Cyberbullying and the bystander: What promotes or inhibits adolescent participation?
Research overview:

Cyberbullying is a global concern that governments and schools find difficult to manage (Shariff, 2009) and work from the Anti Bullying Alliance (2013) reports that cyberbullying is an everyday problem for today’s children. The Annual Cyberbullying Survey published by Ditch the Label (2013) states that “cyberbullying is seriously damaging the self esteem and future prospects of young people and is an issue that cannot afford to be overlooked” (p. 5). Therefore it is vital that professionals working with children and young people explore prevention and intervention strategies.

Salmivalli (2010) states that traditional bullying is often described as a group process and many researchers and policy makers share the belief that interventions against bullying should target the peer group level. This view has also been adopted for cyberbullying (Kraft, 2011). However, the limited research in this area has led authors to comment that “bystanders represent a critical group to consider in prevention and intervention strategies” (Cross & Walker, 2013, Kindle location. 6724/8658) and that further research is required to “investigate bystander (participant) roles and ways to engage bystanders to help cyberbullying targets, ways in which bystanders can best intervene in cyberbullying incidents, and what is likely to increase the odds of cyber bystanders intervening” (Cross & Walker, 2013, Kindle location. 6724/8658).

With this in mind the broad aim of this thesis is to explore cyberbullying participant roles and understand what may promote or inhibit bystander involvement in cyberbullying situations. This is addressed in two separate but linked studies as shown in figure 1.

Study One investigates the understanding of the roles that young people take during cyberbullying and explores how social grouping, age and gender affect this process. Data are gathered via self report questionnaires.

Study Two examines adolescent perceptions of the factors that contribute to them becoming involved (or not) in cyberbullying. Data are collected via focus group discussions that were organized using a semi-structured interview schedule to ensure key areas related to findings from Study One were explored.
Taken together, the results from Study One and Study Two highlight that cyberbullying is a group process in which adolescents consider the risks and rewards of involvement and use this information to determine their participant role. Computer Mediated Communication (CMC), social influence and the popularity and status of those already involved at the time of cyberbullying affects this decision.

It is anticipated that these studies will influence educational professionals in general and educational psychologists (EPs) in particular when prevention and intervention plans are developed for young people, teachers and parents that consider the role bystanders play in cyberbullying.
Abstract

Study One

Study One aims to better understand the roles that adolescents take during cyberbullying situations exploring the influence of attitudes towards cyberbullying, social grouping (being alone or with others), age and gender. Methods: Focus groups were used to adapt the Participant Role Scales (Salmivalli, 1998) and the Pro Victim Scale (Rigby & Slee, 1991) to explore cyberbullying. These adapted measures were completed by 261 participants across four year groups (year 7 to 10) via self report questionnaires. Results: Across social groupings an average of 73% of adolescents took participant roles in cyberbullying situations. There were significant differences between assistant, defender, outsider and victim behaviour when alone or when physically with others. In addition attitude towards cyberbullying significantly influenced the role taken and females were more likely to be defenders than males. Age significantly influenced outsider behaviour when participants were alone and defender behaviour when participants were physically with others.

Study Two

Study Two aims to better understand what promotes or inhibits bystander involvement in cyberbullying situations. Methods: The study adopted an explorative approach to understand the experiences of 28 adolescents in a South West Local Authority in England. Data was collected via a semi-structured interview schedule administered in focus groups. Findings were analysed using latent thematic analysis (Braun & Clarke, 2006). Results: The decision for adolescent bystanders to actively join a cyberbullying situation was found to be complex. CMC, social influence (prior relationship, being alone or with others) and popularity and status of those participating in cyberbullying contribute to bystanders’ assessment of the risk and reward of participation. If reward outweighs risk an active role is taken (assistant, reinforcer, defender). However if risks are perceived to be higher than rewards then an outsider role is adopted.
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Study One
1 Introduction

Adolescents in the United Kingdom (UK) have grown up in a world in which there is extensive use of social interactive technologies (text messaging, mobile phones, email, social networking sites, Instant Messenger) in everyday life. For many adolescents their offline and online worlds fall into one social arena (Subrahmanyam & Smahel, 2011) and adolescents spend increasing amounts of time communicating via computers, smart phones or other electronic devices (Slonje & Smith, 2008). The development of modern communication technologies over the last decade has created a number of new online interaction possibilities and networks and wireless communications are removing barriers and providing access to virtually limitless resources and information. While there are many benefits associated with these developments it is also important to recognise a range of negative issues that the utilization of technology can produce.

This range of negative issues has been recognised at a national level within the UK, which led to the development of the UK Council for Child Internet Safety in 2008. In addition a range of national and local organisations such as the Child Exploitation and Online Protection (CEOP) group and the South West Grid for learning (SWGfl) were set up to keep children safe online. Yet despite these initiatives researchers, teachers and parents recognise that risks, such as cyberbullying, bring significant and worrying issues for children and young people (Lenhart, 2007, Li 2007, Oliver & Candappa, 2003). Within schools the Education and Inspections Act (2006) and the ‘Working Together to Safeguard Children’ guide (HMSO, 2006) states that schools must have measures to prevent all forms of bullying and the new OFSTED (schools inspection) framework requires schools to demonstrate the impact of their anti bullying work highlighting that cyberbullying is an important issue.

The available literature regarding cyberbullying relates to its prevalence, frequency among specific groups and the negative outcomes associated with it (Tokunaga, 2010). However there is a lack of research investigating prevention and intervention strategies. Olweus (2012) states that cyberbullying should not be viewed in isolation so it is important to make comparisons with strategies employed in traditional bullying such as those that focus on peer involvement. These strategies identify group members’ bullying roles which are influenced by individual characteristics and environmental factors and help to improve
understanding as to an individual’s motivation to bully, why support is or is not offered to victims and how observers can promote or inhibit bullying behaviour. While this view, namely bystander behaviour in bullying situations, is increasingly perceived as key for solving the problems of cyberbullying (Kraft, 2011; Spears, Slee, Owens, & Johnson, 2008) there has been limited exploration as to the roles individuals take during cyberbullying episodes. Therefore it is important to examine the prevalence, age and gender of those usually involved in cyberbullying before exploring the links between bystander behaviour in traditional bullying and cyberbullying.

Literature discussed in this thesis draws on publications from relevant areas of psychology and educational reviews including research in cyberbullying, bullying, bystander behaviour and CMC. Literature was sourced following data base searches using EBSCO E-Journals, PsychARTICLES, JSTOR, Education Research Complete, ERIC PlusText and Google Scholar using the following search terms in various combinations: cyberbullying, bullying, adolescent(s), internet, bystander, peers, victimisation, computer mediated communication, age and gender.

1.1 Bullying and cyberbullying

Bullying is a form of antisocial behaviour that some school children face (Olweus, 1978, 1993) and with the expansion of information and communication technologies it has taken a new shape in the cyber world. In the past decade research into cyberbullying has received much attention. However there are difficulties defining exactly what it is. Without a clear definition, findings from research form a collection of interesting studies that are only loosely linked by a common interest (Bauman, 2012). In addition, Walker, Craven, and Tokunaga (2013) have suggested that when considering the body of cyberbullying research as a whole, the mixed findings from inconsistent use of definitions have largely undermined the quality of research on cyberbullying. Despite continued questions about intentional harm, repetition and power imbalances (See Bauman 2012 for a review) Tokunaga (2010), attempting to provide unity to the inconsistent definitions of cyberbullying, stated that “cyberbullying is any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others” (p. 278).
Palfrey, Boyd, and Sacco (2009) state that cyberbullying is the most common risk that minors face online, therefore it is vital to explore ways to reduce it. Although cyberbullying is a recent development, extensive observational and experimental research in traditional bullying has contributed to the development of some effective interventions (see Thompson & Smith, 2010 for a review). Therefore it is feasible that aspects of these interventions can be modified and used to reduce cyberbullying incidents. Given that cyberbullying occurs in the context of social groups and relationships (Mishna, Saini & Solomon, 2009) bystanders represent a critical group to consider in intervention and prevention strategies. However before the role of the bystander and the bystander in relation to cyberbullying can be explored, it is necessary to examine cyberbullying prevalence and the characteristics of those involved.

1.2 Prevalence of cyberbullying

Research indicates that cyberbullying prevalence rates vary significantly. Exploration of 27 peer reviewed journals by Patchin and Hinduja (2012) show victimization rates ranged from 5.5% to 72% with an average of 24.4%. While perpetration rates ranged from 3% to 44.1% with an average of 18%. It is likely that these prevalence rates vary considerably due to differences across countries and cultures, the developmental stage and age of the children involved, and the inconsistent ways cyberbullying is defined or categorised. It is also likely that cyberbullying rates are different due to methods of data collection (self report questionnaires or peer and teacher ratings); providing or not providing a definition of bullying to pupils; the type of rating categories used; and the time period (e.g. in the last week/month) which has been considered (Patchin and Hinduja, 2012).

1.3 Cyberbullying and age

Most cyberbullying research focuses on victimisation of children and young people under the age of 18 and highlights that cyberbullying is most prominent among middle school youth (Cassidy, Jackson & Brown, 2009; Patchin & Hinduja, 2012).

Kowalski and Limber (2007) surveyed 3,767 children using self reports from grades 6, 7, and 8 from six schools in south-eastern and north-western United States (US). They found that grade 7 (aged 11 – 12) and grade 8 (aged 12 – 13) students were significantly more likely to
cyberbully others when using Instant Messenger than those in lower grades. Furthermore grade 8 students used text messaging more frequently to cyberbully others in comparison to their younger peers, although there were no differences among the grades for cyber victimisation. Williams and Guerra (2007) found similar results. 3,339 US children from grade 5 (aged 9 – 10), grade 8 and grade 11 (aged 15 – 16) completed questionnaires including measures of cyberbullying perpetration and victimization. The researchers discovered that 5th graders experienced the least victimization with a prevalence of 4.5%. The proportion of students’ cyberbullied reached its highest point in 8th graders (12.9%) and dropped amongst older students (9.9%).

In comparison, Dehue, Bolman, and Vollink (2008) state that cyberbullying victimisation was higher for primary school students than those in high school while others (Perren, Dooley, Shaw, & Cross, 2010; Ybarra & Mitchell, 2004) identified high school students (aged 14 to 18) are more involved in cyberbullying.

Dooley, Cross, Hearn, and Treyvaud (2009) argue that the limited data shows that age and cyberbullying follow an inverse U pattern (rates start low, increase to the mid teenage years and then decrease).

1.4 Cyberbullying and gender

Tokunaga (2010) reports that research on gender differences in cyberbullying is “fraught with inconsistent findings” (p. 280). Given that girls are more likely to engage in indirect or relational bullying and when given cyber tools are more likely to resort to name calling and mocking others for their physical appearance (Rivers & Noret, 2010) it is reasonable to hypothesize that girls are more likely to cyberbully when compared to traditional bullying. However this is not consistently shown in the literature. While a minority of studies show girls are more likely to cyberbully (Li, 2006; Ybarra & Mitchell, 2004) and be victims of cyberbullying (Dehue et al., 2008; Kowalski & Limber, 2007; Ybarra & Mitchell, 2004) the majority of studies reveal no particular gender is targeted more than others (Hinduja & Patchin, 2008; Li, 2007; Juvonen & Gross, 2008; Wolak, Mitchell, & Finkelhor, 2007).
1.5 Prevalence, age and gender summary

While prevalence rates vary tremendously, the average percentage rates for both victimization and perpetration show that cyberbullying represents a significant problem. Research shows cyberbullying increases throughout childhood, reaching a peak during mid teenage years before reducing. Furthermore both genders are equally involved in the cyberbullying process. Therefore it is beneficial to explore how strategies or interventions, such as bystander involvement, may relate to those most affected by cyberbullying (male and female teenagers).

1.6 The bystander

In many studies school bullying is seen as a group process (see Salmivalli, 2010) and research utilizing naturalistic observations found that peers are present in 85% of all bullying episodes (Hawkins, Pepler, & Craig, 2001). This led researchers to study how bystanders react to bullying and how their reactions may contribute to the problem or help to resolve it (Salmivalli, Lagerspetz, Bjorkquist, Osterman & Kaukiainen, 1996). Using a peer nomination procedure to identify the roles children take in the bullying process, Salmivalli et al. (1996) identified four participant roles in addition to the bully or victim. Assistants of bullies join the ringleader while reinforcers provide positive feedback to the bully by laughing or cheering. Outsiders withdraw from the bullying situation while defenders comfort and support the victims and take their side. It is clear that the roles taken by witnesses of bullying have an important impact on bullies, victims and observers. When others support a bully by reinforcing or assisting the behaviour it is likely that the bully receives positive reinforcement, whereas when the bully is challenged and the victim is helped by defenders negative feedback is provided.

In an observational study, Hawkins et al. (2001) found that bystanders’ support for a victim often stopped bullying episodes and Sharp and Cowie (1994) state that bullying is less likely to occur in contexts where the peer group disapprove of bullying behaviour. Furthermore Eslea and Smith (2000) found that 63% of children in their study tried to help victims while 72% did not join in bullying. While these studies, in general, highlight pro-victim antibullying attitudes, Rigby (1996) states that a high proportion of students (almost half his sample) understood why some children enjoyed bullying and thought their peers should
stand up for themselves. These studies highlight the importance of understanding how feelings about bullying affect behaviour and further research is required to explore links between attitude and cyberbullying participation.

Although there are obvious benefits if bystanders defend (comforting those involved or confronting the bully) victims, children who witness bullying do not seem to use their potential to stop it (Salmivalli, 2010). While most children are against bullying and report they would support peers in hypothetical situations (Rigby & Johnson, 2006; Whitney & Smith, 1993) a study of 6th and 8th graders in Finland (Salmivalli, Lappalainen, & Lagerspetz, 1998) identified 17 – 20% of students as defenders but 20 – 29% as reinforcers or assistors to the bully. Furthermore 26 – 30% withdrew from the bullying situation and did not take sides allowing it to continue. So, while children may say they are likely to aid a victim, in reality this does not appear to be the case.

Salmivalli (2010), in a review of bullying and the peer group, highlights multiple reasons why children do not intervene more in bullying situations. The bystander effect and diffusion of responsibility may limit involvement as those watching feel others will take action; if nobody does the event is not viewed as serious. Furthermore as most bullying acts consist of verbal attacks, the bullying may appear mild and assumed to be a joke (Terasahjo & Salmivalli, 2003). Moreover as bullies are often perceived as powerful and popular, it may appear difficult for observers to stand up to them. It has also been found (Garandeau & Cillessen, 2006) that behaving aggressively towards a target of bullying allows individuals to feel connected to their peer group. Over time, this may develop into a strong negative bias regarding the victimised classmate and Schuster (2001) identified that victimised classmates are seen as personally responsible for their mistakes more often than non-victimised peers.

1.7 Cyberbullying and the bystander

Cross and Walker (2013) report that further research is required to investigate bystander (participant) roles in cyberbullying. Moreover given that studies show that victims of cyberbullying rarely (1% - 9% of the time) inform their parents of online victimization (Aricak et al., 2008; Slonje & Smith, 2008) it is vital to explore the intervention strategy. With this in mind, it is important to consider the context of cyberbullying and how this affects bystanders.
Bystanders can easily engage in cyberbullying behaviours (Kowalski, 2008) such as forwarding or posting harmful messages, but often do not realise that their actions mean they are participants (Kraft, 2011). Alternatively those wishing to support a victim or confront a bully may be unaware of other witnesses and are unable to see their reactions. This may lead to diffusion of responsibility caused by the bystander effect, which reduces supportive behaviour (Latane & Darley, 1970).

A factor that influences both reinforcing and defending cyberbullying behaviour is CMC, which causes people to behave differently online in comparison to similar offline situations (Joinson, 2003; Suler, 2004). The perceived online anonymity (McKenna & Bargh, 2000) and lack of face to face contact results in reduced non verbal cues, which may modify behaviour (Suler, 2004). Potentially this creates conditions that encourage intentional or unwitting aggression that supports cyberbullying, or leads to social and emotional support or advice without fear of confrontation from the perpetrator.

Consequently these factors will affect cyberbystander behaviour and it is important to understand how in more detail. However studies exploring this area, such as Wachs (2012), often identify cyberbullying roles with dichotomised questions, a technique that Tokunaga (2010) states is too simplistic to explore the multidimensionality of cyberbullying. Furthermore using one or two items to measure bullying constructs is flawed because single items are unreliable, cannot distinguish fine degrees of an attribute and lack scope and the ability to uncover detail (Griezel, Craven, Yeung, & Finger, 2008). Other studies examining specific bystander behaviour such as support for cyberbullied schoolmates (Machackova, Dedkova, Sevcikova, & Cerna, 2013) or factors that contribute to negative bystander behaviours (Barlinska, Szuster, & Winiewski, 2013) only considered bystander behaviour in isolation and did not explore how bystander behaviour is influenced by others witnessing the event. Smith (2012) described how cyberbullying differs from traditional bullying in several ways and highlighted a variety of bystander roles in cyberbullying (the bystander may be with the perpetrator when an act is sent or posted; with the victim when it is received; or with neither, when receiving the message or visiting the relevant internet sites). It seems likely that bystander behaviour will be influenced by these factors; but there is a lack of research which considers this point. Therefore if bystanders are to be used as a cyberbullying intervention it is important to understand the particular roles individuals take.
in cyberbullying situations, to measure attitudes towards cyberbullying and to explore the influence social groupings (alone or with others) have on behaviour in more detail.

2 Aims

Study One aims to investigate the roles young people take during cyberbullying.

The principle aim of this study is:

- To examine what roles participants take in the cyberbullying process.

3 Research questions

This aim is addressed through the following research questions:

- What type of participant roles do adolescents take in cyberbullying situations?
- How does role behaviour change when adolescents are alone or physically with others during cyberbullying situations?
- How do adolescent attitudes toward cyberbullying influence the role they take?
- What are the gender differences between the roles adolescents take?
- What is the relationship between adolescent age and the roles they take?
4 Design and method

This research study is informed by pragmatism. Johnson and Onwuegbuzie (2004) state that pragmatism does not offer a theory of truth or knowledge. Instead it allows the researcher to focus on the most appropriate method to answer the research questions. This study is not carried out in isolation but forms part of a linked piece of research in which the planning, data collection, findings and conclusions will be shared. Pragmatism is viewed as a philosophical approach that fits well with mixed methods research (Robson 2002).

Yin (2006) suggests that the mixed methods approach is not limited to a single study and can be used in the context of an overarching problem or research question, therefore it is appropriate.

4.1 Research perspective

In order to identify adolescent cyberbullying roles and examine the characteristics that influence this behaviour Study One is viewed through a stronger objective reality lens and a weaker subjectivism lens (Morgan, 2007). Within this study assumptions are made that participants understand concepts related to cyberbullying in similar ways and that participant responses will create a generalised view of behaviour in cyberbullying situations. Individual views in Study One are only important in that collectively, after analysis, the factors that influence cyberbullying behaviour will be identified and used to explain adolescent actions.

