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## **Bullying Victimization Prevalence and Its Effects on Psychosomatic Complaints. Can Sense of Coherence Make a Difference?**

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## **Bullying Victimization Prevalence and Its Effects on Psychosomatic Complaints. Can Sense of Coherence Make a Difference?**

### **ABSTRACT**

**BACKGROUND:** The aim of this study was to examine the prevalence of bullying victimization and its impact on physical and psychological complaints in a representative sample of adolescents and to explore the role of sense of coherence (SOC) in victimization prevalence and consequences.

**METHODS:** A representative sample of Spanish adolescents (N = 7,580, M age = 15.41) was selected as part of the *Health Behaviour in School-aged Children* study. Bullying victimization, physical and psychological symptoms and SOC were measured, and comparisons were made between strong- and weak-SOC adolescents regarding their likelihood of being a victim of bullying and the negative effects of bullying victimization on their health.

**RESULTS:** Weak-SOC adolescents were significantly more likely to suffer from bullying victimization regardless of type (non-physical vs physical and non-physical) or means (traditional vs cyberbullying). In addition, bullying victimization showed significant increasing effects on weak-SOC adolescents' physical and psychological symptoms whereas in strong-SOC adolescents it was not significantly associated with increases in physical complaints and its effects on psychological complaints seemed to be weaker.

**CONCLUSIONS:** Weak-SOC adolescents seem to be at higher risk of becoming bullying victims and victimization experiences appear to have increased negative effects on them when compared to strong-SOC students.

**Keywords:** bullying; cyberbullying; victimization; sense of coherence; salutogenesis; adolescence.

Bullying is a complex phenomenon, which has motivated scientific research worldwide. The wide array of negative consequences that bullying experiences cause makes this phenomenon of international interest, despite differences in prevalence rates of bullying victimization across countries.<sup>1</sup> Additionally, since bullying episodes peak at the beginning of adolescence, much research has focused on this developmental stage.

Bullying occurs when an student is exposed to negative actions on the part of one or more other students, in a way that is consistent with the three following characteristics: it is intentionally harmful, it is carried out repetitively and over time and there is an imbalance of power between the bully and the victim.<sup>2</sup> One common classification of types of bullying distinguishes between physical, verbal and relational bullying. Among these types, verbal victimization seems to be the most prevalent, and interesting sex differences have been reported, with boys showing a higher likelihood of being involved, as bullies or victims, in overly physical or verbal abuse whereas girls are more prone to be engaged in or being victims of relational bullying.<sup>3,4</sup>

In the last decades, as a result of the increasing presence of new technologies in everyday life, a new and challenging type of bullying has emerged: cyberbullying. Cyberbullying is defined as the use of the Internet or other electronic communication devices, such as cellphones, as a medium to harass or hurt someone.<sup>5</sup> Although cyberbullying is usually considered a new type of bullying, an alternative view is that it is a new means of committing bullying, which makes it possible to extend bullying outside the school limits.<sup>6,7</sup> In this vein, some studies show that most cyberbullying victims are also victims of traditional bullying.<sup>8-10</sup>

Traditional bullying victimization has well-documented negative consequences; victims tend to be more depressed, more lonely and more generally and socially anxious and to have a lower self-esteem than non-victims.<sup>11</sup> Less is known about the effects of cyberbullying. The

anonymity and the wider breadth of audience in cyberbullying could make it more damaging than traditional bullying, but some studies report less or similar negative emotional consequences on cyberbullying victims compared to traditional bullying victims.<sup>12</sup> According to Smith et al.,<sup>10</sup> the impact on the victim will depend on the type of cyberbullying, with certain types having more negative effects than traditional bullying whereas others tend to be less damaging. Nevertheless, it seems that the combination of traditional and cyber victimization places the victims at an increased risk of internalizing adjustment problems.<sup>8</sup>

