The Emotional Impact on Victims of Traditional Bullying and Cyberbullying
A Study of Spanish Adolescents

Rosario Ortega,1 Paz Elipe,2 Joaquín A. Mora-Merchán,3 Juan Calmaestra,1 and Esther Vega1

1Department of Psychology, University of Córdoba, Spain
2Department of Psychology, University of Jaén, Spain
3Department of Developmental and Educational Psychology, University of Seville, Spain

Abstract. We examine the emotional impact caused to victims of bullying in its traditional form, both directly and indirectly, as well as bullying inflicted by use of new technologies such as mobile phones and the Internet. A sample of 1,671 adolescents and young people responded to a questionnaire which asked if they had been victims of various forms of bullying, as well as the emotions this caused. The results show that although traditional bullying affected significantly more young people than cyberbullying, the latter affected one in ten adolescents. Analysis of the emotions caused showed that traditional bullying produced a wide variety of impacts, with the victims being divided into five different emotional categories, while indirect bullying and cyberbullying presented a narrower variety of results with the victims being classifiable into just two groups: Those who said that they had not been emotionally affected and those who simultaneously suffered from a wide variety of negative emotions. The influence of age, gender, and severity on each emotional category is also analyzed.

Keywords: bullying, cyberbullying, emotions, victimization, adolescents

There is broad agreement that bullying can be defined as a form of aggression that occurs when an individual or group intimidates, excludes, harasses, or mistreats, another or others, directly (physically or verbally) or indirectly (threats, insults, isolation, destruction, or theft of belongings, etc.) (Olweus, 1999). A complex power imbalance arises among those involved, making it difficult for victims to defend themselves. Episodes are intentionally repeated over time until they constitute a relational problem and also one for the coexistence of those involved (Ortega & Mora-Merchán, 2000, 2008). When victims manage to defend themselves promptly, pathological relationships and dependence on the aggressor are diminished and negative effects may be minor. This, in fact, is what many victims do. However, when extended over a period of months, and if the victim finds no help or support, then the phenomenon can become particularly negative and the effects on the mental health of victims extremely pernicious (Aluede, Adeleke, Omoike, & Afen-Akpaida, 2008; Dyer & Teggart, 2007).

Victims of bullying always are affected by any vulnerability, but this could be mediated by diverse conditions and factors (Hunter & Borg, 2006; Kochenderfer-Ladd, 2004; Kochenderfer-Ladd & Ladd, 2001). Frequently, internalized fear may accompany the feeling of being defenseless, while an angry and reactive fear may feed a stress reaction. Stress, itself associated with reactive emotions such as anger, may support an attitude of either confrontation or avoidance and flight (Lazarus, 2000). Some victims show an adaptive resilience which allows them to soften the emotional impact of aggression. It is possible that this gives them the emotional strength to allow them to manage this adverse situation successfully (Christle, Jolivette, & Nelson, 2000; Schwartz, Proctor, & Chien, 2001). Others, however, experience negative feelings over which they have little control and which affect their well-being and influence the environment in which they develop and relate to others (Graham & Juvonen, 2001).

Over recent years the phenomenon of bullying has become more complex in view of the widespread use of Information and Communication Technologies (ICT) by adolescents and young people. This has opened a new line of research on cyberbullying. In Spain, a nationwide study by the Defensor Del Pueblo-UNICEF (2006), which included questions about victimization and aggression using
ICT, found that 5.5% of students reported having been cyber-victims, whereas 4.8% admitted they were cyber-aggressors. Our preliminary studies (Calmaestra, Ortega, & Mora-Merchan, 2008; Mora-Merchan & Ortega, 2007; Ortega, Calmaestra, & Mora-Merchan, 2008) performed with specific instruments for the study of cyberbullying have shown that including occasionally as well as severely, approximately 20% of secondary and high school students are involved in this phenomenon.

