Report

Sticks and stones may break my bones
but being left on my own is worse

An analysis of reported bullying at school within
NFER attitude surveys

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1. Background

Since early 2010 the NFER has been working with both primary and secondary schools to allow them to survey their own pupils and better understand their views across a range of issues. With almost 100 secondary schools and more than 35,000 pupils in years 7 to 13 having taken part we have now begun undertaking a national analysis of the results so far. We have begun by exploring findings relating to bullying at school and have produced some interesting results.

As part of the NFER attitude survey, children in school years 7 to 13 (aged 11 to 18) were asked questions about the types of bullying they had experienced over the last 12 months and why they think they may have been bullied. Through analysis of their responses to these questions and how these relate to the emotional wellbeing of children (also measured within the questionnaire) some conclusions can be made as to the prevalence of different types of bullying and the relative seriousness of each type of bullying as measured by its impact on emotional wellbeing.
2. Main messages and findings

Our analysis indicates that:

- Schools and parents should be aware of the potential harm done to young people when they experience bullying through “being left out”. This type of bullying is more strongly associated with poor emotional wellbeing than any other type including more explicit forms such as physical or verbal abuse. For this reason it is important that schools look for ways to build on the efforts they already make to help young people to socialise, and explore ways of supporting them when relationships with other pupils break down.

- “Being left out” is more common amongst girls than boys. However, it was found that the link between this type of bullying and poor emotional wellbeing is stronger in boys.

- For girls “unwanted sexual contact” was found to be the type of bullying most strongly associated with poor emotional wellbeing. However, this type of bullying is relatively rare.

- The most common type of bullying is verbal abuse. The potential negative impact of this type of bullying should not be underestimated as our analysis indicates that verbal abuse is more strongly linked to poor emotional wellbeing than physical abuse.

- Pupils become less likely to be the victim of the majority of types of bullying once they enter the sixth form.

- Physical bullying more commonly affects boys than girls.

- Pupils who have been the victim of bullying are most likely to mention “lies or rumours” about them or their appearance as the reason they think they have been bullied.
3. **Types of bullying**

The survey asks pupils whether they have been bullied by people from their school in any of the following ways:

- verbal (name calling, spreading rumours, threatened)
- physical (being hit or kicked)
- being left out
- had property stolen or damaged
- racism
- unwanted sexual contact
- cyber bullying (mobile phone, internet, email)

Overall forty-four per cent of pupils indicated that they had been bullied in at least one of the above ways\(^1\). Table 1 shows how the chances of being a victim of each type of bullying depend upon the age and gender of pupils.

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\(^1\) This figure differs from some other published figures regarding the percentage of pupils who are bullied. For example results from the Tellus4 survey ([http://www.education.gov.uk/rgateway/DB/STR/d000908/osr04-2010.pdf](http://www.education.gov.uk/rgateway/DB/STR/d000908/osr04-2010.pdf)) indicated that 29 per cent of children had experienced bullying in the last twelve months. This difference can be partially explained by the fact that the figure quoted here relates entirely to secondary schools. Differences are likely to be caused by the different ways in which questions about bullying are phrased.
Table 1: Prevalence of different types of bullying across different gender and age groups

<table>
<thead>
<tr>
<th>Gender of pupil</th>
<th>Age (at start of school year)</th>
<th>Verbal</th>
<th>Physical</th>
<th>Being left out</th>
<th>Had property stolen or damaged</th>
<th>Unwanted sexual contact</th>
<th>Cyber bullying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11</td>
<td>31</td>
<td>20</td>
<td>20</td>
<td>17</td>
<td>4</td>
<td>7</td>
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<tr>
<td></td>
<td>12</td>
<td>32</td>
<td>19</td>
<td>21</td>
<td>17</td>
<td>6</td>
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<td></td>
<td>13</td>
<td>32</td>
<td>18</td>
<td>18</td>
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<td>7</td>
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<td>14</td>
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<td>16</td>
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<td></td>
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<td>19</td>
<td>11</td>
<td>14</td>
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<tr>
<td>Female</td>
<td>11</td>
<td>30</td>
<td>10</td>
<td>32</td>
<td>14</td>
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<td>11</td>
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<td>11</td>
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<td>5</td>
<td>14</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 1 reveals that verbal bullying is clearly the most common form affecting almost a third of pupils aged between 11 and 15. Boys and girls are roughly equally likely to be affected. The least reported form of bullying is unwanted sexual contact.