Coping strategies employed by victims have also started to be studied recently, since they have significant effects on victimization duration and consequences. Thus, it seems that helplessness and counter-aggression tend to perpetuate bullying, whereas ignoring the bully, assertively asking the bully to stop or seeking help may be more effective to put a stop to the victimization experience.<sup>13</sup> As noted by Stassen Berger,<sup>14</sup> almost every student is hurt on occasion, but whereas most of them find protective tactics, those who are anxious, hostile, or sensitive may trigger repetition and finally become victims. In a similar vein, Kochenderfer-Ladd and Ladd<sup>15</sup> have claimed that features of victimization experiences should be studied in relation to internal psychological characteristics of the victims, since individual factors may explain why similar experiences play some students at greater risk than others.

Inasmuch as individual appraisals and coping abilities can have significant effects on bullying victimization duration and consequences, including individual variables related to these aspects in investigation of the associations between victimization and health seems warranted. In this respect, sense of coherence (SOC) can be viewed as a promising concept, due to its relevant role in understanding individuals' capacity to deal with stressors.

SOC, the central construct in the salutogenic model, is defined as 'a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of

confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable (comprehensibility); (2) the resources are available to one to meet the demands posed by the stimuli (manageability); and (3) these demands are challenges, worthy of investment and engagement (meaningfulness).<sup>16</sup>

SOC has been proven to be an important factor in maintaining and regaining health.<sup>17</sup> A lower tendency to interpret life situations as threatening and an increased ability to select appropriate coping strategies and to mobilize resources are two of the pathways proposed to explain SOC protective effects on health. Furthermore, even when the individual is confronted with strain, a strong SOC is hypothesized to prevent or at least reduce their negative effects on health.<sup>16</sup>

Despite that, to our knowledge no studies on bullying victimization have analyzed the role of SOC. Nevertheless, research has shown that SOC had a negative association with levels of psychopathology in a sample of juvenile delinquents exposed to community violence victimization<sup>18</sup> and, in adult populations, SOC has been found to act as a protective mechanism among targets of workplace bullying, though this protective effect seemed to diminish when bullying was very severe.<sup>19</sup> It has also been suggested that individuals with a weaker SOC may be at a higher risk of exposure to violence due to their poorer coping abilities to deal with work conflicts.<sup>20</sup> Regarding the school context, Torsheim and colleagues<sup>21</sup> found that a stronger SOC was significantly associated with lower levels of school-related stress and that the association between school-related stress and health complaints may be less strong for strong-SOC students. Strong-SOC adolescents also showed a lower likelihood of experiencing weekly headaches and of using medicine as a coping mechanism if suffering from them.<sup>22</sup>

In the present study, we analyzed the prevalence of different types of victimization experiences and the effects of different types of bullying on physical and psychological

complaints. Our analyses on the effects of type of bullying victimization and health will include comparisons between traditional bullying and cyberbullying, since this is an area in which discrepancies have been found. In addition, the role of SOC will be explored regarding both aspects (victimization prevalence and its impact on physical and psychological complaints), so that some insight may be obtained about potential differences between strong-SOC and weak-SOC adolescents' experiences of victimization. In line with the aforementioned SOC research regarding workplace bullying and school-related strain, we hypothesized that weak-SOC students may be at a higher risk of bullying victimization and that they may be more vulnerable to the negative effects on health of being bullied than strong-SOC students.

## **METHODS**

### **Participants and Procedure**

A representative sample of adolescents aged 11 to 18 was selected as part of the 2010 edition of the study *Health Behaviour in School-aged Children in Spain* by means of random multistage sampling stratified by conglomerates. Data collection was conducted on-line in accordance with the HBSC international standardized procedure<sup>23</sup> and students' anonymity was ensured. Data collection took place from March to June 2010. Both the Spanish HBSC questionnaire and the survey procedure were approved by the Experimentation Ethical Committee of the University of Seville.

From the original sample, we selected the 7,580 adolescents (M age = 15.41, SD =1.44) that had answered to the scales of interest in the present study. Adolescents aged 11 and 12 were excluded because the SOC scale was not part of their questionnaires.