Cyberbullying is structured by a relational dynamic with at least two well-defined roles: aggressor and victim. However, its communication channel, instantaneity, and the lack of face-to-face contact bring differential characteristics: (a) the communication scenario of the actors involved, which apart from not being direct, could be extended in time and space; (b) the possible anonymity of the aggressor (some studies have found that in 20–30% of occasions the victims are unaware of their cyber-aggressor’s identity, although in 50–60% of cases the phenomenon occurs among students from the same educational center: Slonje & Smith, 2008; Smith et al., 2008); and (c) its indirect character, as in the case of cyberbullying, the aggressive behavior is always mediated by the technological resource the aggressor uses and through which the victims receive the aggression (Ortega, Elipe, & Calmaestra, in press).

In this paper we hypothesize that despite its specificities, cyberbullying retains the same basic roles (victim and aggressor) and different levels of severity (occasional and severe) as found in traditional bullying. However, we hypothesize that the emotional effects on the victim are different. Specifically, we analyzed the similarities and differences of this impact according to the specific type of bullying suffered (traditional bullying: direct and indirect and cyberbullying: via mobile phone and the Internet) in relation to age (school-year of the participant) and severity of the aggression (occasional and more frequent). The specific objectives were:

1. To describe the prevalence of different kinds of victimization in the sample: direct and indirect bullying, cyberbullying (via mobile phone and the Internet) in relation to two levels of severity (occasional and more frequent), age and gender.
2. To analyze the emotional impact reported by victims of both types of bullying (traditional and cyberbullying) and establish differential emotional profiles in both types of suffering and in relation to severity of bullying, age, and gender.

Method

Participants

The original study sample was composed of 1,755 students from seven secondary schools in Córdoba, Spain randomly selected from the provincial school network. The data of 4.9% of participants whose responses were inconsistent or who had not completed important parts of the questionnaire were excluded. As a result, the final sample was formed of 1,671 adolescents (51.3% males and 48.7% females) distributed in three educational levels/ages: 1st year of Compulsory Secondary Education, n = 539 (12–13 year olds; 55.8% males and 44.2% females), 3rd year of Compulsory Secondary Education, n = 534 (14–15 year olds; 50.1% males and 49.9% females), and 1st year of High School (Bachillerato), n = 598 (16–17 year olds; 48.5% males and 51.5% females).

Instrument

We used the DAPHNE Questionnaire (Genta et al., 2009), developed within the framework of the project “An investigation into forms of peer-peer bullying at school in preadolescent and adolescent groups: New instruments and preventing strategies”. A translation into Spanish of this questionnaire was used for this study. It is made up of three self-report sections: “About you” (35 items), “About your school” (11 items), and “About bullying and cyberbullying” (37 items). The “About bullying and cyberbullying” section collects information, through multiple-choice questions, about five areas: students’ access to ICT (3 items), direct bullying (5 items), indirect bullying (5 items), cyberbullying via mobile phone (12 items), and via the Internet (12 questions). With the objective of improving the validity of responses, following the recommendations of Solberg & Olweus, 2003, the following definitions of bullying and cyberbullying were provided in the questionnaire: “Bullying is behavior carried out by an individual, or a group, which is repeated over time in order to hurt, threaten or frighten another individual with the intention to cause distress. It is different from other aggressive behavior because it involves an imbalance of power which leaves the victim defenseless”; “Cyberbullying is a new form of bullying which involves the use of mobile phones (texts, calls, video clips) or the Internet (e-mail, instant messaging, chat rooms, and websites) or other forms of ICT to deliberately harass, threaten, or intimidate someone”.

Next, examples of direct bullying were provided (hitting, insulting, making fun of someone, etc.) and questions were asked about this type of bullying: (a) frequency of victimization, (b) feelings associated with victimization, (c) frequency of aggression, (d) frequency of observing episodes of this type, and (e) behavior when observing episodes of this type. The same sequence of questions was used to evaluate indirect bullying (lying or spreading false rumors about someone behind their back, etc.). In order to examine cyberbullying, two types of cyberbullying were distinguished; aggression using mobile phone (upsetting phone calls, taking photographs and/or videos, e.g., being flamed, happy slapping, ...), abusive text messages) and aggression via the Internet (malicious or threatening e-mails directly to the victim, or about the victim to others, intimidation or abuse in chat rooms, abusive instant messages, websites where secrets or personal details are revealed in an abusive way or where nasty or unpleasant comments are being made, social networking websites, file sharing websites, and blogs). These were examined using a parallel structure used
to explore traditional bullying, but with the addition of further detailed items not reported in this paper.

