullying. Adult support can help adolescents build personal and interpersonal resources, which can make them experience positive emotions and improve their well-being, and at the same time with the satisfaction with life.

Implications

The results show the importance of support from adults at both school and home to mitigate the effects of bullying victimization on life satisfaction. In this line, bullying needs to be dealt with from a preventive perspective which implies that families and schools need to work together. This approach would help prevent the occurrence of violent episodes among peers and would act as a protective factor against bullying victimization and mental health problems. The results also point to a relation between bullying victimization and a multi-item measure to assess life satisfaction, which confirms the outcomes of some previous studies that observed this relationship using a single-item of overall life satisfaction (OLS). However, the literature relating bullying victimization and the different components of SWB is still scarce. Further research needs to address the relation between victimization and SWB by using internationally validated scales to assess both the cognitive and affective aspects of SWB during childhood and adolescence.

Limitations

More research is needed with longitudinal designs in order to observe the effects of programs aimed at strengthening these support relationships to prevent the perpetuation of violence and avoid mental health problems in the adolescent population. This should be carried out focusing on the involvement of parents as a core element to reduce levels of bullying and promote the well-being of students.

Acknowledgments

The authors of this article thank the Ministry of Education of Peru (MINEDU) for providing us with the information concerning the baseline of the impact assessment “Escuela Amiga” project, whose data have been analyzed in this work.

References

http://dx.doi.org/10.1080/03637270500432638
http://dx.doi.org/10.1016/j.avb.2015.07.011
http://dx.doi.org/10.1097/01.chi.00003231871f3e68
http://dx.doi.org/10.1002/ab.20006
http://dx.doi.org/10.1016/j.jadolescence.2017.03.001
http://dx.doi.org/10.2466/07.15.PMS.113.5.353-364
http://dx.doi.org/10.1007/s10826-015-0138-2
http://dx.doi.org/10.1037/0033-2909.125.2.276
http://dx.doi.org/10.1007/s11205-015-0921-9
http://dx.doi.org/10.1016/j.childyouth.2012.09.005
http://dx.doi.org/10.1016/j.jadolescence.2016.10.002
http://dx.doi.org/10.1002/ab.20006
http://dx.doi.org/10.1002/pits.20404
http://dx.doi.org/10.3389/fpsyg.2018.00745
http://dx.doi.org/10.1387/RevPsicodidact.10239
http://dx.doi.org/10.1016/j.psicod.2017.01.001
http://dx.doi.org/10.1016/j.avb.2012.03.003
http://dx.doi.org/10.1037/0022-0663.100.1.1