### **Instruments**

The following measures from the HBSC questionnaire were employed for the purpose of this study:

**Bullying.** This content was assessed by means of the *Revised Bully/Victim Questionnaire*.<sup>24</sup> Apart from the global report on bullying victimization and reports on seven types of victimization experiences provided by the questionnaire, we developed an additional indicator, labeled observed bullying, using the maximum frequency function on the seven questions of bullying victimization experiences so that adolescents that reported having been a victim for at least one of them were considered victims. This strategy was employed in the hypothesis that some types of bullying experiences may be more likely than others to be considered bullying and consequently adolescents' global self-report on bullying may be an underestimation of the actual bullying victimization prevalence. To identify bullying victims, we used the cut-off point proposed by Solberg and Olweus<sup>25</sup> according to which adolescents were considered victims when they reported a bullying victimization frequency of two or three times a month or higher.

**Physical and psychological complaints.** These variables were measured by means of the *HBSC Symptom Checklist*,<sup>26</sup> a non-clinical measure of physical and mental health that assesses the frequency of psychosomatic symptoms in the last 6 months. This is an 8-item scale that has been validated in adolescent samples and provides separate information about two interrelated components: psychological complaints (feeling nervous, feeling low, irritability and sleeping difficulties) and somatic complaints (headache, abdominal pain, backache and dizziness).<sup>27</sup> The scores range from 1 (*Rarely or never*) to 5 (*Almost everyday*). Cronbach alpha in the present study was .71 for physical symptoms and .78 for psychological symptoms.



**SOC.** Sense of coherence was assessed by means of the SOC-29 scale.<sup>16</sup> The SOC-29 scale has shown good psychometric properties in numerous studies.<sup>28,29</sup> In the present study, reliability was .87. Given the lack of validated cut-off points, we used quartiles as a reference to distinguish between strong SOC (quartiles 1 and 2) and weak SOC (quartiles 3 and 4).

### **Data Analysis**

We calculated prevalence for global victimization and specific victimization experiences in the total sample as well as in boys and girls separately and explored how different bullying victimization experiences combined. Chi-square and Crammer's V were employed to analyze whether significant differences existed between boys and girls in the aforementioned aspects. Afterward, we developed two indicators of bullying: type of bullying and means of bullying, which are consistent with the suggestion by Ybarra and colleagues<sup>30</sup> of a distinction between type and mode of bullying, and studied prevalence differences between strong-SOC and weak-SOC adolescents. General linear models, using type of bullying and means of bullying as predictors, were employed to analyze the associations between being a victim of bullying and physical and psychological symptoms. Given the well-known sex differences on physical and psychological symptoms,<sup>31</sup> the possibility of sex x bullying interactions was considered. After conducting each of these analyses on the sample as a whole, strong-SOC and weak-SOC adolescents' results were compared.

### **RESULTS**

The percentages of bullying victims are presented in Table 1. Rumors or gossip (10.5%), sexual jokes (9.6%), and being called mean names or made fun of in a hurtful way (9.53%) were the most prevalent types of bullying, whereas being bullied using new technologies, either computers (4.0%) or mobile phones (3.6%) were the least prevalent conditions. No sex differences existed in the prevalence of being bullied, except for the item "I was hit, kicked,

pushed, shoved around, or locked indoors”, which was significantly more frequent in boys (Cramer’s  $V=.129$ ,  $p < .001$ ). Prevalence of bullying victimization was very different depending on how it was assessed: 4.8% according to the global self-report on bullying and 21.0% based on observed bullying ie, the composite from the answers about experiencing each of the different bullying experiences.