Procedure

Once the educational centers which took part in the study were selected, we made a first approach to request collaboration and consent for participation in the study. Students enrolled in all the school-years selected for the research were then contacted and asked to participate. After obtaining the appropriate consent, the questionnaire was handed out during class sessions. A member of the research team was in charge of handing out the questionnaires and gave precise instructions. Anonymity and voluntary participation were emphasized as well as the importance of honest answers. The concepts of bullying and cyberbullying were explained and any doubts expressed by the students as they answered the questionnaire were cleared up. The average time needed to complete the questionnaire was about 45 min.

Data Analysis

Identification of the victims was established from the answers to the questions: “Have you been bullied... over the last two months?” for each type (direct, indirect, via the Internet, and via mobile phone). The response options for all cases were “I haven’t been bullied”, “Once or twice”, “Two or three times a month”, “Once a week”, and “Several times a week”. When the victim reported having suffered this kind of aggression “Once or twice” it was considered to be occasional aggression. When the victim reported having suffered aggression more frequently, this was considered to be severe aggression.

As we analyzed the categorical variables, chi-square contrasts and, when pertinent, contrasts ratios (z test) were used. Bonferroni correction was used to determine the level of significance of the z test because we made multiple comparisons.

In order to obtain groups of emotions, a hierarchical cluster analysis was used. The amalgamation (linkage) rule used was Ward’s method and the measure distance was the percentage of disagreement. A two-phase cluster analysis was used in order to obtain groups of individuals based on emotional impact. This method is an algorithm in two steps: (1) bringing together previous clustering of the cases into many small sub-clusters and (2) clustering the resulting sub-clusters of the previous clustering. In the first step Schwarz’s Bayesian Information Criterion is calculated for each number of clusters within a specified range and the result is used to find the initial estimation of the number of clusters. In a second step, the initial estimation is refined to find the highest relative increase in the distance between the two nearest clusters in each step of hierarchical grouping. The distance measurement used was log-likelihood. The distance between two clusters is related to the decrease in log-likelihood as they are combined into one cluster.

The level of significance adopted for all the analyses was $p < .05$.

Results

Prevalence of Traditional Bullying and Cyberbullying Victims

Table 1 shows the prevalence of traditional bullying (direct and indirect) against cyberbullying (via mobile phone and the Internet) although the number of students severely affected is not very high in our study. Overall, we found that 25% of participants were affected by some kind of bullying. Some victims had suffered exclusively traditional bullying (direct, indirect, or both; 15%), others exclusively cyberbullying (via mobile phone, the Internet, or both; 5%), and some both types of bullying (multivictimization; 5%).

Age (school grade) was examined in relation to all four types of bullying (indirect and direct bullying, cyberbullying via mobile phone and via the Internet). There were no significant differences for indirect bullying or for cyberbullying via the Internet. For direct bullying, victim rates were higher in the 1st and 3rd years of Secondary Education (14.8% and 12.4%, respectively) than in High School (5.4%), $\chi^2(2, 1,660) = 28.82, p < .01$. For cyberbullying by mobile phone, victim rates were higher in 3rd year students in Secondary Education (5.9%) than among those in 1st year (2.3%) or in High School (4.6%), $\chi^2(2, 1,641) = 8.70, p = .01$.

Gender was similarly examined in relation to all four types of bullying. There were no significant differences for indirect bullying. For direct bullying, victims rates were higher for males (13.0%) than females (8.3%), $\chi^2(1, 1,661) = 9.67, p < .01$. In contrast, more females reported being victims of cyberbullying both via mobile phone (6.3% females vs. 2.4% males), $\chi^2(1, 1,642) = 15.09, p < .01$, and via the Internet (9.1% females vs. 6% males), $\chi^2(1, 1,649) = 5.69, p = .02$.