4.2 Mixed methods approach

A discussion on the value of mixed methods and reasons for its selection is in the appendices (Appendix 20).

4.3 Ethical Principles

Bullying in schools is an international public health problem (Gini & Pozzoli, 2009) and cyberbullying is described as the most common risk that children and young people face online (Paltry et al., 2009). Therefore it is important to acknowledge that asking pupils to think about cyberbullying may cause discomfort or psychological harm as they relive previous experiences or explore current events.
The study design considered these important factors and was granted ethical approval from the University of Exeter, Graduate School of Education Ethics Committee. Furthermore the study adhered to the British Psychological Society’s code of conduct for human research (BPS, 2011). For a full account of the ethical approaches see the appendices (Appendix 21).

5 Procedure

5.1 Participant Role Scale (PRS) and the Pro Victim Scale (PVS).

5.1.1 PRS

The PRS was devised by Salmivalli (1998) and contains behaviour statements relating to bullying situations. Originally consisting of 49 items the scale was revised and improved to create a 23 item version. The statements are clustered around six key roles: bully, assistant, reinforcer, victim, defender and outsider. The scale was initially designed for use with secondary school pupils but has been adapted for use with younger children (Sutton & Smith, 1999). Salmivalli’s (1998) scale combined self and peer nominations, with each pupil in a class evaluating how well they and their peers fitted into behavioural descriptions. Internal reliability has been established for each of the roles: bully = 0.95; reinforcer = 0.9; assistant = 0.86; defender = 0.92; outsider = 0.86. The scale could not be used in its original form as it focused on traditional bullying behaviour. Therefore the scale was adapted to produce statements relating specifically to cyberbullying. (See appendix 22.4 for justification of PRS use in this study).

5.1.2 PVS

The PVS is a ten item questionnaire designed by Rigby (1997) to identify attitudes towards bullying. Half the items support bullying and half disapprove of bullying. Rigby quotes Cronbach’s Alpha coefficients of 0.81 for boys and 0.78 for girls aged 9 to 18 years. The questionnaire, in its original form, was unsuitable as it did not specifically focus on cyberbullying behaviours. Therefore the scale was adapted to meet the aims of this study. (See appendix 22.4 for justification of PVS use in this study).
5.2 Data Collection

5.2.1 Phase 1: Adapting the PRS and PVS

Davidson, Ridgway, Kidd, Topor and Borg (2008) highlight that young people will be supported in cyberbullying if prevention and intervention is guided by an intimate understanding of the everyday lives and perspectives of those actually involved. Therefore, in order to effectively adapt the chosen scales, it was vital to listen to adolescent views as to how behaviour statements should be revised to focus specifically on cyberbullying.

5.2.2 Participants

Behaviour statements from the PRS (Salmivalli, 1998) and the PVS (Rigby, 1997) were adapted in a focus group in an urban secondary school in a south west authority in England. The group comprised of five participants (three boys and two girls) from a year 9 form group. Pupils were self selected through returned positive parental consent forms (Appendix 21.6). 27 parental letters were sent and 7 positive responses were received by the deadline date, which is a response rate of 26% (only five participants were included in the focus group as two were absent on the day of data collection).

5.2.3 Procedure

Students were given the PRS (Appendix 22.1) and informed that the general structure would remain but each behaviour statement would be adapted to make it specific to cyberbullying. Students discussed each behaviour statement to identify a cyberbullying equivalent, and when a majority of students agreed the new statement was recorded. The same procedure was used to adapt the PVS (Appendix 22.2). This study adopted Tokunaga’s (2010) definition of cyberbullying (Appendix 22.3) which was shown to the students to ensure clarity. Students felt the definition was written in adult language that would be confusing for their peers to read and was adapted (Appendix 22.3) based on their comments.

5.2.4 Phase 2: Data collection using the adapted scales

The adapted PRS and PVS were used to investigate the participant roles adolescents take in cyberbullying situations and adolescent attitude towards cyberbullying respectively.
5.2.5 Participants

261 participants, 140 males (53.8%) and 120 females (46.2%) (1 student did not answer the gender question) from two secondary schools in an urban area in a south west authority in England completed both scales. 52 year 7 participants (19.9%), 81 year 8 participants (31%), 54 year 9 participants (20.7%), and 74 year 10 participants (28.4%) took part.

5.2.6 Procedure

An Assistant Head Teacher from each school gave informed consent to allow students to participate after a meeting where the research aims and methods were discussed (Appendix 21.3). Parental permission was sought via passive consent (Appendix 21.4). Pupils gave informed consent (Appendix 21.5) and were told they could withdraw at any time.

Form tutors discussed the research project, measures, and instructions for administering the research surveys (Appendix 22.5 & 22.6) with me. Students completed the questionnaires in their tutor groups. Their teacher read a definition of cyberbullying and shared information (as recommended by Tokunaga, 2010) (Appendix 22.5). Finally a description of the different participant roles during cyberbullying was read to the students (Appendix 22.5). Students completed both measures via self report; those who had not received permission to participate read silently.

The scales were completed by self report due to the potential anonymity (Walker et al., 2013) and the increased audience size associated with cyberbullying (Smith, 2012). As Smith (2012) highlighted a variety of bystander roles in cyberbullying events (e.g. the bystander may be with the perpetrator when the act is sent or posted; with the victim when it is received; or with neither when receiving the message or visiting the relevant internet site) students were asked to score each PRS behaviour statement in two categories ‘when alone’ and ‘when physically with others’.

5.2.7 Scoring

5.2.7.1 PRS

Students scored each behavioural statement in two social categories: ‘when alone’ and ‘when physically with others’. The students used a three point scale (0 = never, 1 = sometimes, 2 = often) to score each of the 23 statements.
In order to assign students to a participant role, the scoring system used by Salmivalli et al. (1996) was adopted. Therefore students were assigned to a role if their highest score (for roles with multiple statements individual scores were added and divided by the number of statements for that role to achieve a mean) was above the mean for that participant role. If scores were equal on two or more scales an additional criterion was used (as recommended by Salmivalli et al., 1996). If the difference between a pupil’s highest score and second highest score was less than 0.1, or a student did not score above the mean on any scale, they were assigned to the ‘no role’ category.

5.2.7.2 PVS

PVS scoring followed Rigby’s (1997) guidance and all ten statements were assigned 1 to 3 points. Answers demonstrating a pro-victim attitude received 3 points while those showing a pro-cyberbullying attitude scored 1 point. If participants did not have a clear opinion and were unsure they scored 2 points. Therefore the lowest possible score was 10 and the highest was 30. The higher the score attained, the more pro-victim or anti-cyberbullying attitude the pupil had. A score below 20 indicated a pro-cyberbullying or anti-victim attitude.

6 Results

Before conducting any analyses, the variables were examined for skewness and kurtosis in order to check normality. Tests (Appendix 23.2.1, 23.2.2 & 23.2.3) revealed that the data was not normally distributed so non parametric tests were used.

Results were analysed inferentially and descriptively using SPSS. Details of planned statistical analysis are included in the appendices (Appendix 23).

6.1 Internal consistency

The results for the cyberbullying responses (bully, reinforcer, assistant, defender, outsider) were analysed using Cronbach’s Alpha (a measure of the reliability of a scale). Cronbach’s Alpha for the scales were bully: $\alpha = .709$, reinforcer: $\alpha = .763$, assistant: $\alpha = .676$, defender: $\alpha = .954$, outsider: $\alpha = .869$. In addition Cronbach’s Alpha was also calculated for the Pro-Victim Cyberbullying Scale: $\alpha = .706$. It is accepted that an alpha of more than $\alpha = .7$ demonstrates a reliable internal consistency between variables (Field, 2005). Therefore the
results demonstrate good internal consistency for each of the cyberbullying roles and the cyberbullying attitudinal scale.

6.2 Answering the research questions

<table>
<thead>
<tr>
<th>Research question</th>
<th>Questionnaire</th>
<th>Results section</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of participant roles do adolescents take in cyberbullying situations?</td>
<td>PRS questionnaire</td>
<td>6.2.1</td>
</tr>
<tr>
<td>How does role behaviour change when adolescents are alone or physically with others?</td>
<td>PRS questionnaire</td>
<td>6.2.2</td>
</tr>
<tr>
<td>How do adolescent attitudes toward cyberbullying influence the role they take?</td>
<td>PRS &amp; PVS questionnaire</td>
<td>6.2.3</td>
</tr>
<tr>
<td>What are the gender differences between the roles adolescents take?</td>
<td>PRS &amp; PVS questionnaire</td>
<td>6.2.4</td>
</tr>
<tr>
<td>What is the relationship between adolescent age and the roles they take?</td>
<td>PRS &amp; PVS questionnaire</td>
<td>6.2.5</td>
</tr>
</tbody>
</table>

Figure 2: Table to show links between research questions and the data collected
6.2.1 Participant roles in cyberbullying situations

In accordance with the procedure described 74.5% of students were assigned to a participant role in a cyberbullying situation when alone (figure 3). 7.8% of participants were assigned to the role of victim; 0.8% to the role of reinforcer; 0.4% to the role of assistant; 36% to the role of defender and 29.5% to the role of outsider. 25.5% of students were not assigned a role and 0% were categorised in the bully role.

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>20</td>
<td>7.8%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Defender</td>
<td>93</td>
<td>36%</td>
</tr>
<tr>
<td>Outsider</td>
<td>76</td>
<td>29.5%</td>
</tr>
<tr>
<td>No role</td>
<td>66</td>
<td>25.5%</td>
</tr>
</tbody>
</table>

Figure 3: Table to show cyberbullying participant roles when alone

While in cyberbullying situations when physically with others, 71.4% of students were assigned to a participant role (figure 4). 6.8% of participants were assigned to the role of victim; 1.2% to the role of reinforcer; 2.0% to the role of assistant, 33.7% to the role of defender and 27.7% to the role of outsider. 28.6% of students were not assigned a role and 0% were categorised in the bully role.

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>17</td>
<td>6.8%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Assistant</td>
<td>5</td>
<td>2.0%</td>
</tr>
<tr>
<td>Defender</td>
<td>84</td>
<td>33.7%</td>
</tr>
<tr>
<td>Outsider</td>
<td>69</td>
<td>27.7%</td>
</tr>
<tr>
<td>No role</td>
<td>71</td>
<td>28.6%</td>
</tr>
</tbody>
</table>

Figure 4: Table to show cyberbullying participant roles when physically with others

When analysing specific behavioural statements relating to bully and victim behaviours, 2.3% of participants stated that they sometimes started cyberbullying while alone and 4.4% of participants sometimes started cyberbullying when physically with others (question 2 from the adapted PRS see appendix 22.1). 18% of participants were cyberbullied sometimes when alone and 1.9% were often cyberbullied when alone. When physically with others, 11.9% of participants were cyberbullied sometimes and 0.4% were often cyberbullied (question 1 from the adapted PRS see appendix 22.1).
### 6.2.2 Participant role and social groupings

The Wilcoxon Signed Rank Test (Appendix 25.1) analysed participant role behaviour ‘when alone’ and ‘when physically with others’. The results show that ‘when alone’ students were significantly more likely to be cyberbullied than when ‘physically with others’ (\(Z = -5.617, p<0.001, r = -0.35\)). In addition students engaged in significantly more assistant cyberbullying behaviour when ‘physically with others’ (\(Z = 4.707, p<0.007, r = 0.3\)). Students were more likely to participate in defender behaviours (\(Z = -5.965, p<0.001, r = 0.39\)) and outsider behaviours (\(Z = 4.991, p<0.003, r = 0.33\)) when alone. There were no significant differences between bully and reinforcer behaviours based on social groupings.

### 6.2.3 Participant role and attitude

The Kruskal Wallis test established a significant difference in students’ attitude towards cyberbullying and the role they took ‘when alone’ (\(H(5) = 20.180, p < 0.001\)) (Appendix 26.1) and ‘when physically with others’ (\(H(5) = 25.153, p < 0.0001\)) (Appendix 26.3). However the test did not establish whether the roles were significantly different from each other. Therefore post hoc analysis was performed using the Mann Whitney U Test, each with Bonferroni Correction (Appendix 26.2 & 26.4). An explanation of why these tests were used and an overview of the descriptive and inferential data can be found in the appendices (Appendix 26). Key findings are documented in 6.2.3.1 & 6.2.3.2.
6.2.3.1 When alone

Participant roles that provide support for cyberbullying (reinforcer & assistant) were compared with those that support the victim (defenders) in order to explore whether attitude affects the participant role taken during cyberbullying events. There were significant differences between the attitudes of assistants and defenders \((U = 86, p = 0.023, r = 0.19)\) and reinforcers and defenders \((U = 172, p = 0.001, r = 0.26)\) (Appendix 26.2). Figure 5 shows the mean PVS scores for different participant roles.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>19</td>
<td>21</td>
<td>30</td>
<td>27.05</td>
<td>2.25</td>
</tr>
<tr>
<td>Reinforcer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>2</td>
<td>19</td>
<td>21</td>
<td>20</td>
<td>1.41</td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Defender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>86</td>
<td>22</td>
<td>30</td>
<td>27.52</td>
<td>1.8</td>
</tr>
<tr>
<td>Outsider</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>74</td>
<td>19</td>
<td>30</td>
<td>26.74</td>
<td>2.69</td>
</tr>
<tr>
<td>No role</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>59</td>
<td>20</td>
<td>30</td>
<td>25.83</td>
<td>2.90</td>
</tr>
</tbody>
</table>

Figure 5: Table to show adapted PVS scores for participant roles when alone

6.2.3.2 When physically with others

There is a significant difference between the attitude of reinforcers and defenders \((U = 207, p = 0.015, r = 0.27)\) (Appendix 26.4). Figure 6 shows the mean PVS scores for different participant roles.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>16</td>
<td>20</td>
<td>29</td>
<td>25.31</td>
<td>2.52</td>
</tr>
<tr>
<td>Reinforcer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>3</td>
<td>19</td>
<td>27</td>
<td>22.33</td>
<td>4.16</td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>4</td>
<td>10</td>
<td>29</td>
<td>22</td>
<td>8.28</td>
</tr>
<tr>
<td>Defender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>76</td>
<td>23</td>
<td>30</td>
<td>27.8</td>
<td>1.62</td>
</tr>
<tr>
<td>Outsider</td>
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<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>69</td>
<td>19</td>
<td>30</td>
<td>26.52</td>
<td>2.67</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS scores</td>
<td>64</td>
<td>20</td>
<td>30</td>
<td>26.33</td>
<td>2.90</td>
</tr>
</tbody>
</table>

Figure 6: Table to show adapted PVS scores for participant role when physically with others
6.2.4 Gender differences

The Mann Whitney U test found females were significantly more likely to report being a victim of cyberbullying ‘when alone’ (U = 6417.5, p = 0.0001, r = -0.29) and ‘when physically with others’ (U = 6962, p = 0.009, r = -0.17). Females were significantly more likely to engage in defender behaviour ‘when alone’ (U = 4516, p = 0.0001, r = -0.32) and ‘when physically with others’ (U = 4579.5, p = 0.0001, r = -0.26). There were no other significant differences between gender and participant role behaviour. Females were significantly more likely to adopt pro victim or anti cyberbullying attitudes (U = 5082, p = 0.0001, r = -0.28). (See appendix 27.1 for a breakdown of the statistical analysis and descriptive statistics). Figure 7 and figure 8 show gender differences between participant roles ‘when alone’ and ‘when physically with others’ respectively. Figure 9 shows the differences between female and male PVS scores.

<table>
<thead>
<tr>
<th>Male cyberbullying roles when alone</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>6</td>
<td>4.4%</td>
</tr>
<tr>
<td>Bully</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Defender</td>
<td>36</td>
<td>26.3%</td>
</tr>
<tr>
<td>Outsider</td>
<td>48</td>
<td>35%</td>
</tr>
<tr>
<td>No role</td>
<td>44</td>
<td>32.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female cyberbullying roles when alone</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>14</td>
<td>11.7%</td>
</tr>
<tr>
<td>Bully</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Assistant</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Defender</td>
<td>57</td>
<td>47.5%</td>
</tr>
<tr>
<td>Outsider</td>
<td>28</td>
<td>23.3%</td>
</tr>
<tr>
<td>No role</td>
<td>21</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

Figure 7: Table to show participant role according to gender when alone
### Male cyberbullying roles when physically with others

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>6</td>
<td>4.5%</td>
</tr>
<tr>
<td>Bully</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Assistant</td>
<td>5</td>
<td>3.8%</td>
</tr>
<tr>
<td>Defender</td>
<td>32</td>
<td>24.3%</td>
</tr>
<tr>
<td>Outsider</td>
<td>43</td>
<td>32.6%</td>
</tr>
<tr>
<td>No role</td>
<td>44</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

### Female cyberbullying roles when physically with others

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>11</td>
<td>9.5%</td>
</tr>
<tr>
<td>Bully</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>Assistant</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Defender</td>
<td>51</td>
<td>43.9%</td>
</tr>
<tr>
<td>Outsider</td>
<td>26</td>
<td>22.4%</td>
</tr>
<tr>
<td>No role</td>
<td>27</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

Figure 8: Table to show participant role according to gender when physically with others

### Female PVS scores

<table>
<thead>
<tr>
<th>PVS scores</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td></td>
<td>21</td>
<td>30</td>
<td>27.56</td>
<td>1.87</td>
</tr>
</tbody>
</table>

### Male PVS scores

<table>
<thead>
<tr>
<th>PVS scores</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>131</td>
<td></td>
<td>10</td>
<td>30</td>
<td>25.90</td>
<td>3.20</td>
</tr>
</tbody>
</table>

Figure 9: Table to show adapted PVS scores for male and female participants
6.2.5  Age and participant roles

The Kruskal Wallis Test (Appendix 28.1) identified significant differences amongst different aged students and outsider behaviour ‘when alone’ and defender behaviour ‘when physically with others’. Figures 10 to 17 show how participant roles differed according to age. No other significant differences were found for age and participant role or age and attitude towards cyberbullying. See the appendices (Appendix 28.1 & 28.2) for an explanation of the tests used and details regarding inferential statistics.