Prevalence of single and combined types of victimization experiences, taking into consideration the categories physical, non-physical (verbal or relational), traditional bullying and cyberbullying, is summarized in Table 2. Traditional non physical abuse was the most frequent type of bullying victimization and affected 14.5% of the sample. Around 5% of adolescents were victims of cyberbullying, which most frequently appeared in combination with non-physical abuse or both non-physical and physical abuse. Effect size tests indicated that differences between boys and girls were negligible (Cramer’s  $V=.084$ ,  $p < .001$ ). Only physical abuse (0.3%), the combination of physical abuse with cyberbullying (0.1%) and only cyberbullying (0.4%) were very infrequent conditions.

Based on the previous data and given that the small number of observations in certain conditions did not allow using that classification in subsequent analysis, we distinguished two dimensions aimed to cover different aspects of the bullying phenomenon: the type of victimization experienced (non-physical abuse only versus the combination of physical and non-physical abuse) and the means employed by the bullies (whether it was face-to-face or it involved new technology ie, traditional bullying versus cyberbullying). These two indicators are separately examined in the remaining analyses.

Table 3 shows the distribution of adolescents, in the whole sample and in the groups of strong and weak SOC, in the different categories. Chi-square analyses showed significant differences in both type of bullying ( $\chi^2=321.27$ ,  $p < .001$ , Cramer’s  $V= .222$ ) and means of

bullying ( $\chi^2=334.93$ ,  $p < .001$ , Cramer's  $V = .226$ ) between SOC-derived subgroups of adolescents. Specifically, the examination of the corrected standardized residuals indicated that weak-SOC adolescents were significantly more likely to be a victim of bullying, regardless of type and means.

To assess the effects of these bullying dimensions on physical and psychological symptoms, two separate general linear models were estimated (see Table 4). Both types of bullying and means of bullying had significant small effects on physical and psychosomatic symptoms. The magnitude of their effects seemed to be stronger on psychological symptoms than in physical symptoms, though all effect size values were small. No significant interactions with the variable sex were observed, so bullying effects on physical and psychological symptoms did not appear to be significantly different for boys and girls.

Descriptive statistics for the different conditions in the bullying dimensions are shown in Table 5, including effect size tests on the comparisons between each condition and the no abuse condition. Differences between the conditions non-physical abuse and combined physical and non-physical abuse, as well as between traditional bullying and cyberbullying had negligible effect sizes (Cohen's  $d$  values lower than 0.20).

Finally, univariate models on the effects of each bullying dimension on physical and psychological symptoms showed differing results in SOC-derived subgroups. In weak-SOC adolescents, significant associations with small effect size were found between type and means of bullying and both psychological symptoms ( $p < .001$ ; partial  $\eta^2 = .039$  and  $.036$ , respectively) and physical symptoms ( $p < .001$ ; partial  $\eta^2 = .012$  and  $.013$ , respectively). According to partial eta square values, the association seemed to be slightly stronger with psychological symptoms. In contrast, in strong-SOC adolescents, neither type of bullying nor means of bullying had noticeable effects on physical symptoms (partial  $\eta^2 = .001$ ), but they

showed a small association with psychological symptoms ( $p < .001$ ; partial  $\eta^2 = .012$  and  $.013$ , respectively). The magnitude of the association with psychological symptoms, however, was lower than the one found for weak-SOC adolescents.

## **DISCUSSION**

This study examined the prevalence and the impact on physical and psychological complaints of bullying victimization and it tested whether significant differences existed between strong-SOC and weak-SOC adolescents in those aspects.

This study's findings on bullying victimization are consistent with previous research on several aspects. The overall lower likelihood of girls to suffer from bullying victimization<sup>14</sup> coincides with the obtained prevalence rates except for sexual jokes, comments or gestures; nevertheless, the only difference that reached a significant effect size appeared for physical victimization, which was more prevalent among boys. Among different bullying experiences, verbal and relational forms (grouped as non-physical) seemed to be the most frequent ones, which may have to do with the greater difficulty to detect these types of bullying episodes and the lower tendency of teachers to stop them, compared to physical ones.<sup>32,33</sup> Regarding cyberbullying, its prevalence in the sample was close to five per cent, a result which is similar to the one reported in a previous study with Spanish adolescents.<sup>12</sup>