Emotional Impact of Traditional Bullying and of Cyberbullying

The emotional impact the bullying generated in the victims was assessed through questions: “How did you feel when...

Table 1. Percentage of victims by type and severity of aggression

<table>
<thead>
<tr>
<th></th>
<th>Direct bullying</th>
<th>Indirect bullying</th>
<th>Mobile cyberbullying</th>
<th>Internet cyberbullying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haven’t been bullied</td>
<td>89.3</td>
<td>84.2</td>
<td>95.7</td>
<td>92.5</td>
</tr>
<tr>
<td>Occasional victimization</td>
<td>7.5</td>
<td>12.4</td>
<td>3.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Severe victimization</td>
<td>3.2</td>
<td>3.4</td>
<td>0.5</td>
<td>1.3</td>
</tr>
</tbody>
</table>
bullied . . . over the last two months?” This question was formulated for each type of bullying: direct, indirect, via mobile phone, and via the Internet. In all cases the participant could choose one or several of the following options: “I haven’t been bullied over the last two months”, “Embarrassed”, “Worried”, “Upset”, “Afraid and scared”, “Alone and isolated”, “Defenseless, no one can do anything for me”, “Depressed”, “Stressed, tense”, “Not bothered”, “Angry”, and “Other (please state)”. Table 2 shows the emotions reported, by victims of the four types of bullying. We analyzed these in relation to age (school grade), gender, and to severity of bullying (occasional or frequent). No significant associations were found for age.

Regarding gender, generally a higher number of females stated that they felt diverse negative emotions. For direct bullying, more females than males stated that they felt afraid (25.4% vs. 9.3%), \( \chi^2(1, 171) = 8.04, p = .01 \). For indirect bullying more females than males stated that they felt worried (26.1% vs. 11.0%), \( \chi^2(1, 256) = 9.33, p < .01 \), depressed (21.0% vs. 7.6%), \( \chi^2(1, 256) = 9.02, p < .01 \), and angry (47.1% vs. 33.1%), \( \chi^2(1, 256) = 5.21, p = .02 \); more males than females stated that they were not bothered (32.2% vs. 21.0%), \( \chi^2(1, 256) = 4.12, p = .04 \). For cyberbullying via mobile phone, more females than males stated that they felt worried (30.6% vs. 5.6%), \( \chi^2(1, 67) = 4.55, p = .03 \); more males than females said that they were not bothered (55.6% vs. 28.6%), \( \chi^2(1, 67) = 4.17, p = .04 \). Via the Internet, more females than males stated that they felt stressed (13.7% vs. 2.0%), \( \chi^2(1, 123) = 4.99, p = .03 \), and angry (37.0% vs. 18.0%), \( \chi^2(1, 123) = 5.17, p = .02 \).

Regarding severity of the bullying (occasional or frequent), generally severe victims reported more negative emotions. For direct bullying, more severe than occasional victims stated that they were embarrassed (35.8% vs. 23.4%), \( \chi^2(1, 256) = 10.69, p < .01 \). For indirect bullying, more severe than occasional victims stated that they were depressed (28.6% vs. 11.0%), \( \chi^2(1, 256) = 10.08, p < .01 \). For cyberbullying via mobile phone, more severe than occasional victims stated that they felt alone (33.3% vs. 3.4%), \( \chi^2(1, 67) = 10.08, p < .01 \), and stressed (33.3% vs. 3.4%), \( \chi^2(1, 67) = 10.08, p < .01 \).