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>6</td>
<td>11.8%</td>
</tr>
<tr>
<td>Defender</td>
<td>22</td>
<td>43.1%</td>
</tr>
<tr>
<td>Outsider</td>
<td>13</td>
<td>25.5%</td>
</tr>
<tr>
<td>No role</td>
<td>10</td>
<td>19.6%</td>
</tr>
</tbody>
</table>

Figure 10: Table to show Year 7 participant roles when alone

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>5</td>
<td>6.3%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Defender</td>
<td>32</td>
<td>40.5%</td>
</tr>
<tr>
<td>Outsider</td>
<td>17</td>
<td>21.5%</td>
</tr>
<tr>
<td>No role</td>
<td>24</td>
<td>30.4%</td>
</tr>
</tbody>
</table>

Figure 11: Table to show Year 8 participant roles when alone

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>2</td>
<td>3.7%</td>
</tr>
<tr>
<td>Defender</td>
<td>16</td>
<td>29.6%</td>
</tr>
<tr>
<td>Outsider</td>
<td>24</td>
<td>44.5%</td>
</tr>
<tr>
<td>No role</td>
<td>12</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

Figure 12: Table to show Year 9 participant roles when alone

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>7</td>
<td>9.5%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Defender</td>
<td>23</td>
<td>31.1%</td>
</tr>
<tr>
<td>Outsider</td>
<td>22</td>
<td>29.7%</td>
</tr>
<tr>
<td>No role</td>
<td>20</td>
<td>27.0%</td>
</tr>
</tbody>
</table>

Figure 13: Table to show Year 10 participant roles when alone
<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>3</td>
<td>6.3%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>2.1%</td>
</tr>
<tr>
<td>Defender</td>
<td>21</td>
<td>43.8%</td>
</tr>
<tr>
<td>Outsider</td>
<td>10</td>
<td>20.8%</td>
</tr>
<tr>
<td>No role</td>
<td>13</td>
<td>27%</td>
</tr>
</tbody>
</table>

**Figure 14:** Table to show Year 7 participant roles when physically with others

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>5</td>
<td>6.7%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Defender</td>
<td>24</td>
<td>32%</td>
</tr>
<tr>
<td>Outsider</td>
<td>17</td>
<td>22.7%</td>
</tr>
<tr>
<td>No role</td>
<td>27</td>
<td>36%</td>
</tr>
</tbody>
</table>

**Figure 15:** Table to show Year 8 participant roles when physically with others

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>3</td>
<td>5.8%</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Defender</td>
<td>16</td>
<td>30.8%</td>
</tr>
<tr>
<td>Outsider</td>
<td>20</td>
<td>38.5%</td>
</tr>
<tr>
<td>No role</td>
<td>12</td>
<td>23%</td>
</tr>
</tbody>
</table>

**Figure 16:** Table to show Year 9 participant roles when physically with others

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>6</td>
<td>8.1%</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Assistant</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Defender</td>
<td>23</td>
<td>31.1%</td>
</tr>
<tr>
<td>Outsider</td>
<td>22</td>
<td>29.7%</td>
</tr>
<tr>
<td>No role</td>
<td>19</td>
<td>25.7%</td>
</tr>
</tbody>
</table>

**Figure 17:** Table to show Year 10 participant role when physically with others

<table>
<thead>
<tr>
<th>Year group</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr 7</td>
<td>48</td>
<td>22</td>
<td>30</td>
<td>27.1</td>
<td>2.04</td>
</tr>
<tr>
<td>Yr 8</td>
<td>74</td>
<td>10</td>
<td>30</td>
<td>26.47</td>
<td>3.01</td>
</tr>
<tr>
<td>Yr 9</td>
<td>50</td>
<td>20</td>
<td>30</td>
<td>27.14</td>
<td>2.36</td>
</tr>
<tr>
<td>Yr 10</td>
<td>71</td>
<td>19</td>
<td>30</td>
<td>26.24</td>
<td>3.20</td>
</tr>
</tbody>
</table>

**Figure 18:** Table to show adapted PVS scores across year groups
7 Discussion

This section discusses the research questions in the context of psychological theory and previous research.

7.1 Research question 1: What type of participant roles do adolescents take in cyberbullying situations?

Participant roles in cyberbullying situations have not been explored in detail previously. When studied, researchers such as Wachs (2012) attempted to identify roles using dichotomised variables, a technique that has been criticised as too simplistic to explore the multidimensionality of cyberbullying (Tokunaga, 2010).

This study aimed to adapt the PRS (Salmivalli, 1998) to examine the particular roles that adolescents take during cyberbullying situations. In parallels drawn with intervention techniques used in traditional bullying, it is suggested that the bystander holds the key to prevent cyberbullying (Kraft, 2011). This study categorised the particular participant roles that adolescents take during cyberbullying situations, which is an important consideration when trying to develop strategies to combat cyberbullying.

The findings highlight that cyberbullying should be regarded as a group phenomenon as a majority of adolescents from the secondary schools had definable participant roles. This has an important implication for intervention programmes within the schools: since most adolescents are involved in the cyberbullying process, strategies to reduce cyberbullying should be directed towards all adolescents and not just at cyber bullies or cyber victims.

Although this study outlined the participant roles that individuals take there are a number of points to consider when exploring the results. While the original PRS combined self and peer nominations (each pupil in a class evaluated how well they and their peers fitted into the behavioural descriptions), this study included only self report information. In Salmivalli et al. (1996) study pupils tended to, if compared to peer estimates, underestimate their aggressive behaviour and emphasize pro-social or withdrawing behaviour in all participant role groups. This ‘self serving attribution bias’ (Osterman et al., 1994) impacted on the reliability of the data collected because individuals make attributions that favour their self-perception and support their self-esteem. Self reports are prone to social desirability biases.
resulting in underreporting of bullying behaviours (e.g. Craig et al., 2000) and it is probable that participants in this study reported in similar ways: overemphasising their defending behaviours and underestimating their cyberbullying behaviours. This social desirability bias impacts directly on the results due to the scoring system used because if defending behaviours are overemphasised a higher average mean score is created in the category. Therefore pupils are less likely to be categorised in a bully, reinforcer or assistant role because their score in these categories will be lower than their score for defending or withdrawing behaviours.

In addition, this study incorporated Salmivalli et al. (1996) additional scoring criterion (if the difference between a pupil’s two highest scores is less than 0.1, s/he does not have a clearly definable role) to establish clear participant roles. However, this additional criterion is arbitrary and does not contribute to the clarity of the results other than to inflate the ‘no role’ category. In future studies it would be sensible to drop this from the scoring system and assign a participant role if a participant’s highest score was above the mean for that scale.

The self report nature of the questionnaire and the scoring system affected the results by decreasing the number of pupils assigned to bully, assistant or reinforcer roles and increasing the number of pupils assigned to defender or outsider roles. This helps to explain why only 7.8% of adolescents were identified as victims (in the ‘when alone’ category) despite 19.9% reporting they were sometimes or often cyberbullied or why no bully roles were identified despite 2.3% and 4.4% of participants stating that they sometimes cyberbullied ‘alone’ or ‘when physically with others’ respectively.

A final point to consider when examining the trustworthiness of the participant roles assigned is to explore how the presentation of the questionnaire affected the results. Pupils were presented with the adapted PRS and asked to think about their behaviour regarding each statement (‘when alone’ or ‘when physically with others’). However this format could be leading and shapes the nature of responses in a way that reflects the researcher’s thinking (e.g. the respondent fills in each category differently because they feel this is what the questionnaire wants to achieve). In future, to eradicate this potential influence on the results, it would be beneficial for one set of participants to complete the questionnaire
when considering their behaviour ‘when alone’ and another set of participants to complete
the questionnaire considering their behaviour ‘when physically with others’. Analysis of data
produced in this way would reduce researcher influence and improve the trustworthiness of
the results gained.

Future studies exploring participant roles need to move beyond the self report data used in
this study. Peer data (mainly via nominations) have been used in school bullying research
(Dijkstra, Lindenberg & Veenstra, 2008; Salmivalli et al, 1996) and peer nominations
regarding participant roles in cyberbullying situations would provide further understanding
of adolescent actions. Furthermore it would generate multiple perspectives of cyberbullying
events.

7.2 Research question 2: How does role behaviour change when adolescents are alone
or physically with others during cyberbullying situations?

Smith (2012) described a variety of bystander roles in cyberbullying and results from this
study show that being alone or with other people in cyberbullying situations influences
behaviour. This needs to be considered when intervention strategies, such as bystander
involvement, are used to reduce cyberbullying.

Adolescents were significantly more likely to be victims ‘when alone’ than ‘when physically
with others’. This may be because individuals access the internet more often when alone
increasing the likelihood that any messages/pictures received will be viewed in isolation.
Another explanation is due to the susceptibility of misinterpretation of online
communication (McQuade, Colt & Meyer, 2009). Written communication is different from
face to face communication due to the lack of audiovisual assistance where non verbal cues
such as eye contact, frowning or head shaking are not available. Therefore, when alone, it
may be more difficult to tell if someone is intentionally cyberbullying or just trying to be
humorous or sarcastic. When physically with other people dialogue about messages may
lead to the formation of different interpretations resulting in less hurt for those involved.

Furthermore, given that researchers (Ortega, Elipe, Mora-Merchan, Calmaestra, Vega, 2009;
Didden et al., 2009) found that one of the emotions expressed by victims of cyberbullying is
loneliness, being with others when experiencing cyberbullying may act as a protective factor and lessen its impact.

In this study adolescents were more likely to engage in defender or outsider participant role behaviours ‘when alone’ in comparison to ‘when physically with others’. The methods employed in this study offer an explanation. Individuals completed the measures using self report methods. Subsequently when responding to the behaviour statements in the ‘when alone’ category, participants potentially overemphasised their prosocial or withdrawing behaviours as these are socially desirable answers. Additionally the bystander effect (Latane & Darley, 1970) may lead participants to feel less responsibility to defend ‘when physically with others’.

Alternatively, individuals may be more likely to engage in defender behaviours due to aspects of CMC. A lack of visual cues may result in individuals witnessing cyberbullying to misinterpret its nature or severity, therefore increasing the need to comfort a victim or stop a cyberbully. This factor may also be encouraged by the online disinhibition effect (Suler, 2004) in which people ‘go out of their way to help others’ (p. 321) due to the different ways people interact in cyberspace in comparison to face to face situations.

While being a victim or engaging in outsider or defender behaviours were more likely ‘when alone’, assistant behaviours were more likely ‘when physically with others’. Therefore adolescents in this study were more likely to join in cyberbullying or help a cyberbully when in a social group. It is feasible that aspects of CMC again influence this behaviour. While online, some people will say, type or do things they would not normally do in face to face situations. This disinhibition effect can be positive as outlined, but can also result in more negative behaviour as individuals feel free to express themselves with little reservation. With this decreased self awareness comes a decreased concern for how they are perceived or judged by others (Willard, 2007). Furthermore social norms theory states that in an effort to find belonging and acceptance youth mimic behaviours their peers engage in. Therefore if cyberbullying is seen as an acceptable or positive behaviour, groups of individuals engage in it in concordance with peer norms, without thinking of the negative psychological impacts it has on victims.
These findings highlight the importance of not only understanding bystander behaviour from an individual point of view but also examining it from a group experience. These results allow me to reason or hypothesize that bystander behaviour is significantly influenced by social groupings, which must be considered if bystanders are encouraged to prevent cyberbullying. Intervention programmes should help adolescents understand the importance of sharing any harmful messages or pictures they receive with those who can support them. This reduces the susceptibility of misinterpretation of online communication and also lessens feelings of loneliness. Individuals should be educated about the effects of CMC and its influence on behaviour. An understanding that actions are likely to be different when communicating online may help to increase self awareness and reduce cyberbullying behaviours. In addition adolescents should be supported to understand the role that their peers’ behaviour has on them and recognise they may engage in cyberbullying without considering the consequences for others. These areas require further research and will be explored in Study Two.

7.3 Research question 3: How do adolescent attitudes toward cyberbullying influence the role they take?

Findings show links between adolescent attitudes and participant roles. Specifically post hoc tests reveal stronger antibullying attitudes are linked with behaviours such as comforting a victim or telling others to stop cyberbullying while lower anti-bullying scores are linked with behaviours encouraging and supporting cyberbullying. These findings reinforce Machackova et al. (2013) who established that a tendency toward prosocial behaviour was a positive predictor of supportive behaviour in cyberbullying situations.

This result is positive as intervention attempting to promote anti-bullying or pro-victim attitudes may decrease assistant or reinforcer participant roles and increase defender roles. However it is important to recognise that this suggestion may be too simplistic given previous research findings.

Research into traditional bullying reports that while a majority of children are against it and would support victimised peers in hypothetical situations (Rigby & Johnson, 2006; Rigby & Slee, 1991) actual defending behaviour assessed by peer report is rare (Salmivalli et al., 1998). This may be similar in cyberbullying, but as cyberbullying is witnessed online and the
bully is not seen, feelings of safety may increase and concerns of retribution overcome leading to more defending behaviour.

Further research is required to understand the links between attitude and participant role. However, the findings suggest that education programmes implemented in the participating schools should encourage pro-victim or anti-bullying attitudes as this may reduce supportive behaviours for cyberbullies and encourage defending behaviour towards cybervictims thus providing an effective intervention.

While this offers a way to reduce cyberbullying it is important to recognise study limitations. It is likely that participant roles were influenced by social desirability due to the self report nature of the questionnaires and many adolescents identified themselves as defenders in comparison to reinforcers and assistants. Thus it is possible that the results were influenced by a small number of pro-bully participants so generalisations cannot be made. In addition cyberbullying takes place in social contexts where behaviour is influenced by many factors (such as relationship to the bully or victim or self esteem). Therefore to gain a more accurate picture of the influence of attitude on cyberbullying behaviour group context should be explored.

7.4 Research question 4: What are the gender differences between the roles adolescents take?

The results show that females were significantly more likely to be a victim of cyberbullying ‘when alone’ (female victims 11.7%, male victims 4.4%) and ‘when physically with others’ (female victims 9.5%, male victims 4.5%) and significantly more likely to engage in defender behaviours ‘when alone’ (female defenders 47.5%, male defenders 26.3%) and ‘when physically with others’ (female defenders 44%, male defenders 24.2%). Furthermore females had significantly higher pro-victim attitudes.

Smith et al. (2013) and Rivers and Noret (2010) suggest that girls may be more involved in cyberbullying which supports findings from this study. ‘When alone’ 59.2% of females took active roles with 23.3% identified as outsiders. In comparison only 32% of the roles taken by males were active with 35% categorised as outsiders. Similar results were found in the ‘when physically with others’ social grouping. These findings highlight that females may be
victimised more because they are more actively involved in cyberbullying. This view contrasts with findings from traditional bullying in which boys are more involved as bullies and victims (Boulton & Underwood, 1992). In traditional bullying males tend to bully others and be bullied through aggression and physical threats (Bosworth, Espelage & Simon, 1999) whereas females are more involved in bullying related to psychological torment as stated by Stephenson & Smith, 1989. Therefore females may be at greater risk of cyberbullying due to the inaccessibility to bully physically in cyberspace and the tendency that females are more likely to resort to name calling and mocking others for their physical appearance while online (Beale & Hall, 2007).

Females were significantly more likely to engage in defender behaviours which may be explained by their stronger pro-victim attitudes. Furthermore when compared with traditional bullying, research shows that girls are more likely than boys to be cast in the role of defender (Salmivalli et al., 1998) or to engage in behaviours associated with a defender role (Trach, Hymel, Waterhouse & Neale, 2010).

The findings suggest that intervention strategies need to focus on male and female students, however there are likely to be differences in information given to them. The nature of cyberbullying females engage in links to traditional bullying, therefore programmes for females educating how name calling/mocking others can cause psychological pain may reduce cyberbullying behaviours. In addition girls defend more than boys so encouragement and training informing the most effective ways to support peers would enhance defending behaviour that females already engage in. As 35% of boys in this study were categorised as outsiders, male participants are likely to benefit from information about the positive effects defending behaviour has on victimised peers.

While these intervention ideas are specific to the participating schools research in this area is contradictory. Machackova et al. (2013) found that gender was not a factor that increased or decreased bystander support for a victim while Bastiaensens et al. (2014) found, in their study of Social Network Sites, that girls had higher behavioural intentions to comfort victims, give victims advice, report cyberbullying incidents or defend victims, which are similar to the findings in this study. Tokunaga (2010) states there are many inconsistent
findings regarding gender and cyberbullying due to different samples and methodologies employed (Slonje et al., 2013).

Further research is required to determine the factors that underlie gender differences in cyberbullying and explore the specific behaviours that males and females engage in. In addition awareness of whether females and males interpret same or opposite sex defending differently will help to focus intervention planning.

7.5 Research question 5: What is the relationship between adolescent age and the participant roles they take?

Results show few differences between age and participant roles and there were no significant differences between age and attitude towards cyberbullying.

Age did significantly affect the outsider participant role ‘when alone’ and the defender participant role ‘when physically with others’. Analysis suggests that more adolescents took outsider roles as their age increased (year 7 – 25.5%, year 8 – 21.5%, year 9 – 44.4%, year 10 – 29.7%) and that defenders were more common in younger year groups (year 7 – 43.8%, year 8 – 32%, year 9 – 31%, year 10 – 31.1%).

Findings from traditional bullying offer insight into these results. Salmivalli et al. (1998), in a two year follow up study, found that although participant roles in traditional bullying appeared relatively stable over time the percentage of outsiders increased with age. While this study’s findings are similar, longitudinal research is needed to confirm this in cyberbullying. Furthermore research has found that younger students (10 years of age) tended to be more supportive of victims in their peer reported defending (Salmivalli & Voeten, 2004) and self reported defending (Trach et al., 2010). While there were more adolescents from year 7 (aged 11 years) in this study who were categorised as defenders, they were older than those in traditional bullying. However, given that the peak of traditional bullying generally occurs at younger ages (see Slee, 1995) the results of this study suggest similarities in cyberbullying and bullying behaviours. Further research is required to explore these similarities in more detail.

Regarding cyberbullying, Tokunaga (2010) argued that the trend across studies with age is for a curvilinear relationship for victimization, with the greatest incidence around 13 – 15
years. This study reports no significant differences between victimisation rates between 11 – 15 year olds and that, except for the stated behaviour differences, participant roles and attitudes were similar across year groups. This finding is important as it highlights that resources and intervention strategies in the participating secondary schools should be implemented across year groups. This is sensible given that Livingstone and Hadden (2012) reported that 95% of 9 – 16 year olds in the UK access the internet at home and 50% are online via mobile devices.
8 Conclusion

Study One aimed to understand the behaviours adolescents engage in during cyberbullying situations. It did this by investigating the specific participant roles that individuals take based on self-report measures in two social situations: ‘when alone’ and ‘when physically with others’. In addition, it explored whether attitude towards cyberbullying, age, and gender affected the behaviour.

Kraft (2011) states that bystander involvement is vital to reduce cyberbullying but prior to this study, participant roles have not been explored in detail. This study shows that a majority of adolescents across 4 year groups from 2 secondary schools have definable participant roles and therefore within the school, cyberbullying should be viewed as a group process. While Smith (2012) described a variety of bystander roles in cyberbullying, this study discovered that social groupings (being alone or physically with others) significantly impacts behaviour, which must be considered when developing intervention strategies and should be explored in future research to see if similar results are obtained. This study demonstrates a link between attitudes towards cyberbullying and the roles individuals take, which implies that intervention strategies designed to increase pro-victim or anti-bully attitudes may effectively decrease the prevalence of cyberbullying. In addition, significant differences between male and female behaviour highlight the benefits of gender-specific intervention programmes focusing on the increased likelihood of female victimisation, building on the supportive defending behaviour females already participate in to ensure they understand the most effective ways to support their female and male peers, and encouraging males to help and support victimised peers instead of adopting outsider roles. Furthermore, this research shows that intervention programmes in the participating schools should be aimed at all age groups as there were few significant differences between age and the participant role adopted.