The analyses on the effects of bullying victimization on physical and psychological complaints showed that the effects of type and means of victimization were similar in boys and girls. Specifically, bullying victimization was significantly associated with higher levels of physical and psychological symptoms, regardless of type and means. That association appeared to be slightly stronger with psychological symptoms. The finding that no differences appeared to exist between victims of non-physical forms of bullying only and those who suffered from a combination of physical and non-physical forms is consistent with the view

that students are equally distressed by bullying victimization experiences regardless of the type of experience or whether multiple forms combine within the incidents.<sup>34</sup> Another interesting though tentative finding was that no significant differences appeared between victims of traditional bullying and cyberbullying. Nevertheless, substantial overlap has been found between traditional and cybervictimization,<sup>9,35</sup> which makes it difficult to draw conclusions in this respect. In addition, as noted by Smith et al.,<sup>10</sup> various cyberbullying experiences may have differing effects on health, so more research on this topic would be beneficial.

Regarding the role of SOC, results indicated that weak-SOC adolescents were significantly more likely to suffer from bullying victimization regardless of type or means. These findings are consistent with previous studies that show that weak-SOC individuals seem to be at a higher risk of violence victimization in the workplace.<sup>20</sup> Given that most students are hurt by others students on occasion and that their coping strategies can put a stop to the attacks or tend to perpetuate them,<sup>13,14</sup> strong-SOC adolescents' higher confidence in their abilities to effectively cope with strain in various situations may be related to more effective responses, which are likely to prevent future episodes. This seems to be especially relevant given that the possibility has been suggested that the effectiveness of a given coping strategy may depend of the attitude of the victim when employing that strategy, with students approaching problem solving with self-blame or helplessness feelings being less likely to succeed in reducing future victimization.<sup>36</sup> Nevertheless, given the cross-sectional design of the present study we cannot rule out the possibility that weak SOC could be a result of bullying victimization. It is also possible that weak SOC influences the appraisal of the environment and makes its stressors to appear more threatening. Although our decision to use SOC as a variable to define subgroups is supported by the moderate stability of SOC reported on previous

studies,<sup>37</sup> longitudinal studies should contribute to clarify on the direction of the associations between SOC and bullying victimization in the future.

Differences between weak-SOC and strong-SOC adolescents were also found regarding the effects of bullying victimization on physical and psychological complaints. Thus, bullying victimization, regardless of type and means, showed significant increasing effects on weak-SOC adolescents' physical and psychological symptoms, especially the latter. In contrast, in strong-SOC adolescents bullying victimization was not significantly associated with increases in physical complaints and the effects of victimization on psychological complaints seemed to be weaker than the ones found for weak-SOC adolescents. Both results are consistent with our hypothesis that strong-SOC students would be less affected by bullying victimization and are in line with Antonovsky's original formulation that strong-SOC individuals would experience less negative health effects even when exposed to significant stressors.<sup>16</sup> Nevertheless, bullying reports referred to the last two months and, consequently, did not allow distinguishing between short-term and long-term victimization. This distinction and whether the obtained results would maintain in long-term victimization deserve future research, since some studies indicate that serious or long-term victimization may affect people's view of the world, and consequently could lead to a weakened SOC.<sup>19</sup>

### **Limitations**

This study has some limitations that should be acknowledged in the interpretation of its findings. Some of them have already been mentioned, such as the cross-sectional design and the impossibility to analyze bullying duration and severity, which are aspects that should be addressed in future studies. In addition, due to the small sample size on certain victimization conditions, it was not possible to conduct analyses separately for passive victims and provocative victims (also called bully/victims). Although the vast majority of victims belong

to the passive category, there also seems to be a small proportion of provocative victims, who are prone to aggressive and hostile behaviors.<sup>2,38</sup> Therefore, replicating the present analyses across these two subgroups of victims would provide a more nuanced view of the role of SOC on the bullying victimization phenomenon.