Table 2. Emotions reported by victims of traditional bullying and cyberbullying

<table>
<thead>
<tr>
<th></th>
<th>Not bothered</th>
<th>Embarrassed</th>
<th>Angry</th>
<th>Upset</th>
<th>Stressed</th>
<th>Worried</th>
<th>Afraid</th>
<th>Alone</th>
<th>Defenseless</th>
<th>Depressed</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct bullying</td>
<td>23.4</td>
<td>25.7</td>
<td>41.5</td>
<td>17.5</td>
<td>10.5</td>
<td>15.8</td>
<td>15.2</td>
<td>13.5</td>
<td>11.7</td>
<td>17.0</td>
<td>12.3</td>
</tr>
<tr>
<td>Indirect bullying</td>
<td>26.2</td>
<td>11.7</td>
<td>40.6</td>
<td>23.4</td>
<td>9.0</td>
<td>19.1</td>
<td>5.5</td>
<td>7.4</td>
<td>5.1</td>
<td>14.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Mobile cyberbullying</td>
<td>35.8</td>
<td>6.0</td>
<td>31.3</td>
<td>22.4</td>
<td>7.5</td>
<td>23.9</td>
<td>13.4</td>
<td>7.5</td>
<td>13.4</td>
<td>13.4</td>
<td>10.4</td>
</tr>
<tr>
<td>Internet cyberbullying</td>
<td>43.9</td>
<td>6.5</td>
<td>29.3</td>
<td>17.1</td>
<td>8.9</td>
<td>15.4</td>
<td>8.9</td>
<td>7.3</td>
<td>5.7</td>
<td>10.6</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Note: The two categories more selected are shown italicized and the two least selected are shown in gray shade for each type of bullying.

Clustering of Emotions in Traditional Bullying and Cyberbullying

With the objective of identifying the emotions that were most related to each other, a cluster analysis was carried out with the emotions (excluding the “Other” category). Distance matrices were calculated for each type of bullying (these can be obtained from the first author). The analysis of the dendrograms obtained showed different groupings of emotions for the four different types of bullying, as shown in Table 3.

The most differentiated grouping of emotions appeared in direct traditional bullying in which six groups were identified. In indirect bullying and cyberbullying by mobile phone, a similar grouping appeared, but with only five groups of emotions. In cyberbullying via the Internet, a less differentiated group, with three groups was found. In each victims stated that they felt stress (25.0% vs. 5.8%), \( \chi^2(1, 123) = 7.56, p = .01 \).

Table 3. Summary of emotion groups from the cluster analysis for each type of bullying

<table>
<thead>
<tr>
<th>Direct bullying</th>
<th>Indirect bullying</th>
<th>Mobile phone cyberbullying</th>
<th>Internet cyberbullying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>Alone</td>
<td>Alone</td>
<td>Alone</td>
</tr>
<tr>
<td>Defenseless</td>
<td>Defenseless</td>
<td>Defenseless</td>
<td>Defenseless</td>
</tr>
<tr>
<td>Depressed</td>
<td>Depressed</td>
<td>Depressed</td>
<td>Depressed</td>
</tr>
<tr>
<td>Stressed</td>
<td>Stressed</td>
<td>Stressed</td>
<td>Stressed</td>
</tr>
<tr>
<td>Afraid</td>
<td>Afraid</td>
<td>Afraid</td>
<td>Afraid</td>
</tr>
<tr>
<td>Embarrassed</td>
<td>Embarrassed</td>
<td>Embarrassed</td>
<td>Embarrassed</td>
</tr>
<tr>
<td>Worried</td>
<td>Worried</td>
<td>Worried</td>
<td>Worried</td>
</tr>
<tr>
<td>Upset</td>
<td>Upset</td>
<td>Upset</td>
<td>Upset</td>
</tr>
<tr>
<td>Angry</td>
<td>Angry</td>
<td>Angry</td>
<td>Angry</td>
</tr>
<tr>
<td>Not bothered</td>
<td>Not bothered</td>
<td>Not bothered</td>
<td>Not bothered</td>
</tr>
</tbody>
</table>
case, the emotions “not bothered” and “angry” we found to be independent from the rest.