In addition, this study hypothesises that the online disinhibition effect and social norms theory help to explain cyberbullying behaviour. While it takes time and replication of findings to build good theory Espelage, Rao, and Craven (2013) report that discussions of explanatory theories of cyberbullying involvement among youth are often piecemeal and
sparse. Therefore it is hoped that this study's findings can inform future research in cyberbullying.

Study One provided more understanding of the roles that adolescents take during cyberbullying situations while exploring the influence of social grouping, attitude, age and gender. The data were collected via self report, which is a suitable method as it sheds light on the subjective experiences of those involved (Espinoza and Juvonen, 2013). However given that there are reasons to question the validity of self reports in cyberbullying (e.g. youth underreport cyberbullying behaviour out of a desire to present themselves in a positive light, fear of adults taking away electronic devices, not viewing negative online behaviour as bullying, or over reporting cyberbullying behaviour to appear tough or technologically savvy (Underwood and Card, 2013)), it is important to better understand the perceptions and (re)actions of bystanders using a range of methods.

With this in mind, the findings from Study One will be explored and examined to develop a better understanding of the factors that encourage or limit engagement in cyberbullying situations. Ackers (2012) states that school students are the greatest resource available to establish measures to counter cyberbullying and, as a result, it is important to hear the voices of those most involved. Therefore Study two will further explore students’ understanding of participant role behaviour specifically focusing on what may promote or inhibit reinforcing, assisting and defending behaviours by allowing young people to share their cyberbullying experiences. (See Appendix 29 for researcher reflections for Study One).
References


Study Two
10 Introduction

Cyberbullying victimization is related to numerous negative health consequences including emotional distress (Sahin, 2012), depression (Kowalski & Fedina, 2011), self harming behaviours (Price & Dalgleish, 2010) and suicide attempts (Schneider, O’Donnell, Stueve & Coulter, 2012). Consequently cyberbullying poses a danger to adolescent mental and physical health.

The Education and Inspections Act (2005) states that schools must have measures to prevent all forms of bullying and from January 2012 a new OFSTED (school Inspection) framework was introduced requiring inspectors to consider ‘types, rates and patterns of bullying and the effectiveness of the schools actions to prevent and tackle all forms of bullying and harassment. This includes cyber-bullying...’ (P. 42). In order to achieve an outstanding judgment schools must show that “all groups of pupils feel safe at school and at alternative provision placements at all times. They understand very clearly what constitutes unsafe situations and are highly aware of how to keep themselves and others safe, including e-safety” (P.44).

There is growing recognition of the implications of cyberbullying within the field of educational psychology and Ackers (2012) suggests that students are potentially the greatest resource available when establishing measures to counter cyberbullying. In addition those who are present during cyberbullying situations, namely bystanders, present a critical group to consider in prevention and intervention strategies (Cross & Walker, 2013). Yet despite this, there is a lack of understanding regarding adolescent perceptions of bystander behaviour in cyberbullying which led Cross and Walker (2013) to state that “further research is required to investigate bystander (participant) roles and ways to engage bystanders to help cyberbullying targets, ways in which bystanders can best intervene in cyberbullying and what is likely to increase the odds of cyberbystanders intervening” (Kindle location 6722/8658). This study aims to contribute to this understanding.
10.1 Computer Mediated Communication (CMC)

Online interactions take place with the use of information and communication technologies, which result in CMC. Aspects of CMC likely influence bystanders’ behaviour when reinforcing or defending cyberbullying.

While those wishing to adopt assistant or reinforcer roles are easily able to engage in cyberbullying (Kowalski, 2008) (such as forwarding a picture), they often do not perceive themselves to be participants despite engaging in negative behaviours (Kraft, 2011). In contrast those wishing to adopt supportive roles, namely defenders, are also likely to be influenced by CMC. The lack of knowledge regarding the size of the audience and the inability to see the emotional reaction of a victim (Slonje & Smith, 2008) may affect behaviour.

Research on psychology and the internet has, in general, shown that people behave differently online in comparison to similar offline situations (Joinson, 2003 & Suler, 2004). This difference in behaviour is called disinhibition (Joinson, 1998) or an online disinhibition effect (Suler, 2004).

Suler (2004) suggests that the disinhibition effect can work in one of two ways. People share personal information revealing fears, wishes or emotions in an act known as ‘benign disinhibition’ or people are rude or show threatening behaviour, which is called ‘toxic disinhibition’. Suler (2004) argues that six different factors individually or collectively are involved in the disinhibition effect.

According to Suler (2004) a key factor of toxic disinhibition, and an element of cyberbullying, is anonymity. Anonymity allows individuals to separate online behaviours from their in-person lifestyle and identity, which may increase the likelihood of making negative comments or posting inappropriate pictures of others. While in its most extreme form it results in an individual being unidentifiable, research highlights that a cyberbully is often known to their victim (Mishna, Cook, Gadalla, Daciuk, and Solomon, 2010). Therefore it is possible that the audiovisual anonymity during cyberbullying may affect behaviour. A lack of non-verbal cues such as eye contact, frowns or head shaking may lead to a greater willingness to victimise others.
Diener (1979) reports that anonymity causes a decrease in an individual’s sense of individuality and personal responsibility and recent studies on CMC have found similar results. Furthermore Matheson and Zanna (1988) argue that evidence from CMC research show increased private self awareness and reduced public self awareness. This is likely to affect bystander behaviour in cyberbullying situations.

As a result, a reason individuals engage in cyberbullying behaviour maybe due to a decrease in self control and a lack of individual regulation due to the absence of restraints that occur in face to face interactions. In support of this view Balinska, Szuster, and Winiewski (2013) found that negative bystander behaviour was more likely to occur online than during face to face contact. Moreover, due to the context of cyberbullying, those who witness it, the bystanders, may behave in different ways in comparison to face to face interactions for similar reasons. If bystanders witness cyberbullying it is difficult to know how many others saw the event, which may lead to diffusion of responsibility caused by the bystander effect culminating in a lack of supportive behaviour (Latane & Darley, 1970; Thornberg, 2007). Furthermore given that those who witness cyberbullying are unlikely to see a victim’s emotional response, they may underestimate the severity of the act. In addition, the lack of visual cues may decrease empathy of those who witness the event and limit any potential intervention. It is also important to note that, given the audiovisual anonymity of cyberbullying, unless support for a victim or rejection of the bullying is explicitly expressed, the behaviour may continue as the bully, victim and bystanders are not able to adjust their behaviour due to non verbal cues.

In contrast aspects of CMC may also encourage defending behaviour as online activities are perceived to be monitored less by bullies. Likewise the cyberbully and defender are not able to see each other online and this distance may encourage supportive behaviour due to the sense of anonymity.

10.2 Social influence

Smith (2012) described a variety of bystander roles in cyberbullying and Study One highlighted significant differences in victimization, assistant, defender and outsider behaviour when ‘alone’ or ‘physically with others’. Thus it appears, as proposed by Festl, Scharkow & Quandt (2012) in a study of peer influence in cyberbullying victimization and
perpetration, that adolescent’s actions are affected by social influence. In traditional bullying Nickerson, Mele & Princiotta (2008) found the desire to be accepted by peers and peer pressure led to bystanders becoming involved in bullying. In contrast positive peer pressure predicted defending behaviour (Pozzoli & Gini, 2010). With this in mind the social influence of other bystanders in cyberbullying situations may result in similar actions.

Social Identity theory (Hogg & Abrams, 1988; Tajfel & Turner, 1979) states that aspects of the self can be divided into categories that reflect personal or social identity. Each identity is associated with a range of concepts that guide thoughts, feelings and behaviour. The sense of self at any particular time is dependent on what is most salient (for e.g. when with others social identity is important). Each social identity is associated with a range of attributes that characterise the prototypical group member. In addition they are associated with group norms that influence how group members should think and behave. Therefore social grouping may influence behaviour as there is a desire to gain acceptance and praise and avoid punishment and exclusion from others.

In addition social relationships are likely to influence behaviour. Bastiaensens et al. (2014) found that bystanders had increased behavioural intentions to join cyberbullying when other bystanders were good friends. Furthermore Machackova, Dedkova, Sevcikova & Cerna (2013) found that bystander’s positive relationships with victims led to more supportive behaviour in comparison to those with bad or nonexistent relationships.

10.3 The views of children and young people

In recent years a handful of studies have explored the role bystanders play in cyberbullying situations using quantitative methods, however there are relatively few studies that incorporate qualitative measures (Mishna & Van Wert, 2013) and gain the voice of the child. Subsequently if bystanders are seen as key in solving the problems of cyberbullying (Kraft, 2011; Spears, Slee, Owen & Johnson, 2008) it is vital that they have opportunities to share their experiences. Heary and Hennessy (2002) state that understanding these experiences is crucial for prevention and intervention efforts. Furthermore Davidson, Ridgway, Kidd, Topor and Borg (2008) have highlighted that young people will only be supported if cyberbullying prevention and intervention is guided by an intimate understanding of the everyday lives and perspectives of those actually involved. In order to explore these areas this study will
attempt to gain the views of adolescents regarding what may promote or inhibit bystander involvement in cyberbullying situations.

11 Aims

This study will provide the opportunity for pupils to share and reflect on the experiences of bystander behaviour in cyberbullying situations.

There are two principle aims:

- To build and develop the current psychological knowledge regarding adolescent cyberbullying bystander behaviour.
- To understand adolescents’ perceptions of what may promote or inhibit bystanders from becoming involved in cyberbullying.

12 Research Questions

The aims of the study will be addressed by the following research questions.

1. What promotes adolescent participation in cyberbullying?

2. What inhibits adolescent participation in cyberbullying?

3. What influence do adolescents perceive bystanders have in cyberbullying situations?

4. How does social grouping affect adolescent cyberbullying bystander behaviour?

5. What are the gender differences in bystander behaviour in cyberbullying situations?
13 Method and procedure

13.1 Participants

All secondary schools in a single local authority in the south west of England were approached to participate in this study. Two schools agreed, however, after Study One, one school opted out (they wanted to use the data from this study for their OFSTED inspection, which was completed before Study Two began. After the inspection the school no longer considered the research as a priority and did not proceed with Study Two). Consequently, of the 132 students who completed Study One questionnaires in the remaining school, 78 showed interest in participating in a follow up study. Permission slips asking for both adult and pupil signatures (Appendix 21.6) as advised by Morgan, Gibbs, Maxwell & Britten (2002) were distributed. 28 positive consent forms were returned by the stated cut off date, which represents a response rate of 35.8%.

Data were gathered in focus groups. The focus groups were conducted with female and male participants from the same year group (five year 7 boys, five year 7 girls, four year 8 boys, six year 8 girls, four year 9 boys, four year 9 girls). The participants were predominantly White British. The sample is not representative but aims to provide insight into the experiences and understanding of cyberbullying bystander behaviour in this school.

13.2 Ethical considerations

Cyberbullying poses a significant threat to adolescents’ mental and physical health (Bastiaensens et al, 2014). In addition young people are extremely unlikely to report problems they experience online to adult authorities for fear that adults will try to reduce or remove their access to online communication (Mishna, McLuckie & Saini, 2009).

In this study adolescents discussed cyberbullying in focus groups with peers from their form group, which may result in revelations to an adult about online victimisation for the first time. In this situation the researcher is faced with a dilemma; specifically the researcher must decide whether confidentiality should be broken in order to meet the ethical principle of protection (Mishna, Antle & Regehr, 2004). Given these sensitivities participants were informed that while their comments were confidential, if the researcher was concerned in any way the Head of Health (school lead for social and emotional development) from the
participating secondary school would be informed. In addition a prior agreement was established with the Head of Health so that thoughts or feelings evoked from the focus groups could be discussed.

The study gained full ethical approval from the University of Exeter Ethics Committee which is available in the appendices (Appendix 21.2).

### 13.3 Researcher perspective

The chosen methods were best suited to answering the research questions while considering the ethical issues. Therefore this study sits within a theoretical assumption of pragmatism (Morgan, 2007). The study adopts an Interpretivist perspective, which values experiences, searches to find meaning by understanding how individuals make sense of their world (Robson, 2002), and allows an understanding of cyberbullying bystander behaviour to develop.

It is important to consider that adolescent views and opinions were influenced by me as a white, married, 35 year old male enrolled on a doctoral training course. Views were affected by my questioning, prompts, probes and non-verbal cues. In addition participants’ willingness to express their thoughts were influenced by their peers. Study Two assumed that these interactions led to co-created meanings that could not be generalised or replicated. To ensure awareness of these factors throughout data collection I used contact summary sheets to reflect on the process (Miles & Huberman, 1994) (Appendix 39).

### 13.4 Pupil focus groups

The study used focus groups to explore and listen to adolescents’ thoughts, feelings and experiences of cyberbullying bystander behaviour.

Qualitative research provides opportunities to engage with the richness of young people’s thoughts and feelings about themselves and their world (Mishna et al., 2004) and allows deeper understanding of group processes and culture from young people’s perspectives (Thornbury, 2007). Researchers are able to understand nuances, subtleties and dynamics of cyberbullying as well as feelings and emotions with qualitative approaches (Spears et al., 2008) yet the majority of literature on cyberbullying research consists of quantitative
research (Mishna & Van Wert, 2013). While there are different methods to choose from, focus groups were used in this study because:

- Focus groups are synergistic (Stewart & Shamdasi, 1990) as the group works together and group interaction is explicitly used to generate data and insight (Morgan, 1997). These features relate to key aspects of the study, namely how social groups affect (cyberbullying) behaviour.
- Focus groups present more natural environments than individual interviews as participants are influencing and are influenced by others which is similar to real life (Kreuger & Casey, 2000).
- Discussions in focus groups reflect how work is conducted in the classroom (Mauthner, 1997) and therefore is believed to help children feel more comfortable.
- Focus groups provide a sense of safety when discussing sensitive areas of student interaction (Robson, 2002).
- The social context of focus groups allow ideas and language to emerge in more naturalistic settings compared with in-depth interviews and reflects social constructions (normative influences, collective and individual identity) which are important in allowing understanding of the world (Bloor, Frankland, Robson & Thomas, 2001).

Focus groups were formed with students of the same gender because Study One identified that male and female participants behaved in different ways. In addition focus groups were conducted with participants from the same tutor groups across years 7, 8 and 9. Naturally occurring homogenous groups improve group interactions and discussion (Mauthner, 1997), which is beneficial for the study.

13.5 Research tool

Within focus groups a semi-structured interview schedule provided structure and ensured relevant topics were explored to gain the views of adolescent participants. Mauther (1997) suggests that interviewers help to equal power discrepancies between the researcher and participant by being reflexive and responsive and allowing participants to set their own agenda and talk about their own lives. To aid this process each participant drew a rich
picture (Checkland, 1981) of a ‘typical cyberbullying experience’ (see appendix 33 for an example) which they described to the group. This technique allowed all participants to contribute to the discussion at an early stage helping quiet or less confident adolescents to share ideas. In addition it was hoped that this technique limited the pressure exerted by the group on participants to conform to socially acceptable viewpoints, which decreases the sharing of divergent views and experiences. It also allowed the researcher to guide discussion using participants’ own words and examples (as advised by Robson, 2002).

In addition participants were asked to scale how likely it was for others to reinforce, assist, defend or observe in cyberbullying situations, and how behaviour may change ‘when alone’ or ‘when physically with others’. Scaling questions did not require simple and concrete answers but allowed participants to respond in degrees of agreement. It was considered that this would increase participant’s willingness to share their feelings and thoughts, and also create opportunities for the researcher to explore differences in views and opinions (helping to understand the subtleties and dynamics of cyberbullying behaviour). (See appendix 31 for the interview schedule).

14 Data analysis

Transcribed interviews (Appendix 30) were analysed using thematic analysis (Braun & Clarke, 2006). The approach “acknowledges the ways individuals make meaning of their experience, and, in turn, the ways that the broader social context impinges on those meanings whilst retaining focus on the material and other limits of reality”, (Braun & Clarke, 2006, P.86) which was deemed important in this study as both personal and social experiences of cyberbullying were sought.

Themes were developed by searching the data set to find repeated patterns of meaning; this process was based on the researcher’s interpretations. The data was analysed inductively and therefore the researcher did not try to fit it into a pre-existing coding frame. In addition thematic analysis was conducted at a latent level as underlying ideas, assumptions and conceptualisations of the data were examined.

The data was entered into NVivo (a qualitative data analysis computer software package) and the researcher became familiar with the data by reading the transcripts and listening to
the audio recordings. At this stage initial observations were noted for each focus group transcript. Next, important features of the data (relating to the research questions) were generated to ensure a semantic and conceptual understanding of the data was generated. The important features or codes from each transcript were then examined and themes were found within the data set. The themes were checked in relation to the coded extracts and data set and the relationships between them explored. The themes were then defined and named and used to create a ‘story’ of the data. An overview of the six phases is located in the appendices (Appendix 37).
15 Results

Five themes were identified in the data: Computer Mediated Communication (figure 20), social influence (figure 21), popularity and status (of those involved) (figure 22), the decision to become involved (figure 23), and the effects of involvement (figure 24).

Overviews of the key findings within these themes are presented visually in mind maps on the next pages. Within each theme subthemes were also identified. The interactions occurring between each theme and the key findings that arose are shown visually in a Venn diagram (figure 25).

Figure 19: A mind map to show the themes developed from the data
15.1 CMC

Figure 20: A mind map to show the key findings within the theme Computer Mediated Communication
Aspects of CMC contribute to adolescents’ decision to become involved in cyberbullying and participants specifically discussed anonymity, asynchronicity and a lack of audio visual cues. The students stated that some cyberbullying was anonymous (when the victim, bully and others involved did not know each others’ identity), however this cyberbullying appeared to be specific to sites that encouraged anonymous communication and online gaming. Anonymity encouraged individuals to join in cyberbullying because it was difficult to trace and therefore provided protection (Appendix 38.1 & 38.2). Similarly this factor also created security for defenders to become involved as they could not be identified (Appendix 38.3). However while anonymity provided protection for defenders, they were reluctant to engage because of fear of retribution from the bully (Appendix 38.4).

While some cyberbullying was anonymous, the majority discussed by participants occurred in established relationships. This finding is similar to research by the National Children’s Home (2005), and Mishna et al. (2010) who found that in 89% of reported incidents Canadian adolescents knew the identity of their cyberbullying perpetrators. Participants in this study stated that truly anonymous bullying appeared to be opportunistic and that bullying occurred in preexisting relationships as bullies, reinforcers and assistants knew what would hurt victims (Appendix 38.5). Therefore audio visual anonymity contributed to bystanders becoming involved. Adolescents suggested that not seeing others’ reactions made it easier to reinforce or assist the bullying because it decreased the feelings of personal responsibility and reduced thoughts about the effects of one’s actions on others (see appendix 38.6 for further quotations).