Despite that, this study provided interesting information on the prevalence and the effects of different types of victimization, including a comparison between traditional and cyberbullying victimization experiences. Furthermore, it made a valuable initial contribution to the study of the role of SOC in bullying victimization prevalence and effects. In fact, to our knowledge, this is the first study to explore this topic and it provided interesting findings that hint at the potential of SOC to protect from bullying victimization and to buffer or attenuate its negative consequences; weak-SOC adolescents seemed to be at higher risk of becoming bullying victims and victimization experiences appeared to have increased negative effects on them when compared to strong-SOC students. Besides, those results were quite consistent, since the former was found regardless of the analyzed type or means of bullying.

## **Conclusions**

In sum, the present work extends our current knowledge on bullying victimization, pointing out to the potential protective effect of a strong SOC against victimization experiences. Furthermore, this study breaks ground to future research on this topic. For that purpose, commentaries on main findings have always been followed by suggestions on how to deepen and expand research on them. As a result, not only have some valuable initial findings been achieved but also future lines of research have been outlined, such as the incorporation of other aspects of the victimization experience eg, duration and the interest of further exploring the role of SOC among the four traditionally distinguished groups in bullying research: not involved, bullies, victims and bully/victims.

## **IMPLICATIONS FOR SCHOOL HEALTH**

Results of the present study indicate that strong-SOC students seem to be less likely to become bullying victims and that a strong SOC may buffer or attenuate victimization negative effects on health. The cross-sectional design of the study does not allow drawing conclusions about causal relationships and the fact that the relationships between SOC and bullying victimization had not been previously studied makes it advisable to conduct further research to replicate and expand these findings. Although implications for practice must accordingly be cautiously taken, results in the present study point to the potential of strengthening SOC as a useful complementary strategy for school-based health practice aimed at preventing bullying victimization and its negative consequences in health. Given that previous research<sup>39,40</sup> has shown that support from teachers, classmates and parents are associated with a stronger SOC in adolescent students, school health interventions that encourage these aspects not only are expected to foster a more positive school climate and students' school satisfaction but may also be beneficial to reduce bullying victimization prevalence and its negative consequences on health.

### **Human Subjects Approval Statement**

Both the Spanish HBSC questionnaire and the survey procedure were approved by the Experimentation Ethical Committee of the University of Seville.

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**Table 1. Bullying Victimization\* Prevalence in the Study Sample**

	Total sample	Boys	Girls
Called mean names, made fun of, or teased in a hurtful way	9.5%	9.8%	9.3%
Left out of things on purpose, excluded from group of friends, or completely ignored	7.3%	7.7%	7.0%
Hit, kicked, pushed, shoved around, or locked indoors	4.3%	5.9%	2.8%
Target of lies or false rumors	10.5%	10.4%	10.5%
Target of sexual jokes, comments, or gestures	9.6%	11.8%	7.4%
Bullied using a computer	4.0%	5.1%	3.0%
Bullied using a mobile phone	3.6%	4.8%	2.5%
Self-reported bullying	4.8%	6.0%	3.6%
Observed bullying	21.0%	21.7%	20.3%

\* Victims are defined by a frequency of at least two or three episodes a month according to Solberg and Olweus criteria.<sup>25</sup>

**Table 2. Prevalence of Different Types of Bullying Victimization\***

	Total sample		Boys		Girls	
	f	%	f	%	f	%
Traditional physical abuse	19	0.3%	10	0.3%	9	0.3%
Traditional non-physical abuse	979	14.5%	447	13.5%	532	15.4%
Traditional physical and non-physical abuse	81	1.2%	51	1.5%	30	0.9%
Cyberbullying	27	0.4%	12	0.4%	15	0.4%
Cyberbullying and physical abuse	7	0.1%	4	0.1%	3	0.1%
Cyberbullying and non-physical abuse	114	1.7%	63	1.9%	51	1.5%
Cyberbullying and combination of physical and non-physical abuse	184	2.7%	130	3.9%	54	1.6%

