Abstract
Recent media coverage has highlighted the growing prevalence of cyberbullying, however to date this new form of aggressive behaviour has received relatively little research attention compared to other aspects of bullying behaviour. In this study 14,281 pupils were surveyed annually over a five year period, using an adapted version of the Olweus Bullying Questionnaire (Olweus, 1993). The results showed that the prevalence of cyberbullying increased from 14.5% to 20.6% annually over the five year period. This rise in cyberbullying was particularly steep in boys, with the prevalence rising from 13.7% in 2002 to 17.8% in 2006. The rise in cyberbullying was also examined by gender. Among girls, direct verbal forms of bullying have been the most frequently reported over the five year period, followed by reports of cyberbullying (rising from 14.5% to 20.6%). Among boys, the pattern in boys was somewhat different to that found in girls. Overall direct verbal types of bullying were the most commonly reported type of bullying. With the exception of the first year, this was then followed by direct physical forms of bullying. In boys, cyberbullying was found to be the third most prevalent type of bullying. As this figure shows, rates of cyberbullying have actually fallen in boys over the five year period, in the first year the prevalence rate was 13.2%, which has fallen to 10.4% in the last year. As Figure 4 shows, victims of cyberbullying reported having fewer friends than those who were not cyberbullied. Chi-square analysis found a significant association between being cyberbullied and reports of having fewer friends, χ²(1) = 76.10, p<0.001. A further analysis of the data found a significant association between being cyberbullied and reports of having fewer friends, χ²(1) = 76.10, p<0.001.

The Prevalence & Correlates of Cyberbullying in Adolescence: Results of a Five-Year Cohort Study
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Queen Margaret University Edinburgh & York St John University

Introduction
In recent years there has been increased attention given to the topic of Cyberbullying, and the ways in which adolescents bully each other using technologies such as the mobile phone and the internet. Campbell (1995) defines cyberbullying as bullying which is committed using media and communication devices, and can include behaviours such as sending nasty or threatening text messages via mobile, causing insulting and critical websites about someone, sending threatening, insulting or nasty messages over the internet, through social networking sites such as Bebo or MySpace, or on instant messenger programmes such as MSN Messenger. Previous research has suggested a prevalence rate of between 19 and 25% of adolescents reporting being a victim of cyberbullying (Campbell, 2005; Whitney & Smith, 1993). This study reports on one aspect of a much larger 5 year cohort study employing a survey design. Participants: Over the past 5 years, 14,281 adolescents have participated in the study. 50.3% were female and 49.7% were male. 0.7% (n = 100) did not disclose their gender. In the last two years all participants were taken from Years 7 and 8 (11 to 13 years of age). In the first 3 years of the study some participants were also taken from Year 9 (13 to 14). The aim of this study is to examine the prevalence of cyberbullying in an adolescent sample, and the degree to which this has changed over a five year period. Due to the somewhat ambiguous findings of previous research studies, this study also aims to examine any gender differences that may exist in the prevalence of cyberbullying. Furthermore this study aims to build on previous research to examine further correlates of cyberbullying. Method
Participants: Over the past 5 years, 14,281 adolescents have participated in the study. 50.3% were female and 49.7% were male. 0.7% (n = 100) did not disclose their gender. In the last two years all participants were taken from Years 7 and 8 (11 to 13 years of age). In the first 3 years of the study some participants were also taken from Year 9 (13 to 14). Survey Tool: An adapted version of the Olweus bullying questionnaire was used (Olweus, 1993; Whitney & Smith, 1993). Of interest to this study were participants responses to the questions ‘Have you ever received any nasty or threatening text messages/emails’. In the 2006 survey this question was separated into two to ask about the receipt of nasty or threatening text messages and then a separate question on the receipt of nasty or threatening emails. The questions were answered on a 5 point Likert scale ranging from 1 to 5: 1 = never, 5 = always. The project was conducted with the co-operation of the Local Education Authority and each year data collection took place in the summer term. All participants completed a copy of the questionnaire in class time. The questionnaires were distributed and collected in by the teacher and then returned to the researchers for analysis.