Suz: And when you are like online it’s like…you just write more…you just want to keep writing and you don’t realise how much bad things you’ve said but face to face you don’t really want to say anything.

Mel: And like you have more power on the internet than face to face.

Interviewer: ok tell me about that.

Mel: Because they don’t really know what they are doing to the other person so they can say what they want and they don’t know how it affects the other person that they are saying it to.

For similar reasons the lack of audio visual cues also decreased the likelihood of defender involvement because they were unsure whether the victim required support.
Karen: Yeah so...you don’t really want to tell them but when it is over the internet or like on your phone you do want to...you wish they knew what you were feeling...you wish they could see...but if it was face to face you don’t want to tell them because then they would make fun of you more.

Interviewer: So if people could see the reactions would they be more likely to get involved?

Karen: Maybe on the victims side then more people would join and get involved and the cyberbully would feel alone.

Adolescents also commented that the asynchronous nature of CMC encouraged them to join in cyberbullying.

Nancy: Yeah and it is like really – if they comment you have a chance to like think it through whereas if they said it right to you and you stopped and like talked, thinking about it, they would say ‘oh you don’t know what to say next, you don’t have any comebacks’.
15.2 Social influence

Being alone promotes defending and inhibits cyberbullying
- Feel more empathy and think about the victims feelings

Being with others inhibits defending
- Individuals do not want to be seen as different to their peers

Being with others promotes cyberbullying
- Encouragement
  - Enhances status
  - Less concern about the victim or consequences

Relational ties promote cyberbullying and defending behaviour
- More thought about the rewards and consequences of becoming or not becoming involved

Figure 21: A mind map to show the key findings with the theme Social Influence
When presented with a scenario, focus group participants stated they were more likely to assist cyberbullying when physically with others. However they were more likely to defend a victim when alone (Appendix 36). This finding supports results from Study One. Adolescents stated they were more likely to assist cyberbullying when physically with others for several reasons including encouragement from friends and being easily influenced (see appendix 38.7 for additional quotations).

Interviewer: so if you are by yourself you may be more inclined to stop it?
Beth: yeah you feel differently about it.
Interviewer: How do you feel?
Beth: A bit worried about the person and like is this right, is this wrong, should I join in, should I not. Then like when you are with other people it’s just like let’s just play along with this, it seems fun and like all my friends are doing it. And then everyone encourages everyone else and then it turns like that you want to join in.

Assisting a cyberbully also helped to enhance an individual’s status.

John: yeah cause there would be more people and they would be like showing off.
Fred: yeah.
Bill: yeah.
Interview: anything else?
John: cause then like all your friends would be like, oh gosh, where did you find that and then they would all laugh with you and then you feel...
Bill: they would like, it is quite funny if you mess around and show off in front of friends.
John: and you probably don’t think of the effects cause you are more concentrated on showing everyone before it gets deleted.

In groups there were fewer concerns about the consequences because of the influence of others.

Burt: It is almost like a share of the blame – it is not them, it is everyone else. It was the hype of the moment, it was on that day when we were having that laugh that was what it was. It wasn’t that I was being horrible and then they can use the argument to almost defend themselves if they were being questioned by a teacher.

Adolescent views also show that if friends had already commented online then others were more inclined to assist the cyberbullying (Appendix 38.8). In contrast individuals were more likely to engage in defending behaviour when alone because they felt more empathy and thought more about how their actions might affect others.
Kim: When you are by yourself you think before you write things. When you are with other people you just write straight away.

Sally: Yeah and then you just get carried away.

Kay: Yeah because you are being told what to write. Usually when you are with other people they tell you what to write.

Kim: but by yourself you don’t just keep hitting send you actually think ‘should I send this one off?’ or ‘could it hurt them?’ Whereas if you are with others they might be like ‘just send it, it will be fine’.

Adolescent behaviour was also influenced by relational ties with those already involved. Prior relationships meant that bystanders were more likely to engage in defending or cyberbullying behaviours.

Interviewer: what would encourage people who see cyberbullying to stop it?

Suz: just to like either not get involved - yeah the best thing I think to do is just not get involved

Racheal: yeah but you have to get involved if it is your friend

Suz: if it is a good friend then yeah but if you are like a random onlooker then you shouldn't get involved cause a lot of the time you suffer the consequences if you get involved.

Emma: like, if it was a family member and your sister got involved then they would get involved quite quickly, whereas if it was someone you hang out with at school, if you are not that close then they probably wouldn’t get involved. Whereas a best friend who you have known for ages you would get involved.
15.3 Popularity and status

Figure 22: A mind map to show the key findings within the theme Popularity and Status
Another factor that adolescents discussed regarding involvement in cyberbullying was the popularity and status of those already involved. Perceived high status peer involvement increased the likelihood that others would assist the cyberbullying behaviour and decreased an individual’s willingness to defend a victim. There were two reasons for this. One being that adolescents felt their status would rise as a consequence of aiding a high status peer (see appendix 38.10 for further quotations).

Fred: If you are popular loads of people would join in.
Interviewer: Can you tell me about that?
Fred: I think it is almost a hierarchy of everything so they care more about some people that might make them look good more than the people that they don’t really care about cause they don’t think that they have almost any use to them.
Interviewer: anything else?
Fred: Yeah it can get them into that crowd.
John: It is almost like they grab onto other people’s comments almost to make them feel bigger as well because it is almost like adrenaline isn’t it. When something is happening to someone else and they are putting them down and they are getting higher and higher in their head and getting bigger and bigger. Some people especially with the popularity thing, they would jump on and start as well.

The other being that joining cyberbullying when high status individuals were involved was perceived to lower the likelihood of becoming a victim.

Alf: but then again you’ve got the thing that say you know someone who is really popular that is cyberbullying someone, they could just try and get in friends with them, say if they commented or whatever, which would stop the bullying for them cause they would go up the scale.

Adolescents were also less likely to defend those who were bullied by a high status individual due to fears of retribution and questions as to how effective the intervention would be.

Sam: Cause they could, they are like the only people trying to stop it whereas say if they suddenly say ‘guys stop’ then they always feel like the bad people cause everyone else is still bullying and you just write a comment saying ‘don’t’ or ‘stop doing this’ and then no one listens to you and you just carry on saying well there is no point in trying to stop this because it is not going to stop.
Mel: or they are scared they will get bullied too.
It is also important to note that while the majority of participants commented on how adolescents would be influenced by their peers, a small minority talked of the importance of individual viewpoints.

**Emma:** Yeah, everyone wants to fit in but a lot of the time if it means you are not you, then there is no point in fitting in. If you are gonna fit in and they want to be your friend then they should be your friend for who you are not because you have joined in bullying someone because it is stupid and pathetic. You have your own brain use it, whether it means fitting in or not.
15.4 Decision to become involved

Figure 23: A mind map to show the key findings within the theme Decision to become involved
All the factors discussed (CMC, social influence, the popularity and status of those already involved) contribute to a decision making process in which the risks and rewards of engagement are analysed before a choice is made to become an active participant in a cyberbullying situation or remain a passive bystander.

As discussed the rewards of assisting or reinforcing a cyberbully are to improve personal status or decrease the chance of future victimization. If observers are to act as defenders they also weigh up the reward of helping a friend by confronting a bully with the risks of retribution (see appendix 38.11 & 38.12 for further quotations).

Lyn: *Maybe because they don’t want it to happen to them.*
Rachel: *yeah they are scared.*
Lyn: *They are scared of being like hurt and….and they just wouldn’t.*
Sarah: *To be honest they don’t want it happening to a friend but they also don’t want to get involved because then they are part of the situation. They know what is going on.*
Lyn: *mmm. People will have a go at them and say stuff about them for being on the victim’s side. So yeah, the bully might bully them.*

Alternatively a defending option with less risk was to tell an adult or comfort the victim away from a bully’s online gaze.

Interviewer: *so how can you help?*
Elle: *be supportive.*
Jo: *but not say anything to the bully cause that could make it worse.*
Interviewer: *so what would you do?*
Elle: *Well you could like ring someone…well ring the person and be like are you ok and then like make sure they are all right or you could message them or..*
Jo: *And if they are being told how horrible they are then you could say like they are actually really nice…and yeah….say the opposite to like boost their confidence.*
15.5 Effects of involvement

![Mind map]

**Figure 24**: A mind map to show the key findings within the theme Effects of Involvement
The effects of involvement in cyberbullying fell in three areas: negative impacts from cyberbullying behaviour or the negative or positive impacts of defending behaviour.

Participants felt that involvement in cyberbullying often escalated a situation or caused victims to become embarrassed or ashamed.

*Jon:* if it’s the victim’s friend, then they are like, well, sometimes the victim’s friends will contact the bully, say something rude to the actual bully, so like retaliating and fighting back, sort of.

*Fred:* they’ll get like everyone’s parents involved.

*Interviewer:* ok

*Jon:* like maybe the victim didn’t want that and maybe they just wanted to leave it.

*Interviewer:* ok

*Jon:* but then they’ll get everyone involved and then it will just get overwhelming and stuff like that.

*Kate:* yeah cause usually their friends don’t really want to get involved otherwise they could get bullied as well, and if you get involved everyone else is like ‘oh they got involved’ and now they are getting bullied, and where as if you are on the bullies side you are not really going to get bullied back cause you are the bully who will bully them

*Interviewer:* ok

*Jenny:* and sometimes the victim, if they go and like get really upset and tell their friend it will make them look weak and that is why they don’t tell many people cause they don’t want to look like they can’t handle it themselves.

In addition, participants perceived victims often felt stress or depressed, which potentially resulted in school absence or isolation. At its most extreme this caused suicidal thoughts.

*Interviewer:* ok is there anything else about how others joining in can affect the situation?

*Mel:* it can also, like people get very depressed about it, like the person, cause I’ve watched this film once it’s called cyberbully. It’s about a girl who gets cyberbullied and she has these tablets and she nearly kills herself cause of the depression and everything, and when everyone joins in and they start saying horrible stuff, so it just makes it a lot more worse.

*Sarah:* yeah, like people will just comment like ‘ha ha’ and just that will make it worse.

*Rachael:* And they won’t really want to go to school cause everyone will be like crowding around them, and if you start crying it will be even worse. And when they are like walking home everyone, they will feel like really, like they don’t want to walk home cause there will be too many people out there that they will be scared because of what has happened before.

*Dave:* and that will also help like with your grades and stuff so if you are going through an exam and your being cyberbullied at home, like it won’t make you feel at all good for when you do the exam but if you know you are being pushed up again you will feel a lot happier.
**Mike:** Plus even if you are being cyberbullied then it leads to like what Dave says and going into an exam, you might be like stressed so then you haven’t revised and then you just want to get the test done, so you just rush through, and like we were saying earlier, it could affect your career.

Defending behaviour related to positive and negative effects. Sometimes defending behaviour escalated a situation:

**Sam:** So they will, so they will put like leave my friends alone, why are you doing this? And then the cyberbully will like make jokes like ‘ha ha you have to get your friends involved’ and like that can make others join in more.

**Peter:** Well if the victim’s friends get involved, then the bully’s friends get involved and it just makes it so big.

However defenders also had the ability to provide support and comfort for a victim or stop cyberbullying.

**Interviewer:** so when cyberbullying happens what do you think are the best ways to help?

**Dan:** just delete or block it

**Jeff:** block or report it but also trying to get your friends together, like the victims friends, just to help push him up again because obviously when you are bullied you go down quite a fair bit whereas sometimes you can, it just helps, like not like in a physical sense, but just mentally it can really help.

**Interviewer:** doing it online or face to face?

**Jeff:** well either really. I mean it can make you feel a lot better if you get a text message to say ‘hay the bully was wrong you are not that bad, you are a good friend etc etc’ that can make you feel a lot better.

**Luke:** yeah like it can really help to build up your self esteem and stuff knowing that there is someone there looking over you and stuff, helping you.
Figure 25: A Venn diagram to show the interactions between the themes.
15.6 Summary of results

Five themes were identified in the data: CMC, social influence, popularity and status of those already involved in cyberbullying, the decision to become involved and the effects of involvement. These are defined below. The process of theme development is shown in the appendices (Appendix 37).

- **CMC**: CMC creates a platform for adolescents to engage in cyberbullying. It influences behaviour due to a lack of audiovisual cues and the potential for anonymity. This affects feelings of personal responsibility and influences the likelihood of participation in cyberbullying.
- **Social influence**: Prior relationships with those already involved and social grouping (alone or with others) when witnessing cyberbullying affects bystander behaviour and the decision to become involved.
- **Popularity and status**: The popularity and status of those already involved in a cyberbullying incident influences bystanders’ decisions to become involved. Adolescents are more likely to assist or reinforce cyberbullying and less likely to defend a victim if those already involved are perceived as popular and of high status.
- **Decision to become involved**: Adolescents appear to weigh up the risks and rewards of participating in a cyberbullying situation based on the stated factors (CMC, social influence, popularity and status). If reward outweighs risk bystanders participate as reinforce
cers, assistants or defenders. If risk is higher than reward adolescents adopt an outsider role.
- **Effects of involvement**: When cyberbullying is assisted or reinforced there are negative outcomes for the victim and more risk associated with defender participation. If defenders become involved they tend to confront the cyberbully, support the victim or inform an adult and these factors are associated with differing consequences.
16 Discussion

Following Braun and Clarke’s (2006) thematic analysis, stage 6 involves writing up the themes to create new understandings. This section will be structured by grouping together relevant research questions and using the themes to answer them. Additional extracts from the focus groups to support the findings are found in the appendices and are referenced individually.

16.1 Research question 1: What promotes adolescent participation in cyberbullying?

16.2 Research question 2: What inhibits adolescent participation in cyberbullying?

16.3 Research question 4: How does social grouping affect participant behaviour?

When focus group participants were asked how likely it was for individuals to join in cyberbullying when it had already started the mean score was 6.96 (where 1 is it never happens and 10 is it happens all the time). In contrast the mean score for trying to stop cyberbullying on the same scale was 5.72 (Appendix 36). Given that the first study showed the majority of individuals adopted pro-victim attitudes and many more were categorized as defenders it seems somewhat contradictory that those questioned in the focus groups suggested it was more likely for others to assist or reinforce cyberbullying than defend against it.

Adolescent views highlight the decision to become involved or adopt a passive position in a cyberbullying situation is a complex process that, as found in this study, is dependent on the interaction of factors including CMC, social influence, the popularity and status of those already involved and an evaluation of the risks and rewards of participating.

16.3.1 CMC

The aspects of CMC highlighted by adolescents in this study (anonymity, lack of audio visual cues, asynchronicity) are elements of the ‘online disinhibition effect’ (Suler, 2004), which encourages individuals to say and do things that they wouldn’t ordinarily say and do in face to face situations. Subsequently adolescent views show that benign disinhibition (defending) and toxic disinhibition (assisting and reinforcing) promotes participation in cyberbullying situations. In addition, research (Joinson, 2001, Matheson & Zanna, 1988) shows that users of CMC report greater private self awareness and lower public self awareness than
individuals communicating face to face, which will be discussed in the next section (social influence).

16.3.2 Social influence
The behaviours described in the results section suggest that social influence is an important factor in the decision to become involved in a cyberbullying situation. Self categorization theory (Turner, Hogg, Oakes, Reicher & Wetherall, 1987) is an extension of social identity theory and helps us to understand the stated actions. When in groups individuals’ social identity becomes salient and therefore adolescent perceptions of themselves and others become depersonalized. This means that instead of seeing themselves as unique individuals, as appears to be the case when alone, adolescents perceive themselves more in terms of the shared features that define group membership, thinking and behaving in line with the norms of that group.

In addition, as previously stated, CMC increases private self awareness and decreases public self awareness. Therefore when alone, individuals report that they are more likely to defend others because private self awareness intensifies emotional responses and also means individuals are more likely to adhere to personal standards of behaviour (Turner & Crisp, 2012).

Interestingly this contradicts the bystander apathy effect in which Darley and Latane (1969) identified less helping behaviour if individuals perceived there were more bystanders even when the bystanders were not physically present. While this study did not specifically explore this factor, findings show that individuals were more likely to defend when alone. When online there may be many observers; however increased private self awareness associated with CMC may mean individuals do not consider that other bystanders are present. Instead they feel they are alone in the situation which increases their likelihood of helping. This area requires further research.

It is also important to point out that if private self awareness is increased, why when physically with others do adolescents not engage in more defending behaviour? At these times it appears the influence of the group, as described, is the most important factor affecting behaviour. As a result the influence of others leads to conformity due to a desire to
gain acceptance and praise and a fear of being excluded. With this in mind individuals are driven to be accepted by their peers, which potentially causes public attitudes to change (to assisting or reinforcing cyberbullying) and oppose private attitudes (that cyberbullying is wrong) (Turner & Crisp, 2012). This, coupled with decreased public self awareness associated with CMC, leads to more assisting and reinforcing behaviour as there is less regard for evaluation from outside the group. In addition Teachman and Allen’s (2007) findings that close peer interactions predict a higher fear of negative evaluation offer insight as to why individuals are less likely to engage in defending behaviour in groups. If there isn’t consensus amongst the group to defend, individuals will remain silent due to fear of negative social evaluation from their peers (see appendix 38.9 for a quotation to illustrate this point).

In addition, the relationship with others involved influenced behaviour as participants were more likely to engage in cyberbullying or defending behaviour if there were strong relational ties. This could be due to a desire to ‘show off’ in front of good friends, or to gain status goals (Salmivalli, 2010), or other social rewards by engaging in reinforcing or defending behaviour. It also suggests that social rewards granted by bystanders who are good friends are more important than social rewards provided by acquaintances or unknown others.

**16.3.3 Popularity and status of those already involved**

It is not surprising that if high status peers are involved in cyberbullying there is an increase in assisting behaviours and a reluctance to defend. Adolescents strive for belongingness but also for status (Ojanen, Gronroos & Salmivalli, 2005) and while observers may provide help or approval (Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996), assisting or reinforcing bullying may help to improve individual status. For adolescents, imitating popular others is a means of evaluating their own status and traditional bullying is related to popularity both longitudinally (Cillessen & Borch, 2006) and cross sectionally (DeBruyn & Cillessen, 2006). Imitation of successful peers enhances an individual’s status (Erdogan, 1998) and increases the chance of affiliation with popular adolescents or cliques (Merten, 1997).
16.3.4 Decision to become involved in cyberbullying

All the factors discussed (CMC, social influence, the popularity and status of those already involved) contribute to a decision making process in which the risks and rewards of engagement are analysed before a choice is made to become an active participant in a cyberbullying situation or remain a passive bystander.