\* Victims are defined by a frequency of at least two or three episodes a month according to Solberg and Olweus criteria.<sup>25</sup>

**Table 3. Descriptive Statistics for Type of Bullying and Means of Bullying**

<i>Type of bullying</i>	Total sample		Strong SOC		Weak SOC	
	N	%	N	%	N	%
No abuse	5349	79.8%	3010	88.5%	2225	70.9%
Non-physical abuse	1093	16.3%	339	10.0%	723	23.0%
Physical and non-physical abuse	265	4.0%	54	1.6%	189	6.0%
<i>Means of bullying</i>	N	%	N	%	N	%
No abuse	5349	79.8%	3010	88.5%	2225	70.9%
Traditional bullying	1060	15.8%	344	10.1%	686	21.9%
Cyberbullying	298	4.4%	49	1.4%	226	7.2%



**Table 4. General Linear Models of Type of Bullying and Means of Bullying on Physical and Psychological Symptoms**

<i>Physical symptoms</i>	SS	df	MS	F	p	partial $\eta^2$
Corrected model	903.895	5	180.779	98.385	.000	.069
Intersection	12161.005	1	12161.005	6618.350	.000	.498
Sex	149.298	1	149.298	81.252	.000	.012
Type of bullying	212.943	2	106.471	57.945	.000	.017
Sex x Type of bullying	1.660	2	.830	.452	.637	.000
Error	12274.285	6680	1.837			
Total	54224.000	6686				
Corrected total	13178.179	6685				
Corrected model	921.722	5	184.344	100.471	.000	.070
Intersection	14011.985	1	14011.985	7636.796	.000	.533
Sex	186.532	1	186.532	101.663	.000	.015
Means of bullying	236.615	2	118.307	64.480	.000	.019
Sex x Means of bullying	1.464	2	.732	.399	.671	.000
Error	12256.457	6680	1.835			
Total	54224.000	6686				
Corrected total	13178.179	6685				
<i>Psychological symptoms</i>	SS	df	MS	F	p	partial $\eta^2$
Corrected model	1065.179	5	213.036	118.909	.000	.082
Intersection	18786.366	1	18786.366	10485.853	.000	.611
Sex	138.595	1	138.595	77.359	.000	.011
Type of bullying	542.122	2	271.061	151.296	.000	.043
Sex x Type of bullying	.353	2	.177	.099	.906	.000
Error	11960.665	6676	1.792			
Total	76429.000	6682				
Corrected total	13025.844	6681				
Corrected model	1072.288	5	214.458	119.773	.000	.082
Intersection	21890.295	1	21890.295	12225.618	.000	.647
Sex	204.182	1	204.182	114.035	.000	.017
Means of bullying	559.322	2	279.661	156.189	.000	.045
Sex x Means of bullying	8.137	2	4.069	2.272	.103	.001
Error	11953.556	6676	1.791			
Total	76429.000	6682				
Corrected total	13025.844	6681				

**Table 5. Descriptives of Physical and Psychological Symptoms in Conditions of Bullying**

**Victimization and No Victimization**

<i>Physical symptoms</i>	M	SD	N	d*
No abuse	2.39	1.37	5536	
Non-physical abuse	2.81	1.46	1086	0.30
Physical and non-physical abuse	2.90	1.56	264	0.37
Traditional bullying	2.77	1.45	1057	0.27
Cyberbullying	3.02	1.60	293	0.46
<i>Psychological symptoms</i>	M	SD	N	d*
No abuse	2.94	1.37	5333	
Non-physical abuse	3.68	1.29	1086	0.54
Physical and non physical abuse	3.48	1.53	263	0.39
Traditional bullying	3.65	1.30	1056	0.52
Cyberbullying	3.61	1.49	293	0.49

\* Cohen's d for the comparison with the no abuse condition.