Discussion
The results of this study demonstrate that over the past 5 years the prevalence rates for cyberbullying have risen from 13.3% in 2002 to 15.6% in 2006. The rise in cyberbullying was particularly steep in males. The changing prevalence rates were also examined by gender. As Figure 2 shows, among girls, direct verbal forms of bullying have been the most frequently reported over the five year period, followed by reports of cyberbullying (rising from 14.5% to 20.6%). Among boys, the pattern in boys was somewhat different to that found in girls. Overall direct verbal types of bullying are the most commonly reported type of bullying. With the exception of the first year, this was then followed by direct physical forms of bullying. In boys, cyberbullying was found to be the third most prevalent type of bullying. As this figure shows, rates of cyberbullying have actually fallen in boys over the five year period, in the first year the prevalence rate was 13.2%, which has fallen to 10.4% in the last year. As Figure 4 shows, victims of cyberbullying reported having fewer friends than those who were not cyberbullied. Chi-square analysis found a significant association between being cyberbullied and reports of having fewer friends, χ²(1) = 76.10, p<0.001. As Table 1 shows, victims of cyberbullying reported having fewer friends than those who were not cyberbullied. Chi-square analysis found a significant association between being cyberbullied and reports of having fewer friends, χ²(1) = 76.10, p<0.001. As Table 1 shows, victims of cyberbullying reported having fewer friends than those who were not cyberbullied. Chi-square analysis found a significant association between being cyberbullied and reports of having fewer friends, χ²(1) = 76.10, p<0.001.
Abstract

Cyberbullying has been defined as bullying which occurs through communication and media devices such as the mobile phone. To date the majority of research on cyberbullying has focused on identifying the prevalence of this behaviour and any age and gender differences that may exist. As part of a larger survey the aim of this study was to examine the nature of text messages reportedly received by victims of cyberbullying.

Introduction

In recent years cyberbullying has been the focus of increased research and media attention. Research has indicated that between 19% and 25% of adolescents report being cyberbullied (Ybarra & Mitchell 2004; MSN 2006; Rivers & Noret 2007). Campbell (1995) defines cyberbullying as bullying which is committed using media and communication devices, and can include behaviours such as sending nasty or threatening text messages via mobile, creating insulting and critical websites about someone, sending threatening, insulting or nasty messages over the internet, through social networking sites such as eBay or MySpace, or on instant messenger programmes such as MSN Messenger. Smith et al (2005) identify that bullying by phone call, text message and email are the most prevalent forms of cyberbullying. As yet however, the main focus of cyberbullying has been to examine the prevalence rate of this type of bullying behaviour. Little research has been conducted examining the nature of cyberbullying. The aim of this study is to examine one aspect of cyberbullying, bullying by text message, to identify the nature of text messages being sent to Cyberbully, and to identify any gender differences in the nature of messages being sent.

Method

Design: This study draws upon the results of one aspect of a much larger five year cohort study employing a survey design, focusing in particular on the data collected in 2006. Participants: In 2006, 3054 pupils from years 7 and 8 (aged 11 to 13 years old) participated in the study, from 11 schools in the same city. 50.2% of the sample were girls and 49.8% were boys.

Survey Tool: In adapted version of the Olweus bullying questionnaire was used (Olweus, 1991; Whitney & Smith, 1993). Of interest to this study was the question asking participants to provide examples of any nasty or threatening text messages they had received.

Procedure

The project was conducted with the co-operation of the Local Education Authority and each year data collection took place in the summer term. All participants completed a copy of the questionnaire in class time. The questionnaires were distributed and collected in by the teacher and then returned to the researchers for analysis.

Results

Overall, in 2006, 15.6% (n=465) of the sample reported being cyberbullied, with more girls (20.6%) reporting this than boys (10.4%). A total of 164 participants responded to this question, 16 responses were not included in this analysis as they stated such things as ‘do not want to say’ and ‘do not own a phone’. Therefore a total of 448 text messages were included in the analysis. Using content analysis, 12 categories were identified, examples of text messages from each category are given in Figure 1. Table 2 shows the prevalence of the different categories within the text messages (please note the percentages will exceed 100% as some messages fell into more than one category). The most prevalent category received by victims was name calling, this was particularly the case for girls. Other prevalent categories included threats of physical violence and death threats.

Discussion

The results of this study demonstrate the particularly nasty and threatening nature of the text messages reportedly received by victims of cyberbullying. The most commonly observed theme in the text messages received was some element such as...

- Wat up 2 I want to fuk u!
- I will get you and your family too
- I hate you, you fucking bitch and you're a slag
- I am going to beat you up after school tomorrow
- I've only had them when I've fallen out and someone doesn't like me but they aren't threatening and
- Slightly more boys than girls reported receiving such messages

Table 2: The prevalence of the different types of text message, by gender

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats of Physical Violence</td>
<td>25.0%</td>
</tr>
<tr>
<td>Name Calling</td>
<td>34.5%</td>
</tr>
<tr>
<td>Demanding</td>
<td>6.1%</td>
</tr>
<tr>
<td>Approaching</td>
<td>3.6%</td>
</tr>
<tr>
<td>Demanding</td>
<td>3.4%</td>
</tr>
<tr>
<td>Knowing where Recipient lives</td>
<td>1.9%</td>
</tr>
<tr>
<td>Knowing where Recipient lives</td>
<td>1.9%</td>
</tr>
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</tr>
</tbody>
</table>

Abstract

Text messaging as a form of bullying: An analysis of content

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