Dovidio, Piliavin, Gaertner, Schroeder and Clark (1991) investigated the process of weighing risks (costs) and rewards (benefits) for bystanders’ helping behaviour in emergency situations. Their model highlighted that physiological arousal from witnessing an emergency is labeled to provide understanding, and leads to a calculation of the costs of helping (such as time and risk to self) versus the costs of not helping (such as personal costs like guilt, blame for not engaging or empathy costs) to determine whether a decision to act is made.

While cyberbullying situations are clearly distressing for those involved it would appear that the physiological arousal in comparison to an emergency situation would be lessened. In addition findings from this study show that different factors (CMC, social influence, status of those involved) contribute to the thoughts an individual has about a cyberbullying situation and affects the decision to become involved. Therefore Dovidio et al. (1991) bystander-calculus model can be adapted to make it specific to a bystander’s decision to become involved in a cyberbullying situation (as shown in figure 26).
Figure 26: A model generated from Study One and Study Two findings showing factors that influence the decision making process to become involved in a cyberbullying situation

The model generated from Study One and Study Two findings show that bystanders take assistant or reinforcer participant roles in cyberbullying situations when rewards (increased status, less chance of being victimized) are equal to or outweigh the risks (retribution, being caught) when the other factors (CMC, social influence (social grouping, relationship with the bully or victim), popularity and status of those involved) have been considered.

When risks and rewards are high defenders are likely to comfort a victim or tell an adult as confrontation with a cyberbully will result in escalation of the bullying situation and lead to their involvement. However when risk (such as retaliation from the cyberbully) is low, defenders may confront a cyberbully online or support a victim in the aforementioned ways. If risks outweigh rewards or there is little to be gained from a situation bystanders take the outsider participant role.
16.4 Research Question 3: What influence do adolescents perceive bystanders have in cyberbullying situations?

Once a bystander makes a decision to become actively involved in a cyberbullying situation there are potential positive and negative impacts based on assistant/reinforcer or defender behaviour.

Participants reported that assistant and reinforcer behaviour was likely to cause stress or lead to depression for the victim. Furthermore it could cause school absence or decreased academic performance. One participant also mentioned that cyberbullying may result in suicide. These views are similar to previous studies that found cyberbullying experiences led to a sudden drop in grades (Beran & Li, 2007) and increased absences and truancy (Katzer, Fetchenhauer & Belschak, 2009).

Participants commented that aspects of CMC contributed to the feelings and emotions experienced from assistant and reinforcer behaviour. It was felt that the potential size of a cyberbullying audience, which expanded as aggressors joined, led to greater feelings of embarrassment and shame (Appendix 38.13). In addition, the fact that victims could read messages over and over contributed to their emotional angst (Appendix 38.13). Participants also spoke of a snowballing effect; as more people joined a cyberbullying situation defenders were less likely to become involved due to fear of retaliation. Furthermore victims wanted to appear strong and consequently did not ask for support (Appendix 38.14) which replicated other findings (Slonje & Smith, 2008). Combined these aspects resulted in more isolation for the victim.

When defenders chose to intervene they responded in one of two ways. One was to take a high risk but high reward approach of confronting the cyberbully, assistant or reinforcer which could stop cyberbullying but potentially escalated the situation as documented. The other option was for defenders to support a victim by advising them on what to do, by providing them comfort (Appendix 38.15) or by informing an adult. Participants highlighted three adult options; the police for serious cases, and parents or teachers more frequently.

There were positive and negative effects of parental or teacher involvement as they stopped cyberbullying if aggressors were known and also supported affected students.
(Appendix 38.16) but made suggestions that were too simplistic or not current (Appendix 38.16 & 38.17). In addition informing a teacher or parent sometimes escalated a cyberbullying situation and teachers often did not have time to adequately deal with problems (Appendix 38.18).

The findings highlight that assistant and reinforcer behaviour had negative effects on victims, which in extreme cases resulted in discussions about suicide. Aspects of CMC compounded cyberbullying effects. Victims were reluctant to ask others for help as they wanted to appear strong and defenders were hesitant to join in due to fear of retaliation.

Defenders tended to support victims more frequently using lower risk strategies such as privately comforting them or offering advice on what to do. Parents and teachers were able to offer support or advice in cyberbullying situations but their involvement could also escalate the event.

The results suggest that adolescents should be shown how to support victims of cyberbullying by offering their peers advice (such as reporting negative online behaviour or blocking mobile numbers) and comfort. Participants described these as low risk defending behaviours that were more likely to occur. It also appears important to teach adolescents about the harm caused from adopting assistant or reinforcer roles.

Parent and teacher knowledge of adolescent online communication should be accurate as adolescents do not want to hear messages that they perceive are out of touch (such as ‘delete your account’). If parents and teachers offered advice and support that adolescents believed in, they may be used as a useful resource to deter cyberbullying and support those affected by it.

It is important to highlight that this study explored bystander involvement and did not focus on specific types of cyberbullying. Researchers (Smith et al., 2008; Hinduja & Patchin, 2010) have identified a range of media (such as mobile phone calls, text messages, video clips) which are used to cyberbully others. Moreover Willard (2006) described seven different categories of cyberbullying (such as flaming, online harassment). While the findings in this study of the effects of bystander involvement offer a generalised view, further research is required to understand how media and categories of cyberbullying influence its impact.
16.5 Research question 5: What are the gender differences in bystander behaviour in cyberbullying situations?

Noticeable distinctions between male and female views were not identified. Both male and female participants discussed how CMC, social influence, and popularity and status affected their decision to become involved in a cyberbullying situation (as shown by the quotations for the previous research questions and appendix 38.1 – 38.18).

Study One showed that females were more likely to be a victim ‘when alone’ and ‘when physically with others’ and adolescent views from this study offer some insight into this finding. Analysis of the ratings participants gave to the ‘victim’ scenario (Appendix 36) show that while both females and males felt more hurt ‘when alone’ than ‘when physically with others’, female scores for perceived level of hurt were higher. While this represents a crude measure that is influenced by the social norms of the focus group, it may imply that females are more sensitive to online victimization and more likely to categorise themselves as victims when asked. This would link with findings from traditional bullying that highlight girls are more likely to engage in relational bullying (Pellegrini & Roseth, 2006) and research by Smith (2012) who suggests relatively greater involvement of girls in cyberbullying due to its links with relational bullying. Further research is required to explore this in more detail.

While Study One revealed that females were more likely to defend ‘when alone’ and ‘when physically with others’ when compared with males, this study has proposed that the decision to become involved as a defender is a complex process in which several factors are considered. While the scaling questions in the focus groups were designed to generate discussion and were not intended for general analysis, question 3 from the focus group interview schedule (Appendix 31) revealed that males felt others were more likely to defend than females, which is an unexpected finding. While there are obvious flaws (as mentioned) to consider when comparing the scaling questions, this may imply that there are subtle differences between the male and female decision making process (such as the importance that popularity or status plays when choosing to engage). Further research is required to determine if females and males consider the decision making factors differently.
Overall these results suggest that any intervention specifically focusing on bystander involvement should be targeted at adolescents of both sexes as the process they go through to actively become involved in a cyberbullying situation is similar.

16.6 Trustworthiness of thematic analysis

Assessing inter-rater reliability (data are independently coded and compared for agreement) is a process that is recognised in quantitative research. However, its use in qualitative research is less clear. While it has been argued that it is unrealistic to expect another researcher to have the same ‘insights’ from a limited data base (Morse, 1994) others state that reliability is a significant criterion for assessing the value of a piece of qualitative research (Mays & Pope, 1995).

While the debate of reliability in qualitative methodology remains confused it appears important that consistency of meaning is established within a data set. With this in mind, it is suggested that a form of triangulation, namely different researchers exploring a data set, can be used as a method for promoting better understanding (Armstrong, Gosling, Weinman & Marteau, 1997). Therefore to explore the trustworthiness of the thematic analysis undertaken, a single focus group transcript was coded by an educational psychologist (EP) (see Appendix 39).

The EP generated 6 themes that relate to the themes in this study. The themes of ‘Relationship to the victim’ and ‘Victimisation’ represent sub-themes within this study’s ‘Social influence’ theme, which is clear when the EP’s comments are viewed (e.g. victimization – ‘There is a worry of being victimized if they don’t join in – Staying part of a social group in the hope that, when the bullying stops, they will still have friends and be part of the group’).

The EP’s themes of ‘Misconstruing intention through social media’ and ‘Proximity to the bullying incident’ are related to the ‘Computer Mediated Communication’ theme generated in this study. The subtheme (lack of audio-visual cues) shows how messages can be misinterpreted and this view is similar to the EP (e.g. ‘Social media has made it easier to become involved by liking comments or retweeting tweets - comments on social media can be taken the wrong way and misinterpreted’).
The EP also states that the nature of cyberbullying makes it easier for people to be involved as they feel closer to it (Proximity to Bullying incident) (e.g. ‘Easier to make comments/bully online than face to face – feelings of it being easier to be ‘caught up’ or ‘join in’ with cyberbullying for people who wouldn’t normally engage in bullying behaviours’). This relates to subthemes of CMC (‘lack of audio-visual cues’, ‘Anonymity’, and ‘Asynchronocity’) which were found to promote cyberbullying.

The theme ‘personal involvement’ formed by the EP relates to the theme ‘decision to become involved’ and the similarities are shown by the EP’s comments (see Appendix 39). The final theme generated by the EP is ‘Education and understanding’, which also links with the ‘decision to become involved’ theme in this study. The EP discussed how knowledge and understanding of consequences related to cyberbullying can encourage or stop it, which is linked to the factors that promote and inhibit cyberbullying and defending behaviour in this study’s results.

This analysis shows that the results generated within this study are trustworthy as there was consensus within the identified themes even though they were packaged differently. This finding is similar to others who explored the role of inter-rater reliability in qualitative research and summarized that multiple coders of the same transcript do not find completely divergent interpretations but a concordance at a level of situating themes within a wider framework (Armstrong, Gosling, Weinman & Marteau, 1997).

It seems likely that there will be differences between researchers’ consistency when identifying themes in the same data set as analysis is a form of interpretation that involves a dialogue between the researcher and data in which the researcher’s views have important effects. A point also highlighted by Braun and Clarke (2006) who state that researcher judgment is necessary to determine what a theme is. However despite this potential for difference the themes generated within this study, and by an independent coder, demonstrate consistency of meaning and show ‘reliability’ of findings.
Concluding Study One and Study Two

Study One aimed to better understand the roles that adolescents take in cyberbullying situations specifically exploring how attitude towards cyberbullying, age, gender and social grouping affected behaviour. Study Two complemented Study One by providing a psychological understanding of the processes that promote or impede adolescent assisting, reinforcing or defending behaviour. The aims of both studies were met and collectively the results provide new understanding of bystander behaviour in cyberbullying.

Cross and Walker (2013) stated the need for further research investigating bystander behaviour and Study One developed this knowledge by highlighting the particular participant roles adolescents take in cyberbullying situations. Furthermore it built on Smith’s (2012) description of a variety of bystander roles by demonstrating that being alone or physically with others while observing negative online interaction influences behaviour. In addition it showed that attitude towards cyberbullying and gender influenced the participant role adolescents adopted.

Study Two explored and developed the findings from Study One by engaging with adolescents and allowing them to share their thoughts and feelings about bystander behaviour in cyberbullying situations. Study Two aimed to advance the knowledge base of cyberbullying and used three theories to add insight into adolescent actions. Aspects of CMC (anonymity, lack of audio visual cues, asynchronicity) and its links with the online disinhibition effect showed how behaviour changed due to its online nature and the effects on public and personal self awareness. In addition self categorization theory offered an explanation to understand how adolescents’ attempts to gain acceptance, receive praise and avoid criticism or exclusion from the group influenced behaviour when alone or with others. Study Two also demonstrated that adolescents’ views are influenced by the popularity and status of those already involved and when popular high status peers cyberbully, the activity loses some of its negative connotations and leads to imitation or decreased defending due to fears of retribution.

Study One and Study Two findings led to the development of a model that helps to explain the participant roles that adolescents adopt. The aforementioned factors (CMC, social influence, popularity and status of those already involved) contribute to a decision making
process to become involved in cyberbullying situations in which the risks and rewards of participation are calculated. When rewards are equal to or outweigh risks adolescents take active participant roles (assistant, reinforce, defender). However when risks outweigh rewards adolescents take an outsider role.

While additional research is needed to confirm or reject the proposed model, Study One and Study Two reveal factors that influence the decisions to become involved in cyberbullying situations in the participating schools. If these elements are considered it is likely to help reduce pro-bullying behaviours and increase pro-victim behaviours and the educational psychologist is in a position to develop and support these types of intervention programs. (See Appendix 40 for researcher reflections for Study Two).
18 The role of the educational psychologist

EPs support schools, professionals and children by aiding the development of antibullying policies and practice and by providing training and information sessions that link students and staff (Ahmed, 2006; Campbell 2005). Furthermore Diamanduros, Downs & Jenkins (2008) report that school psychologists are in a unique position to play a vital role in addressing issues of cyberbullying and its psychological impact on children and adolescents as they are able to advise on prevention programmes. This study builds on these views by following Ackers (2012) advice to communicate with children and young people to develop specific current knowledge to aid cyberbullying prevention.

The findings show the risk reward decision making process that adolescents consider before becoming involved in cyberbullying situations should be explored and discussed with them. It will be beneficial to educate children and young people about the effects of invisibility and anonymity and the influence CMC has on private and public self awareness. In addition, the role that popularity and status has on participation should be demonstrated. While Study Two showed that bystanders were more likely to assist or reinforce cyberbullying behaviour if popular adolescents were involved, research in traditional bullying has shown that popular adolescents can also increase pro-social behaviour (LaFontana & Cillessen, 2002). Therefore targeted interventions may encourage an increased likelihood of defending behaviours and a reduction in cyberbullying reinforcement.

Intervention also needs to address the impact that social influence has on behavioural intentions to reinforce or assist cyberbullying or to defend a victim. Interventions should teach children and young people how to resist negative peer pressure or to voice their defending intentions. Based on comments in this study it is likely that individuals in a group hold similar pro-victim attitudes but do not voice them because the perceived group norm is pro-bully. Therefore the group engages in assistant or reinforcer behaviour because they feel this will lead to acceptance and praise. Work to illuminate this concept may reduce online assisting behaviour.

Another intervention to create a shift in group behaviour may be produced by minority influence. If individuals are consistent and confident (Maass & Clark, 1984) with their defending views while observing cyberbullying when physically with others then majority
views could change. While this role would be difficult to adopt due to normative consequences (social exclusion and punishment) appropriate supervision from parents, teachers or EPs would help to support adolescents promoting the defender participant role.

The EP also has a role to ensure that adolescents understand the harmful effects associated with cyberbullying as children and young people do not always consider the consequences of reinforcing or assisting behaviours. In addition adolescents demonstrated that certain defending actions such as confronting a cyberbully were high risk. However lower risk strategies such as supporting and comforting a victim or offering private advice were more likely to be utilised. Promotion of low risk defending behaviours would be beneficial as it builds on current online behaviours and improves the likelihood of occurrence. This area requires further research to understand which helping behaviours are most effective.

The EP could provide support and training for parents and teachers as it appears they have a critical role to play in addressing cyberbullying. Research shows that 90% of cyberbullied students did not report the incident to an adult (Juvonen & Gross, 2008). However adolescent views from this research highlight that if adults have up to date knowledge, create time to discuss cyberbullying and do not offer simple, unhelpful advice, adolescents will use them as a resource. This suggests education programmes that increase adult understanding will enable them to support adolescents and create an effective way of reducing and preventing cyberbullying.

In summary this study provides a more informed psychological understanding of what influences bystander involvement in cyberbullying situations. The research highlights the need for EPs to continue to establish their interest and expertise in the topic of cyberbullying to ensure the dangers posed to adolescent mental and physical health are minimised. Further research is required to explore the results in general, and the model generated in this study in particular, as this will allow findings to be generalised and used to inform intervention strategies outside of the participating schools.
19 References


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Appendices
Study One and Study Two
20 Rationale for Mixed Methods research

Mixed methods research has been defined as:

*The type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. use of quantitative and qualitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration.* (Johnson, Onwuegbuzie, Turner, 2007, p 123)

There are different views as to the validity of mixed methods research. Tashakkori and Teddlie (2010) summarise one stance holds that qualitative and quantitative paradigms are different and cannot be mixed; thus mixed methods research is untenable. Another view states that paradigms are independent and can be matched and mixed in different forms. A further view is that paradigms are not incompatible, but are different and should be kept separate in mixed methods research.

Some have taken the first view and argued that the differing ontological perspectives inherent to qualitative and quantitative methods are fundamentally incompatible (Guba, 1990) and therefore mixed methods research has been somewhat discredited.

However others have suggested that mixed methods research can allow bridges to be formed between quantitative and qualitative paradigms (Johnson and Onwuegbuzie, 2004, Morgan, 2007) allowing each to be seen at the end of a continuum as opposed to dichotomously (Johnson and Gray, 2010). Therefore mixed methods research can be seen as an approach which *draws from the strengths and minimizes the weakness (of single qualitative and quantitative designs) both in single research studies and across studies*’ (Johnson and Onwuegbuzie, 2004, p 15).

Morgan (2007) argues that different philosophical positions can be adopted in which certain positions about the nature of reality are taken. The first study in this research adopts a stronger objective reality (the world that exists and is measured is core of reality), while the second study has a stronger subjective reality (individuals’ personal experiences are the core of reality) (Onwuegbuzie, Johnson, & Collins, 2011). Collectively all forms of reality are important and this is emphasized in mixed methods research to gain a fuller understanding of phenomena in the social and behavioural sciences (Johnson 2008).
21 Ethical considerations

As cyberbullying poses a significant threat to adolescent mental and physical health (Bastiaensens et al., 2014) ethical considerations were of vital importance and certificates of ethical approval were awarded for Study One and Study Two by Exeter University Graduate School of Education Ethics Committee (Appendix 21.2).

Students were asked to share their views of cyberbullying which could result in disclosures of current harmful behaviour. Therefore I explained to participants that while their views were confidential, there may be circumstances in which I would need to share information with adults in the participating schools. In addition students were given the name of a staff member to contact to discuss any feelings that arose after completion of data collection.

21.1 Ethical procedures

After schools agreed to participate, a year 9 class was identified and active consent forms were sent home (Appendix 21.6). This led to the adaptation of the data collection tools to be used in Study One. Next, parents and carers of chosen form groups were informed of the study and asked for passive consent (based on school guidance) (Appendix 21.4). Students whose parents granted passive consent completed active consent forms (Appendix 21.5) before participating in the study. The parents and carers of students who agreed to take part in Study Two were sent active consent forms which were signed and returned to school (Appendix 21.6).