For most types of bullying in schools, pupils become less likely to report that they have been a victim once they are older than age 16; that is, the age when they enter the sixth form. There are two exceptions to this rule: unwanted sexual contact becomes generally more likely to be reported as pupils get older, and cyber bullying becomes slightly more common amongst boys and slightly less common amongst girls as they get older.

Of the six types of bullying that have been explored, three are more likely to be reported by boys than girls of the same age. In every age group physical bullying is at least twice as prevalent amongst boys as it is amongst girls. Having property stolen or damaged is slightly more common amongst boys than amongst girls of the same age and (perhaps surprisingly) unwanted sexual contact is also more commonly reported by boys.

Prior to entering the sixth form (age 16), “being left out” is more commonly reported by girls than boys. This is particularly true in the early stages of secondary school between the ages of 11 and 13. Cyber-bullying is unusual in that although it is one of the least frequently reported forms of bullying, it is roughly evenly reported across both boys and girls as well as across different age groups. However, there is some
tendency for cyber-bullying to be more common amongst girls at the beginning of secondary school and more common amongst boys towards the end of secondary school.
4. Reasons for bullying

Those pupils who report that they have been bullied in at least one of the above ways are also asked to respond to the statements “I have been bullied in the past 12 months because”:

- of how I speak
- of how I look/my appearance
- of my name
- of how I act/my personality
- people think I am gay, lesbian or bisexual
- my family doesn’t have the money to buy new things
- of my friends/family
- of my religion
- of my disability or health
- people are jealous of me
- of lies or rumours about me
- I don't know why

The results from this question are shown in figure 1. This shows that the most common reason that victims gave for why they think they had been bullied was “lies or rumours” and “how I look” each of which were reported by 43 per cent of those who had been bullied\(^2\). A very large percentage of pupils (35 per cent) reported that they “didn’t know” why they were bullied and nearly as many (34 per cent) thought they were bullied because of “how I act”. The majority of those who were bullied (62 per cent) listed more than one reason behind the bullying.

A relatively small percentage of pupils noted that they were bullied because they were part of a minority grouping such as a racial or religious group. However, it is difficult to make much of this finding as being part of a minority must (by definition) be something that only relates to a small percentage of pupils and so we would naturally expect these reasons to be stated less often.

\(^2\) It is worth noting that respondents were allowed to suggest more than one reason and as such the percentages in figure 1 add up to far more than 100 per cent.
Figure 1: Percentage of those students giving each reason for bullying (of those that have been bullied)

- of lies or rumours about me
- of how I look/my appearance
- I don't know why
- of how I act/my personality
- people are jealous of me
- of my name
- of my friends/family
- of how I speak
- of my race
- people think I am gay, lesbian or bisexual
- of my disability or health
- my family doesn't have the money to buy new things
- of my religion
5. Bullying and emotional wellbeing

Previous research has established a clear link between bullying and reduced emotional wellbeing\(^3\). With this in mind it was of interest to investigate whether this relationship varies across different types of bullying. This was achieved using a separate section of the survey which asks about the emotional wellbeing of pupils. Specifically the survey asks how often (on a four point scale from “never” to “most of the time”) pupils feel:

- happy
- sad or upset
- depressed
- stressed or anxious
- positive

The responses to these questions were combined to create a score out of 15 measuring the emotional wellbeing of pupils\(^4\). A statistical model was then constructed to calculate the strength of the association between each type of bullying and the emotional wellbeing of pupils. This model also took account of the gender and age of pupils so that (to some extent) the different types of bullying could be compared on a like with like basis. Furthermore, the association between each type of bullying and emotional wellbeing was calculated separately for boys and girls to identify any areas where the link between bullying and wellbeing differed.

The results of the statistical modeling are shown in figure 2. This shows the association between each type of bullying and the emotional wellbeing of pupils as effect sizes\(^5\). Essentially figures further to the right hand side of the chart indicate a larger (negative) association between a particular type of bullying and emotional wellbeing. The chart also shows 95 per cent confidence intervals for the estimated effect sizes allowing us to explore whether the differences between types of bullying are statistically significant.