Emotional Profiles of Victims of Traditional Bullying and Cyberbullying

A separate cluster analysis for each type of bullying (direct, indirect, cyberbullying via mobile phone, and the Internet) was carried out in order to establish the emotional profile of the victims. The variables included were the victims’ answers to questions relating to the emotions they had felt after suffering the bullying, excluding the “Other” category. All the victims were included regardless of the severity of the aggression. The resulting victim profiles are shown in Figures 1–4. In the case of direct bullying, five distinctive clusters appeared, whereas both in traditional indirect bullying and cyberbullying (via mobile phone and the Internet) just two clusters were identified. The nature of the clusters is commented on below, together with their composition in relation to age (grade level), gender, and severity of victimization.

Figure 1. Victims who reported feeling each emotion distributed by cluster: Direct bullying.

Figure 2. Victims who reported feeling each emotion distributed by cluster: Indirect bullying.

Figure 3. Victims who reported feeling each emotion distributed by cluster: Cyberbullying via the Internet.

Figure 4. Victims who reported feeling each emotion distributed by cluster: Cyberbullying via mobile phone.

Direct Bullying

Figure 1 shows different “emotional profiles” for five groups of victims. The A cluster is marked by a high proportion of “not bothered” and a low proportion of the rest of the emotions. The B cluster is marked by a high proportion of “stressed” and “angry”, whereas “depressed”, “not bothered”, and “afraid” are not mentioned by any of the victims. The C cluster has a high proportion of “worried” and “afraid”, whereas “not bothered” is not mentioned. The D cluster covers “depressed”, “alone”, and “defenseless”, whereas “not bothered” is absent. The E cluster is marked by the absence of “angry” victims and by a moderate presence of other emotions: upset, embarrassment, defenselessness, and loneliness.

No significant differences appeared in cluster composition in terms of age. For gender, there was a higher proportion of females than males in the “worried and afraid” cluster (25.4% vs. 9.3%), but this was not significant on chi-square analysis; differences in proportions in the rest of the clusters were less substantial.

The severity of the bullying was markedly associated with the composition of the cluster, \( \chi^2(4, 171) = 14.95, p = .01 \). The proportion of occasional victims in the “not bothered” cluster was significantly higher than severe
victims (28.0% vs. 9.4%). On the other hand, in the “alone, defenseless, and depressed” cluster there was a higher proportion of severe than occasional victims (28.3% vs. 10.2%).

Indirect Bullying

Two clusters emerged in relation to the emotions that the victims of indirect bullying recorded; see Figure 2. Cluster A covered all the (negative) emotions, with an absence of “not bothered”. Conversely cluster B victims were “not bothered” and were low or absent on the other emotions.

No significant differences were found in the clusters in relation to age or the severity of the bullying. However, there were gender differences, $\chi^2(1, 256) = 4.12, p = .04$ with a higher proportion of females than males in cluster A (79.0% vs. 67.8%) and a corresponding higher proportion of males in cluster B.

Cyberbullying via the Internet

The clusters produced for victims via the Internet showed two groups with a very similar configuration to those obtained for indirect bullying, see Figure 3.

There were no significant differences in the clusters, in terms of age or the severity of the bullying. There were gender differences, $\chi^2(1, 123) = 4.75, p = .03$, with a higher proportion of females than males in cluster A (65.8% vs. 46.0%) and a corresponding higher proportion of males in cluster B.

Cyberbullying via Mobile Phone

There were two clusters of victims of cyberbullying via mobile phone, as for those obtained for indirect bullying and bullying via the Internet, but with some differences with respect to those profiles, especially as regards the “alone” emotion, see Figure 4.

There were no significant differences in the clusters, in terms of age or the severity of the bullying. There were gender differences, $\chi^2(1, 67) = 7.20, p < .01$, with a higher proportion of females than males in cluster A (59.2% vs. 22.2%) and a corresponding higher proportion of males in cluster B.