During focus group interviews students were told how data would be stored and informed of their right to withdraw at anytime. This was supported by the permission slips they signed.
21.2 Certificate of ethical approval

Graduate School of Education

Certificate of ethical research approval

MSc, PhD, Taught Doctoral theses

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School’s Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: http://www.bera.ac.uk/publications and view the School’s Policy online.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter).  **DO NOT COMPLETE BY HAND**

Your name: Matthew Baker

Your student no: 610038654

Return address for this certificate: 45 High Street, Westbury on Trym, Bristol, BS9 3ED

Degree/Programme of Study: Doctorate in Educational Psychology

Project Supervisor(s): Dr. Tim Maxwell, Dr. Karen Harris

Your email address: mb465@exeter.ac.uk

Tel:

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

Signed: Matthew Stuart Baker date: 26 March 2013
Certificate of ethical research approval

TITLE OF YOUR PROJECT:
Cyberbullying and the bystander: what roles do adolescents take and do they perceive they can make a difference?

1. Brief description of your research project:

This study will investigate the roles that adolescent bystanders take during cyberbullying episodes. It will also explore the relationship between adolescent attitudes towards cyberbullying and the roles they suggest they take. More in-depth student views will be sought to examine adolescent perceptions as to what may encourage bystanders to intervene and what may prevent bystanders from becoming involved in cyberbullying situations. The influence of gender and age will also be explored.

2. Give details of the participants in this research (giving ages of any children and/or young people involved):

This study will be administered in two parts. The first part will involve a sample of approximately 150 adolescents between 11 and 16 years of age. 30 students (one class) will be asked to participate from years 7, 8, 9, 10 and 11. The second part will compose of male, female and mixed gender focus groups consisting of 5 people. Adolescents from years 7, 9 and 11 will be asked to participate. Therefore a total of 45 students will be required. The focus group participants will be selected from the adolescents who have participated in the first part of the study.

Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

3. informed consent: Where children in schools are involved this includes both headteachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document. a blank consent form can be downloaded from the GSE student access online documents: Each consent form MUST be personalised with your contact details.

See attached consent forms.

A single form group will be identified and parental permission slips will be sent home so that a focus group can be created to adapt the research measures. Next a letter will be sent to parents/carers of all adolescents in 5 classes (one class from year 7, 8, 9, 10 &11) which will grant passive consent. Active consent will then be sought from adolescents in each class whose parents have granted passive consent. On this form students will also be asked if they would be interested in participating in a follow up study.
Parents of students who express a willingness to participate in a follow up study will receive a letter asking for active consent allowing their son/daughter to participate in focus groups. Students will also be asked for their active consent on this letter.

4. **anonymity and confidentiality**

Students will complete scales independently in a classroom setting at their school. Students will be asked to give their gender and age in years and months but will not be required to write their date of birth. This will ensure that the data collected from the first part of the study will be confidential and anonymous. Completed questionnaires will be kept in a locked cupboard and will be shredded when analysed.

Data collected in focus groups will be recorded using a Dictaphone. When focus group discussions have finished data will be transferred from the Dictaphone to a University password protected computer and deleted from recording devices. When the data has been analysed, it will be deleted from computers.

Students will be informed that all information will be confidential. Individuals will not be directly referred to throughout the study.

5. **Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:**

An Adapted version of Salmiwalli’s (1998) Participant Roles Scale (PRS) and Rigby and Slee’s (1991) Pro Victim Scale (PVS) will be used to collect data from the year 7 – 11 students. The PRS is designed for use with secondary age students. It will consist of 22 behaviour statements; students will self report whether they never, sometimes, or often engage in the stated behaviour. The PVS is a ten-item questionnaire schedule designed to identify pupil attitudes towards bullying. Five statements support bullying and five statements disapprove of bullying. There are three response categories for each item – agree, unsure, and disagree. Data collected via these scales will be analysed as directed in the administration instructions and with the use of SPSS.

Focus groups will be used to allow students to discuss their perceptions of the role of bystanders in cyberbullying. A schedule will be developed using hierarchical focusing (Tomlinson, 1989) to ensure coverage of the research area. A hierarchical agenda of questions designed to elicit information relevant to the topic from the participants will be designed when data has been analysed from study 1. The hierarchical agenda will allow focus group discussion to be conducted as openly as possible. This will involve asking initial questions and seeking elaboration and development of themes as they emerge. Aspects of the agenda that have been covered will be noted as the discussion proceeds. If coverage of the research agenda is not completed, the researcher will raise specific topics to ensure all aspects are covered. Data from focus groups will be analysed according to the principles of thematic analysis (Braun & Clarke, 2006).
Students will be given information regarding the study and asked for their consent. Students will be able to seek help if they struggle to read/understand what is required. Participants will have the right to withdraw themselves or their data from the research at any time and for any reason. If students appear distressed about any aspect of the study they can meet with the investigator or discuss issues with a designated member of staff.

Given that participants will discuss their views on cyberbullying, it is possible that participants may discuss current or past issues which are causing psychological harm or discomfort or are safeguarding issues such as receiving or sending sexual images. For these reasons a school safeguarding officer and a key member of staff will be approached and asked to be available should issues arise. Before the research begins students will be made aware that any information they share will be confidential and anonymous, however, if the researcher feels a participant may be in danger, require support, or be involved in an illegal act, the aforementioned members of staff will be informed, who will follow school procedures to deal with the issues. While this statement may inhibit and limit the freedom in which participants discuss cyberbullying issues it is important given that the research involves a vulnerable group (children).

Give details of any other ethical issues which may arise from this project - e.g. secure storage of videos/recorded interviews/photos/completed questionnaires, or

Focus group discussions will be recorded with Dictaphones. This information will be downloaded to a University password protected computer immediately after the discussion and deleted from the Dictaphone. When the information has been transcribed it will be deleted from the computer.

Inventories will be completed anonymously. On completion, students will place their inventories into an envelope which will be sealed. The inventories will be stored in a locked cupboard and shredded once they have been analysed.

Students will be informed that answers will remain confidential in focus group discussion but will be made aware of safeguarding procedures.

special arrangements made for participants with special needs etc.

Adults will be available to help students if they finding reading difficult.

6. Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):
This form should now be printed out, signed by you below and sent to your mentor to sign. Your mentor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to counter-sign. A unique approval reference will be added and this certificate will be returned to you.

Approval is requested for the period: September 2014

From: THH

by (name of principle investigator):

Signature: JH  Date: 20th March 2013

(name of principle investigator)

Name of Mentor
Mentor declaration. I am satisfied that the planned research procedures as described to me are ethical.

Signed (mentor): ................................................................. Date: ................................200

School Ethics Committee approval reference: .................................

Signature: AG  Date: 12/4/13

(Chair of School Ethics Committee)
21.3 Head Teacher consent form

Dear Head Teacher,

In partnership with Exeter University, I will be conducting a study to determine the feelings that young people have towards cyberbullying and the roles they take when witnessing cyberbullying. I will also explore the ways adolescents perceive they can make a difference when witnessing cyberbullying focusing on barriers to intervening and how bystanders may be encouraged to act against cyberbullying behaviour. Ethical approval for this study has been provided by the Graduate School of Education Ethics Committee at Exeter University.

What does participation involve?

Students will be asked to complete two questionnaires. The first consists of 22 statements in which students will be asked to report whether they never, sometimes or often engage in a stated behaviour relating to cyberbullying. In the second questionnaire students will be asked if they agree, disagree or are unsure about statements regarding attitudes towards cyberbullying. It will take approximately 20 minutes for both measures to be completed. Students will also be invited to participate in focus group lasting approximately 45 minutes during class time at school. The discussion will include up to 9 focus groups consisting of five students in each.

All information collected will be anonymous and strictly confidentially. The school or student names will not be used in any report resulting from this study. All information collected will be stored securely (in locked cabinets and password protected computers). You have the right to withdraw your consent to participate in this research project at anytime, without prejudice by contacting me.

Next steps:

1. Please complete the attached consent form and return it to Matthew Baker.

Should you have any questions about this research project, please contact me on 07935330326 or by email: mb465@exeter.ac.uk

Yours sincerely,

Matthew Baker

Trainee Educational Psychologist
This study has been approved by the Graduate School of Education Ethics Committee.

- I have been provided with a copy of the “Information Letter”.
- I have read and understood the information provided.
- I am aware that I can contact Matthew Baker if I have additional questions.
- I understand that students from my school will complete questionnaires and participate in focus groups during class time. The focus of this work will be on the role of bystanders in cyberbullying.
- I understand that information provided by students will be kept confidential and anonymous.
- I understand that the information provided by students will only be used for the purposes of this research project.
- I understand that students or the school can withdraw from the study at anytime without an explanation or penalty.

☐ I give permission for students to participate in this study regarding the role of bystanders in cyberbullying.

OR

☐ I do not give permission for students to participate in this study regarding the role of bystanders in cyberbullying.

School Name: ____________________________  Head teacher Signature: _____________________

Date: ________________________________
21.4 Parent and Carer permission slip Study One

Dear Parent/Carer,

In partnership with Exeter University and your child’s school, I will be conducting a study to determine the feelings that young people have towards cyberbullying and the roles they take when witnessing cyberbullying. (SCHOOL NAME) has agreed to participate in this study and ethical approval has been provided by the Graduate School of Education Ethics Committee.

What does participation involve?

Your son or daughter will be asked to complete two questionnaires. The first consists of 22 statements in which your son or daughter will be asked to report whether they never, sometimes or often engage in a stated behaviour. The second will ask your son or daughter to agree or disagree with statements about attitudes towards cyberbullying. It will take approximately 20 minutes for both measures to be completed.

All information collected from your son or daughter’s responses will be anonymous and strictly confidentially. Your son or daughter’s name will not be used in any report resulting from this study. All information collected will be stored securely (in locked cabinets and password protected computers). Your son or daughter has the right to withdraw individual consent to participate in this research project at anytime, without prejudice by contacting me.

Next steps:

1. If you are happy for your son or daughter to participate you do not need to do anything. Your son or daughter will be asked whether they would like to participate in the study while at school.
2. If you do not wish your son or daughter to participate please return the attached form.

Should you have any questions about your son or daughter’s participation in this research project, please contact me on 07935330326 or by email: mb465@exeter.ac.uk

Yours sincerely,

Matthew Baker
Trainee Educational Psychologist

__________________________________________________________________________

I do not give permission for __________________ (your son/daughters name) in year ___ to participate in this cyberbullying bystanders study.

Parent Name:_________________________ Parent Signature: ____________________________

Date: _____________________________
21.5 Student permission slip Study One

Dear Student,

In partnership with Exeter University I will be conducting a study to determine the feelings that young people have towards cyberbullying and the roles they take when witnessing cyberbullying. Your school has agreed to participate in this study and ethical approval has been provided by the Graduate School of Education Ethics Committee at Exeter University.

What does participation involve?

You will be asked to complete two questionnaires. The first consists of 22 statements in which you will be asked to report whether you never, sometimes or often engage in a stated behaviour relating to cyberbullying. In the second questionnaire you will be asked if you agree, disagree or are unsure about statements regarding attitudes towards cyberbullying. It will take approximately 20 minutes for both measures to be completed.

All information collected will be anonymous and strictly confidentially. Your name will not be used in any report resulting from this study. All information collected will be stored securely (in locked cabinets and password protected computers). You have the right to withdraw your consent to participate in this research project at anytime, without prejudice by contacting me.

Yours sincerely,

Matthew Baker

Trainee Educational Psychologist
**Informed Consent Form**

I have read the information sheet concerning the project and understand what it is about.

I understand that this study has been approved by the Graduate School of Education Ethics Committee.

All my questions have been answered to my satisfaction.

I understand that I am free to request information at any stage.

I know that:

- My participation in the project is entirely voluntary
- I am free to withdraw at anytime without disadvantage
- That data will be securely stored and destroyed when it is no longer needed
- The results of the project may be published but my anonymity will be preserved

I agree to take part in this project:

**Participant name:** ________________________________

**Participant signature:** ________________________________

**Date:** ________________________________

I am interested in participating in a follow up study to this research:  

Yes ☐  

No ☐
21.6 Parent/Carer and Student permission slip for focus groups Study One and Two

Dear Parent/Carer,

In partnership with Exeter University and your child’s school, I will be conducting a study to explore the ways adolescents perceive they can make a difference when witnessing cyberbullying focusing on barriers to intervening and how bystanders may be encouraged to act against cyberbullying behaviour. (SCHOOL NAME) has agreed to participate in this study and ethical approval has been provided by the Graduate School of Education Ethics Committee at Exeter University.

What does participation involve?

Your son or daughter will be invited to participate in one focus group lasting approximately 45 minutes during class time at school. The discussion will include a group of up to five students.

All information collected from your son or daughter’s responses will be anonymous and strictly confidentially. Your son or daughter’s name will not be used in any report resulting from this study. All information collected will be stored securely (in locked cabinets and password protected computers). Your son or daughter has the right to withdraw individual consent to participate in this research project at anytime, without prejudice by contacting me.

Next steps:

1. Please complete the attached parent/carer consent form and return it to your child’s school.

Should you have any questions about your son or daughter’s participation in this research project, please contact me on 07935330326 or by email: mb465@exeter.ac.uk

Yours sincerely,

Matthew Baker

Trainee Educational Psychologist
This study has been approved by the Graduate School of Education Ethics Committee.

- I have been provided with a copy of the “parent Information Letter”.
- I have read and understood the information provided.
- I am aware that I can contact Matthew Baker if I have additional questions.
- I understand that my son or daughter will participate in a focus group with other students during class time to discuss the role of bystanders in cyberbullying.
- I understand that information provided by my son or daughter will be kept confidential and anonymous.
- I understand that the information provided by my son or daughter will only be used for the purposes of this research project.
- I understand that my son or daughter can withdraw from the study at anytime without an explanation or penalty.
- I have discussed this research with my child, who has freely agreed to participate.

☐ I give permission for ______________________________ (your son/daughter’s name) to participate in a focus group discussion regarding the role of bystanders in cyberbullying.

OR

☐ I do not give permission for ______________________________ (your son/daughter’s name) to participate in a focus group discussion regarding the role of bystanders in cyberbullying.

Parent Name: ____________________________ Parent Signature: ___________________________

Child Name: ____________________________ Child Signature: ___________________________

Year group at school: _____ Date: ___________________________
### Data collection Study One

**22.1 Adapted Participant Role Scales based on focus group findings**

<table>
<thead>
<tr>
<th>Participant Role Scales behaviour descriptions (Salmivalli 1998)</th>
<th>Modified behaviour descriptions for this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gets bullied</td>
<td>1. I get cyberbullied</td>
</tr>
<tr>
<td>2. Starts bullying</td>
<td>2. I start cyberbullying</td>
</tr>
<tr>
<td>3. Gets others to join in bullying</td>
<td>3. I get others to join in cyberbullying</td>
</tr>
<tr>
<td>4. Always finds new ways of picking on the victim</td>
<td>4. I always finds new ways of picking on the victim online</td>
</tr>
<tr>
<td>5. Urges others to harass the victim</td>
<td>5. I urge others to harass the victim online</td>
</tr>
<tr>
<td>6. Makes suggestions about bullying someone</td>
<td>6. I make suggestions about cyberbullying someone</td>
</tr>
<tr>
<td>7. Watches the bullying</td>
<td>7. I let the cyberbully or others know I have watched the cyberbullying</td>
</tr>
<tr>
<td>8. Laughs at people getting bullied</td>
<td>8. I write things like ‘lol’ or ‘ha ha’ when people get cyberbullied</td>
</tr>
<tr>
<td>9. Encourages the bullying by shouting</td>
<td>9. I encourage the cyberbullying by commenting</td>
</tr>
<tr>
<td>10. Says things to the bully, like ‘show him/her’</td>
<td>10. I send comments or messages to the bully, like ‘show him/her’</td>
</tr>
<tr>
<td>11. Gets others to watch</td>
<td>11. I forward cyberbullying messages or pictures to others</td>
</tr>
<tr>
<td>12. Helps the bully, maybe catching or holding the victim</td>
<td>12. I help the cyberbully, maybe sending messages to the victim</td>
</tr>
<tr>
<td>13. Joins in the bullying when someone else has started it</td>
<td>13. I join in the cyberbullying when someone else has started it</td>
</tr>
<tr>
<td>14. Comforts the victim in the bullying situation</td>
<td>14. I comfort the victim in the cyberbullying situation</td>
</tr>
<tr>
<td>15. Tells the others to stop bullying</td>
<td>15. I tell others to stop cyberbullying</td>
</tr>
<tr>
<td>16. Says to the others that bullying is stupid</td>
<td>16. I say to the others that cyberbullying is stupid</td>
</tr>
<tr>
<td>17. Tries to make the others stop bullying</td>
<td>17. I try to make the others stop cyberbullying</td>
</tr>
<tr>
<td>18. Comforts the victim afterwards</td>
<td>18. I comfort the victim afterwards</td>
</tr>
<tr>
<td>19. Encourages the victim to tell the teacher about the bullying</td>
<td>19. I encourage the victim to tell an adult about the cyberbullying</td>
</tr>
<tr>
<td>20. Isn’t usually present</td>
<td>20. When cyberbullying happens I am not usually present</td>
</tr>
<tr>
<td>21. Stays outside the situation</td>
<td>21. When cyberbullying happens I stay outside the situation</td>
</tr>
<tr>
<td>22. Doesn’t do anything</td>
<td>22. When cyberbullying happens I do nothing</td>
</tr>
<tr>
<td>23. Doesn’t take sides with anyone</td>
<td>23. When cyberbullying happens I do not take sides with anyone</td>
</tr>
</tbody>
</table>

*Figure 27: Table to show the modified behaviour descriptions for the PRS based on focus group findings*
22.2 Adapted Pro Victim Scale based on focus group findings

<table>
<thead>
<tr>
<th>Pro-Victim Scale statements (Rigby, 1997)</th>
<th>Modified statements for this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kids who get picked on a lot usually deserve it</td>
<td>1. Kids who get picked on a lot online usually deserve it</td>
</tr>
<tr>
<td>2. A bully is really a coward</td>
<td>2. A cyberbully is really a scaredy-cat</td>
</tr>
<tr>
<td>3. Kids should not complain about being bullied</td>
<td>3. Kids should not complain about being cyberbullied</td>
</tr>
<tr>
<td>4. It’s funny to see kids get upset when they are teased</td>
<td>4. It’s funny to see kids get upset when they are teased online</td>
</tr>
<tr>
<td>5. Kids who hurt others weaker than themselves should get told off</td>
<td>5. Kids who cyberbully others should get told off</td>
</tr>
<tr>
<td>6. Soft kids make me sick</td>
<td>6. Weak kids online annoy me</td>
</tr>
<tr>
<td>7. You should not pick on someone weaker than you</td>
<td>7. You should not cyberbully someone</td>
</tr>
<tr>
<td>8. Nobody likes a wimp</td>
<td>8. Nobody likes an online wimp</td>
</tr>
<tr>
<td>9. It makes me angry when a kid is picked on without reason</td>
<td>9. It makes me angry when a kid is picked on online without reason</td>
</tr>
<tr>
<td>10. I like it when someone sticks up for kids who are being bullied</td>
<td>10. I like it when someone sticks up for kids who are being cyberbullied</td>
</tr>
</tbody>
</table>

Figure 28: Table to show the modified statements for the PVS based on focus group findings

22.3 Adapted cyberbullying definition based on focus group findings

Students in the focus group were presented with the Tokunaga’s cyberbullying definition (below) to ensure understanding and clarity.