It is clear from the above chart that all forms of bullying have a negative and statistically significant association with the emotional wellbeing of pupils. However, it can be seen that some types of bullying have an even more negative association than others.

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\(^4\) The reliability of this scale was assessed from a psychometric perspective using Cronbach’s alpha. The reliability coefficient was calculated to be 0.75 – an acceptable level of reliability.

\(^5\) The technical statistical definition of an effect size is the number of standard deviations of change in the outcome that are associated with a change of 1 in the predictor (that is, a change from not being bullied in a particular type of way to being bullied).
Overall the type of bullying that is most strongly associated with low emotional wellbeing is "being left out". This would appear to suggest that in isolation this type of bullying is more damaging to the emotional wellbeing of young people than any other. One possible explanation for this finding might be in the relative frequency that victims experience the different types of bullying. For example, it might be that those who report "being left out" tend to face this type of bullying on a regular basis whereas those who report "physical" bullying generally have only experienced this a handful of times during the year. Nonetheless, the strength of the association between "being left out" and low emotional wellbeing cannot be escaped and clearly suggests that this type of bullying is a serious issue. As stated earlier "being left out" is one of the most common forms of bullying amongst girls. However, it would appear that the impact on poor emotional wellbeing is even stronger for boys than for girls.

This may be related to the suggestion from some authors that boys tend to be part of larger friendship groups than girls and so "being left out" would have a greater impact on their ability to socialise\(^6\).

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For girls, it is “unwanted sexual contact” that has the strongest negative association with emotional wellbeing. This is least common form of bullying experienced by girls but, where it occurs, it is apparently very damaging. This is followed (behind “being left out”) for both genders by verbal abuse suggesting that this type of bullying is at least as damaging as physical bullying. The remaining types of bullying have roughly equal associations with emotional wellbeing although there is some evidence that the link with having property stolen or damaged is slightly smaller.
6. Conclusion

Of all of the analysis undertaken within this paper perhaps the most striking finding is that the type of bullying that appears to be the most damaging to the emotional wellbeing of children is “being left out”. In other words, although both physical and verbal abuse can be very harmful to children, it is exclusion and being prevented in participating in the ordinary social activities of young people that is the most damaging of all. In light of this, it is interesting to note that many school anti-bullying policies give most attention to the former type of bullying (explicit abuse) and less attention to this more subtle type of bullying. Similarly, parents may also be less likely to report such ‘low-level’ bullying to schools or to take action about it. Adults may perceive it as less serious and something children will sort out themselves.

Outside of anti-bullying policies, schools already do make considerable efforts to help children and young people to socialise so that no-one is “left out”. The evidence in this paper would support this practice as being very important to the emotional wellbeing of pupils. However what is less clear is what schools can do to help young people when relationships with other pupils break down and young people may feel socially rejected. It is immediately obvious that tackling the social rejection of some young people by others is a much more difficult task than the (already not insignificant) challenge of dealing with explicit bullying. However, the startling link between social rejection and low emotional wellbeing means that it should not be ignored.
7. **Final caveats**

There are two important limitations to the analysis contained in this paper. First is the fact that the survey only asks whether pupils have been the victim of various types of bullying. Neither the frequency nor the severity of bullying is captured within questionnaire. This means that any differences in the relationship that each type of bullying has with emotional wellbeing may be influenced by the frequency and severity of such bullying and this is not accounted for within this research.

Secondly the analysis presented in this paper is based on cross-sectional data. In this context it is not possible to distinguish between causality and association. Thus, although we can estimate the association between different types of bullying and emotional wellbeing, we cannot say with certainty whether one causes the other.

Furthermore it is possible that causality works in the reverse direction to the one proposed. Rather than bullying itself causing reduced emotional wellbeing, it may be that pupils with low levels of emotional wellbeing are more vulnerable to bullying. Indeed, it seems likely that the two issues are somewhat cyclical, with a pupil being left out as a result of bullying, becoming emotionally upset, and hence becoming more difficult to get on with and more isolated. Having said this, if such a theory proved to be correct, then anything that a school could do to break this cycle would be immensely valuable. Efforts should arguably still be focussed on the types of bullying that have been highlighted in this report as being most strongly linked to emotional wellbeing.