Discussion

Our results indicated, as expected, that direct and indirect forms of bullying which do not involve technology are more common than those which use ICT. While nearly two in ten felt themselves to be a victim of some traditional form of bullying, only one in ten had a similar experience via technological means such as a mobile phone or the Internet. It is worth noting that one in five victims perceives themselves as victims of both types of bullying. These data are in line with general trends described by other studies (Olweus, 1999; Ortega & Mora-Merchañ, 2000, 2008; Smith et al., 2004).

Again as expected, being a victim decreased significantly from 12 to 17 years. However, in the case of cyberbullying there was a significant peak in victimization by mobile phone around the age of 14. This differs from trends found in traditional bullying. There is more than one possible explanation for this, but it could be related to the fact that it is during the years of midadolescence (14–15 years) that dating and courtship begin (Menesini & Nocentini, 2008; Ortega, Ortega-Rivera, & Sánchez, 2008; Ortega, Sánchez, Ortega-Rivera, & Viejo, 2008). Contemporary dating and courtship seem to include the widespread use of ICT, and mobile phones in particular, but also the Internet. This argument is reinforced by the fact that it is females who report experiencing more cyberbullying as victims. Gender differences are also an important factor in traditional direct bullying where most victims are males. The classical gender differences in the case of indirect bullying were not observed in this study, which might indicate a gender “evenness” trend in this phenomenon. This gender “evenness” may be more apparent in cases of psychological and relational bullying than in physical and verbal aggression (which were more likely to involve males).

The main objective of this study was the analysis of the emotional impact caused by victimization, and the search for emotional profiles that might indicate the specific suffering that each of these forms of bullying causes for the victim. According to Fernández-Abascal (2003) it is possible to distinguish among families of primary emotions. Following this idea, we would propose classifying victims’ emotions into five different groups: “not bothered”, referring to an absence of a specific emotion; those related to a basic emotion of fear — worried, afraid; those related to anger, with distinct levels of intensity — angry, stressed, and upset; those associated with sadness — depressed, defenseless, alone; and one moral emotion – shame. Our results showed that the most common emotional response is being angry, especially in direct bullying, together with a range of other negative emotions; but also that an important number of victims feel emotionally strong enough to state that these attacks had not bothered them, particularly in relation to cyberbullying.

This last finding can be interpreted in different ways. Maybe the difference is associated with the perceived emotional distance from the aggression and/or aggressor when a technological resource is mediating the aggression, or when the aggressor is unknown, both of which are defining features of cyberbullying (Slonje & Smith, 2008; Smith et al., 2008). However, the significant proportion of participants who were “not bothered” in response to all kinds of bullying could be interpreted in terms of personal capacity to not feel affected (Christle et al., 2000). Also in direct bullying, embarrassment stands out; an emotion which is hardly ever mentioned in the case of cyberbullying. The perception of anonymity could be interpreted as an element which protects victims from that disturbing social emotion as many cyberbullying attacks are not obvious to others and remain “private” between the aggressor and victim.
Age was not a significant variable in terms of the emotional responses, a fact that requires interpretation. It seems reasonable to suggest that there is a stability of emotional literacy during the adolescent years studied here.

With regard to gender, it was generally the females, more than the males, who stated that they felt a number of negative emotions at the same time in the face of the different types of attack. These results could be related to the finding that females show a higher level of precision in the perception and understanding of emotions (Barrett, Lane, Sechrest, & Schwartz, 2000; Mestre, Guí, Lopes, Salovey & Gil-Olarte, 2006) as well as the finding that girls place more importance on social contacts and friendships through ICT (Thelwall, 2008). It is also possible that males do not feel inclined to admit that victimization affects them emotionally. We are not dealing here with ordinary conflicts or fights, but rather an abuse of power and unequal responsibilities, all of which could have more impact and in more diverse ways on females.

Severity of victimization was associated with some differing emotional consequences. A higher proportion of severe victims, regardless of type of bullying, reported feelings such as embarrassment, stress, upset, depression, and loneliness. These results support the idea that exposure to prolonged episodes of bullying, of whatever type, worsens the emotional impact on the victims (Aluede et al., 2008).