Further research would be required to explore these important issues further.
8. Statistical details

The basic figures in this report are based on the analysis of 35,311 young people. The breakdown of respondents by age and gender is given in table 2. Before calculating percentages, the data was weighted by school type, region and percentage of pupils eligible for free school meals to be representative of secondary schools nationally.

Table 2: Numbers of respondents in data set

<table>
<thead>
<tr>
<th>Age at start of academic year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>3241</td>
<td>3891</td>
</tr>
<tr>
<td>12</td>
<td>3246</td>
<td>3635</td>
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<tr>
<td>13</td>
<td>3708</td>
<td>4351</td>
</tr>
<tr>
<td>14</td>
<td>2953</td>
<td>3323</td>
</tr>
<tr>
<td>15</td>
<td>2016</td>
<td>2504</td>
</tr>
<tr>
<td>16</td>
<td>632</td>
<td>753</td>
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<tr>
<td>17</td>
<td>457</td>
<td>601</td>
</tr>
</tbody>
</table>

Analysis of the relationship between each type of bullying and emotional wellbeing was undertaken using multilevel logistic modelling. This technique allows us to simultaneously examine the effect of many inter-related characteristics of young people whilst also taking account of the fact that our sample of young people is grouped within schools and that the school a young person attends may also have an influence upon their emotional wellbeing.
9. **Coefficients from multilevel modelling**

For statistically minded readers full details of the coefficients from multilevel modelling can be found below. The coefficients were estimated using a three level multilevel model. For the purposes of this analysis the data was structured with pupils nested within year groups that were in turn nested within schools.

**Table 3: Effect sizes from multilevel modelling**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect size (negative)</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female pupil</td>
<td>0.154</td>
<td>0.013</td>
</tr>
<tr>
<td>Age at start of year – 12</td>
<td>0.080</td>
<td>0.023</td>
</tr>
<tr>
<td>Age at start of year – 13</td>
<td>0.173</td>
<td>0.023</td>
</tr>
<tr>
<td>Age at start of year – 14</td>
<td>0.299</td>
<td>0.024</td>
</tr>
<tr>
<td>Age at start of year – 15</td>
<td>0.374</td>
<td>0.026</td>
</tr>
<tr>
<td>Age at start of year – 16</td>
<td>0.453</td>
<td>0.036</td>
</tr>
<tr>
<td>Age at start of year – 17</td>
<td>0.496</td>
<td>0.040</td>
</tr>
<tr>
<td>Type of bullying - verbal (Male)</td>
<td>0.255</td>
<td>0.020</td>
</tr>
<tr>
<td>Type of bullying - verbal (Female)</td>
<td>0.281</td>
<td>0.018</td>
</tr>
<tr>
<td>Type of bullying - physical (Male)</td>
<td>0.194</td>
<td>0.025</td>
</tr>
<tr>
<td>Type of bullying - physical (Female)</td>
<td>0.211</td>
<td>0.028</td>
</tr>
<tr>
<td>Type of bullying - being left out (Male)</td>
<td>0.420</td>
<td>0.024</td>
</tr>
<tr>
<td>Type of bullying - being left out (Female)</td>
<td>0.337</td>
<td>0.018</td>
</tr>
<tr>
<td>Type of bullying - property damaged or stolen (Male)</td>
<td>0.169</td>
<td>0.023</td>
</tr>
<tr>
<td>Type of bullying - property damaged or stolen (Female)</td>
<td>0.137</td>
<td>0.023</td>
</tr>
<tr>
<td>Type of bullying - unwanted sexual contact (Male)</td>
<td>0.234</td>
<td>0.032</td>
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<tr>
<td>Type of bullying - unwanted sexual contact (Female)</td>
<td>0.354</td>
<td>0.033</td>
</tr>
<tr>
<td>Type of bullying - cyber bullying (Male)</td>
<td>0.202</td>
<td>0.032</td>
</tr>
<tr>
<td>Type of bullying - cyber bullying (Female)</td>
<td>0.210</td>
<td>0.025</td>
</tr>
</tbody>
</table>
Providing independent evidence to improve education and learning.