In conclusion, this study aimed at describing the emotional profiles associated with both traditional bullying and cyberbullying. Our results produced a higher degree of discrimination of emotions linked to victimization in the case of traditional direct bullying, where five victim profiles can be differentiated, whereas only two victim profiles are found in indirect bullying. These emotional profiles can be assumed into the theoretical classification presented above. The differences between traditional direct bullying and the other forms, in terms of diversity in the emotional response, could be interpreted as a result of heterogeneity of behaviors included in direct bullying (verbal and physical attacks, threatening, and taking belongings). These differences also could be a result of the face-to-face characteristic of these interactions, where victims have more emotional information about their aggressors. Consequently, victims are perhaps better able to "read" the intentions of the aggressor and this may affect their emotional response to the aggression. However, it is necessary that further research is conducted to explore these hypotheses.

In general cyberbullying produces emotional profiles similar to indirect bullying, with some smaller differences related to whether the bullying is via mobile phone or the Internet. Bullying via mobile phone is less likely to provoke feelings of loneliness than bullying via the Internet or indirect bullying. This is interesting and further research is necessary to understand the differences found here.

These data do not support the hypothesis we set out when we predicted that there would be a different impact of cyberbullying compared to traditional bullying. On the contrary, the data reinforce the characterization of cyberbullying as an indirect form of bullying (Stonje & Smith, 2008). However, “not bothered” and “angry” are two independent emotions in all types of bullying. Taken together, these results reinforce the suggestion that it is important to consider the four types of bullying studied as different, but related, phenomena. It is worth noting that anger appears as an independent emotion in all types of bullying. This emotion seems to be a key element in the emotional dysregulation that some victims show (Garner & Lemerise, 2007; Kelly, Schwartz, Gorman, & Nakamoto, 2008; Schwartz et al., 2001). It would be interesting to examine the role of anger in the different emotional profiles more precisely, taking into account the diverse roles involved in bullying.

The emotional profiles do not show differences in relation to the age groups studied. There are consistent gender differences, with those “not bothered” comprising more male victims and those emotionally affected more often female.

Severity did turn out to be a decisive factor in the analysis of the emotional profiles but only for direct bullying. The “not bothered” profile corresponded significantly to the occasional bullying phenomenon whereas the “alone, defenseless and depressed” profile corresponded to severe victimization, which confirms the negative effect that the persistent suffering of this kind of experience can cause (Dyert & Teggart, 2007). It is possible that some of the factors which differentiate cyberbullying and indirect bullying from direct bullying (e.g., the absence of face-to-face contact) may mediate the relationship between the frequency of the aggression and its emotional impact. However, it is not possible to examine this hypothesis using the data from this study.

This study has a number of limitations which will have to be addressed in future research. It is evident that a local sample may contain cultural biases which may not be present in international studies. Moreover, the reliance on a self-report instrument means that we have to be cautious in making any generalizations in relation to the emotional consequences of bullying in its different forms. However, even though this has been an exploratory study, our results point to an interesting research line that could, if these trends are confirmed in other studies, establish a framework of the emotional effects caused by indirect bullying (traditional and cyberbullying) in contrast to direct bullying. Future research needs to identify the specific factors responsible for the different emotional impact of aggression on the victims and which of these could be useful to manage and minimize such impact. In this respect, the analysis of the ways in which individuals process social and emotional information, as well as emotion regulation, could be particularly interesting.

Acknowledgments

This study was carried out in the framework of National Research Plan (SEI-2007-60673) and HUM-02175 Excellence Research Projects of Andalusian PAIDI, and the European Daphne Project (JLS/2096/DAP-1/241YC 30-CE-0120045/00-79). The first author received support from the Prof-Ex. Programme (2008-0106) by the Spanish MICINN to be a Visiting Professor at the University of Greenwich, UK. The authors are grateful for the support received.
References


Rosario Ortega

Faculty Science of Education
Av. S. Alberto Magno s/n
14004 Cordoba
Spain
E-mail edlorrur@uco.es