“Cyberbullying is any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others.” (Tokunaga, 2010, p. 278)

This definition was chosen as it was provided by Tokunaga’s (2010) review of the cyberbullying literature and developed to provide unity to the inconsistent definitions that appear in research studies. In addition the focus group participants were presented with the following information, which Tokunaga (2010) suggests should be used with research participants to clarify what is meant by cyberbullying:

“In cyberbullying experiences, the identity of the bully may or may not be known. Cyberbullying can occur through electronically mediated communication at school; however, cyberbullying behaviours commonly occur outside of school as well.” (Tokunaga, 2010, p. 278)
Focus group participants felt the definition was too complicated and written in language that would be difficult to understand. Therefore, based on focus group findings, the definition was changed to:

“Cyberbullying is any behaviour performed on a computer, mobile phone, tablet or something similar that repeatedly communicates mean, nasty, or aggressive messages intended to hurt others or make them feel uncomfortable.

When cyberbullying happens, the bully may or may not be known. Cyberbullying happens online, through mobile phone calls or texts, in emails, on social networking sites, in chatrooms, via picture or video clips, via instant messaging or on websites. It can happen at school or outside of school.”
22.4 Justification for using the PRS and the PVS

Cross and Walker (2013) state that further research is required to investigate bystander (participant) roles to understand ways in which bystanders can best intervene in cyberbullying situations. In addition Sharp and Cowie (1994) found that bullying is less likely to occur in contexts where the peer group disapproves of bullying behaviour, however research has not yet identified the links between attitude and cyberbullying behaviour.

Craven, Marsh, and Parada (2013) state that while traditional bullying research is grounded by advances in theory, research, and practice that established key components of bullying constructs, these advances are not applied to research in cyberbullying. Therefore in order to explore participant roles and attitudes toward cyberbullying established traditional measures (PRS and the PVS) were selected to adapt to meet the aims of this study and stimulate new directions for research.

The PRS (Salmivalli, 1998) was chosen because it has been used by a number of researchers in different countries (Finland, UK, Netherlands) with participants ranging in age from 7 to 15 years. Various procedures and formats (original 50 item scale, reduced number of items, different victimization items) have been employed. The scale was previously adapted by Smith and Sutton (1999) for use with younger children and by Goossens, Olthof and Dekker (2000) to explore sociometric status. Furthermore the scale has shown stability of participant roles over a two year period (Salmivalli et al., 1998). While other measures such as the Adolescent Peer Relations Instrument – Bully and Target (Parada, 2000) have been developed to explore bullying roles and could have been used in this study, it was felt that the 36 questions rated on a 6 point likert scale would have caused administration difficulties due to time pressures.

The PVS (Rigby, 1997) was selected as it has been standardized using male and female students aged between 9 and 18 years. The Cronbach alpha co-efficient of 0.81 for boys and 0.78 for girls are above 0.7, which is the figure accepted as demonstrating reliable internal consistency between variables (Field, 2005). Alternate measures such as the Children’s Anti Bullying Attitudes measure (Eslea & Smith, 2000) was not selected because it was standardized on children aged between 6 and 11 years and had weak internal consistency with a cronbach alpha co-efficient of 0.51.
22.5 Final version of the questionnaire

Cyberbullying

Please tick the appropriate box: Male □ Female □

Please circle the year group you are in: 7 8 9 10 11

What month were you born in: ____________________

What year were you born in: ____________________

What is Cyberbullying?

Cyberbullying is any behaviour performed on a computer, mobile phone, tablet or something similar that repeatedly communicates mean, nasty, or aggressive messages intended to hurt others or make them feel uncomfortable.

When cyberbullying happens, the bully may or may not be known. Cyberbullying happens online, through mobile phone calls or texts, in emails, on social networking sites, in chatrooms, via picture or video clips, on instant messaging or on websites. It can happen at school or outside of school.

When cyberbullying happens you may:

- Cyberbully others when you are alone.
- Cyberbully others when you are with other people.
- Be cyberbullied when you are alone.
- Be cyberbullied when you are with other people.
- Be with a cyberbully when he or she cyberbullies others.
- Be with a victim when he or she is cyberbullied.
- Be alone and see the cyberbullying on your computer, mobile phone or tablet.
**Instructions:** Read each statement and then think about your own behaviour. Complete both sections ('When alone' and 'When physically with others') for each statement.

- If you *never* do this, put a ring around 0.
- If you *sometimes* do this, put a ring around 1.
- If you *often* do this, put a ring around 2.

<table>
<thead>
<tr>
<th>BEHAVIOUR</th>
<th>WHEN ALONE</th>
<th>WHEN PHYSICALLY WITH OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I get cyberbullied.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2. I start cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3. I get others to join in cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4. I always finds new ways of picking on a victim online.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. I urge others to harass a victim online.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6. I make suggestions about cyberbullying someone.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7. I let the cyberbully or others know I have watched the cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8. I write things like ‘lol’ or ‘ha ha’ when people get cyberbullied.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9. I encourage the cyberbullying by commenting.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10. I send comments or messages to the cyberbully, like ‘show him/her’</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11. I forward cyberbullying messages or pictures to others.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12. I help the cyberbully, maybe sending messages to the victim.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13. I join in the cyberbullying when someone else has started it.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14. I comfort the victim in the cyberbullying situation.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15. I tell others to stop cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. I say to others that cyberbullying is stupid.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>17. I try to make others stop cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18. I comfort the victim afterwards.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19. I encourage the victim to tell an adult about the cyberbullying.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20. When cyberbullying happens I am not usually present.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21. When cyberbullying happens I stay outside the situation.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22. When cyberbullying happens I do nothing.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23. When cyberbullying happens I do not take sides with anyone.</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

(Adapted version of the Participant Role Scale questionnaire)
**Instructions**: Read each of the following sentences carefully and show how strongly you agree or disagree with it. Do this by putting a tick in one of the boxes for each item.

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kids who get picked on a lot online usually deserve it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. A cyberbully is really a scaredy-cat.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Kids should not complain about being cyberbullied.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. It’s funny to see kids get upset when they are teased online.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Kids who cyberbully others should get told off.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Weak kids online annoy me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. You should not cyberbully someone.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Nobody likes an online wimp.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. It makes me angry when a kid is picked on online without reason.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. I like it when someone sticks up for kids who are being cyberbullied.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

(Adapted version of the Pro Victim Scale questionnaire)
22.6 Instructions for questionnaire administration by teachers

Instructions for administering the research questionnaires:

1) If possible students should be seated to maximize privacy.

2) Students with permission to participate read the information sheet (with the University of Exeter logo) regarding the study and sign the form on the back of the page. It should only take a few minutes to read and sign the forms. It is advisable to collect the signed forms before students complete the questionnaires to ensure students are not concerned about anonymity.

3) On the sheets titled ‘Cyberbullying’ the students tick the correct gender box, circle the appropriate year group and write the month and year of their birth (they do not write the date of their birth).

4) The teacher informs all students to answer the scales honestly and not look at others’ work. Students are told that all answers will be anonymous and confidential. Allow students to ask questions and reinforce this message.

5) The teacher reads the cyberbullying definition which is on the first page of the student’s questionnaire form.

6) The teacher reads the instructions for the first scale (page 2 of the student questionnaire form) and reinforces the message that students should fill in the ‘when alone’ box and the ‘when physically with others’ box.

7) The teacher reads the instructions for the second scale (page 3 of the student questionnaire form).

8) The teacher asks for questions and answers them. Please briefly record any questions that were asked and the answers you gave on the back of this sheet.

9) The teacher informs students that if they require help reading the statements or have questions while they are completing the scales they should ask for support.

10) The students complete the scales in silence.

11) If students make a mistake or wish to change their answers they can. Please make sure their chosen answer is clearly marked.

12) All scales should be returned to the teacher at the end of the session.

13) Students to be told that they can speak to Mrs ********* if they are concerned or worried about cyberbullying.

14) All scales should then be returned to Matthew Baker (Trainee Educational Psychologist).
23 Planned statistical analysis

The PRS and PVS scales measure student participant roles and attitude towards cyberbullying. The data collected from the measures is ordinal. Ordinal data cannot be analysed parametrically because it is not continuous (Field, 2005). However large sample sizes typically allow ordinal data to follow the pattern of normal distribution therefore enabling parametric testing (Howell, 2010).

Analysis planned to compare the difference between participant behaviour ‘when alone’ and ‘when physically with others’ as well as exploring the affects of age, gender and attitude. After testing, the data was found to be not normally distributed (figure 29) resulting in non parametric assessment.
23.1 Descriptive and Inferential data: measures of normality

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Range</th>
<th>Median</th>
<th>Skewness Statistic</th>
<th>Skewness St Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis St Error</th>
<th>Kolmogorov-Smirnov Statistic</th>
<th>DF</th>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim alone</td>
<td>261</td>
<td>2</td>
<td>0</td>
<td>1.958</td>
<td>.151</td>
<td>3.08</td>
<td>.3</td>
<td>.484</td>
<td>261</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Bully alone</td>
<td>255</td>
<td>.40</td>
<td>0</td>
<td>4.437</td>
<td>.153</td>
<td>19.21</td>
<td>.304</td>
<td>.534</td>
<td>255</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Reinforce alone</td>
<td>259</td>
<td>1</td>
<td>0</td>
<td>2.416</td>
<td>.151</td>
<td>6.568</td>
<td>.302</td>
<td>.398</td>
<td>259</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Assist alone</td>
<td>260</td>
<td>1</td>
<td>0</td>
<td>3.661</td>
<td>.151</td>
<td>13.858</td>
<td>.301</td>
<td>.529</td>
<td>260</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Defend alone</td>
<td>241</td>
<td>2</td>
<td>1</td>
<td>.020</td>
<td>.157</td>
<td>-1.075</td>
<td>.312</td>
<td>.126</td>
<td>241</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Outside alone</td>
<td>250</td>
<td>2</td>
<td>1</td>
<td>.067</td>
<td>.154</td>
<td>-.786</td>
<td>.307</td>
<td>.105</td>
<td>250</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Total alone</td>
<td>258</td>
<td>6</td>
<td>6</td>
<td>-1.708</td>
<td>.152</td>
<td>2.952</td>
<td>.302</td>
<td>.289</td>
<td>258</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Victim other</td>
<td>252</td>
<td>2</td>
<td>0</td>
<td>2.543</td>
<td>.153</td>
<td>5.509</td>
<td>.306</td>
<td>.520</td>
<td>252</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Bully other</td>
<td>247</td>
<td>.80</td>
<td>0</td>
<td>4.727</td>
<td>.155</td>
<td>25.184</td>
<td>.309</td>
<td>.521</td>
<td>247</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Reinforce other</td>
<td>248</td>
<td>1</td>
<td>0</td>
<td>2.341</td>
<td>.155</td>
<td>5.711</td>
<td>.308</td>
<td>.405</td>
<td>248</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Assist other</td>
<td>249</td>
<td>1</td>
<td>0</td>
<td>2.991</td>
<td>.154</td>
<td>8.407</td>
<td>.307</td>
<td>.515</td>
<td>249</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Defend other</td>
<td>229</td>
<td>2</td>
<td>.8333</td>
<td>.162</td>
<td>.161</td>
<td>-1.104</td>
<td>.320</td>
<td>.120</td>
<td>229</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Outside other</td>
<td>236</td>
<td>2</td>
<td>.75</td>
<td>.159</td>
<td>.158</td>
<td>-.780</td>
<td>.316</td>
<td>.114</td>
<td>236</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Total other</td>
<td>249</td>
<td>6</td>
<td>6</td>
<td>-1.656</td>
<td>.154</td>
<td>2.904</td>
<td>.307</td>
<td>.263</td>
<td>249</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
<tr>
<td>PVS total</td>
<td>243</td>
<td>20</td>
<td>27</td>
<td>-1.578</td>
<td>.156</td>
<td>4.859</td>
<td>.311</td>
<td>.161</td>
<td>243</td>
<td>.000</td>
<td>Highly significant</td>
</tr>
</tbody>
</table>

Figure 29: Table to show normality test results for the adapted PRS and PVS
23.2 Testing for normality

23.2.1 Test of Skewness and Kurtosis

Normally distributed data has skewness and kurtosis scores equal to zero (Field, 2005). For all variables within this data set the skewness and kurtosis statistic was less than or greater than zero (figure 29). Therefore the data is not likely to be normally distributed.

23.2.2 The Kolomogorov-Smirnov test of normality

The Kolomogorov-Smirnov test of normality compares Study One scores to a normally distributed set of scores with the same mean and standard deviation. If the test is significant then the sample distribution is significantly different from a normal distribution (Field, 2005). The results for study one are significant (figure 29). Therefore the data is not normally distributed.

23.2.3 Q-Q Plots of Normality

Q-Q plots chart the values that are expected for normal distribution against the values in the data set. If the data are normally distributed the observed values should fall along the straight dark line. The data plots (figure 30 to figure 43) deviate from the ‘normal line’ indicating non-parametric data.

Collectively the three normality tests indicate the data set is not normally distributed. Therefore non-parametric statistical tests will be used.
Figure 30: Normal Q-Q plot for victim alone

Figure 31: Normal Q-Q plot for bully alone
Figure 32: Normal Q-Q plot for reinforcer alone

Figure 33: Normal Q-Q plot for outsider alone
Figure 34: Normal Q-Q plot for assistant alone

Figure 35: Normal Q-Q plot for participant role alone
Figure 36: Normal Q-Q plot for victim when physically with others

Figure 37: Normal Q-Q plot for bully when physically with others
Figure 38: Normal Q-Q plot for reinforcer when physically with others

Figure 39: Normal Q-Q plot for assistant when physically with others
Figure 40: Normal Q-Q plot for defender when physically with others

Figure 41: Normal Q-Q plot for outsider when physically with others
Figure 42: Normal Q-Q plot for participant role when physically with others

Figure 43: Normal Q-Q plot for adapted PVS total scores
24 Participant data

Figure 44 shows the parental permission rate for Study One.

<table>
<thead>
<tr>
<th></th>
<th>Permission letters sent out</th>
<th>Students given permission</th>
<th>Positive parental response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School one</strong></td>
<td>166</td>
<td>134</td>
<td>80.5%</td>
</tr>
<tr>
<td><strong>School two</strong></td>
<td>167</td>
<td>136</td>
<td>81.5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>333</td>
<td>270</td>
<td>81%</td>
</tr>
</tbody>
</table>

*Figure 44: Table to show parental permission rate for Study One*

When the questionnaires were administered two students chose not to participate from school one. In addition four children with parental permission were absent. At school two three students were absent when questionnaires were administered. This is shown in figure 45.

<table>
<thead>
<tr>
<th></th>
<th>Students with permission</th>
<th>Students who did not give permission or were absent</th>
<th>Total number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School one</strong></td>
<td>134</td>
<td>6</td>
<td>128</td>
</tr>
<tr>
<td><strong>School two</strong></td>
<td>136</td>
<td>3</td>
<td>133</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>270</td>
<td>9</td>
<td>261</td>
</tr>
</tbody>
</table>

*Figure 45: Table to show total number of participants in Study One*
25 Participant role and social grouping: statistical analysis

25.1 The Wilcoxon Matched Pairs Signed Rank Test

The Wilcoxon Matched Pairs Signed Rank test is used to compare two sets of scores from the same participants (Field, 2005). This test is appropriate for comparing two mediums from a repeated measures design.

The data family includes 6 conditions (victim, bully, reinforcer, assistant, defender, outsider) but I am only interested in comparisons between scores ‘when alone’ and ‘when physically with others’ within conditions. Therefore the Bonferroni Correction is not applied and the significance level remains at 0.05.
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Negative differences</th>
<th>Positive differences</th>
<th>ties</th>
<th>Z-statistic</th>
<th>Statistic sentence with effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim A vs Victim WPWO</td>
<td>252</td>
<td>30</td>
<td>8</td>
<td>214</td>
<td>-5.617</td>
<td>Z=-5.617, p&lt;0.001, r= -0.35</td>
</tr>
<tr>
<td>Bullying A vs Bullying WPWO</td>
<td>246</td>
<td>12</td>
<td>5</td>
<td>229</td>
<td>-3.682</td>
<td>Z=-3.682, n.s.</td>
</tr>
<tr>
<td>Reinforcer A vs Reinforcer WPWO</td>
<td>248</td>
<td>19</td>
<td>20</td>
<td>209</td>
<td>2.33</td>
<td>Z=2.33, n.s.</td>
</tr>
<tr>
<td>Assistant A vs Assistant WPWO</td>
<td>249</td>
<td>3</td>
<td>14</td>
<td>232</td>
<td>-4.707</td>
<td>Z=4.707, p&lt;0.007, r= -0.3</td>
</tr>
<tr>
<td>Defender A vs Defender WPWO</td>
<td>226</td>
<td>55</td>
<td>24</td>
<td>147</td>
<td>-5.965</td>
<td>Z=-5.965, p&lt;0.001, r= -0.39</td>
</tr>
<tr>
<td>Outsider A vs Outsider WPWO</td>
<td>233</td>
<td>16</td>
<td>37</td>
<td>180</td>
<td>4.991</td>
<td>Z=4.991, p&lt;0.003, r=0.33</td>
</tr>
</tbody>
</table>

Figure 46: Table to show post hoc analysis for participant role and social grouping (when alone or when physically with others)
26 Participant role and attitude: statistical analysis

26.1 The Kruskal-Wallis test (when alone)

In order to explore whether attitude towards cyberbullying influenced the role adolescents took in cyberbullying situations the Kruskal Wallis test was used. The Kruskal Wallis test compares several conditions when different participants take part in each condition and is used when data is not normally distributed (Field, 2005).

The Kruskal Wallis test tested differences in attitude towards cyberbullying based on the role (victim, reinforce, assistant, defender, outsider) individuals were assigned to from the adapted PRS measure.

The results of the analysis are shown in figure 47. The Kruskal Wallis test identified that there are significant differences between a young person’s attitude towards cyberbullying and the role they take. However, this test does not highlight which conditions are significantly different from each other.

![Boxplot](image)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ALONENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim</td>
<td>10.00</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>15.00</td>
</tr>
<tr>
<td>Assistant</td>
<td>20.00</td>
</tr>
<tr>
<td>Defender</td>
<td>25.00</td>
</tr>
<tr>
<td>Outsider</td>
<td>30.00</td>
</tr>
<tr>
<td>Nervous</td>
<td>35.00</td>
</tr>
</tbody>
</table>

Total N: 241
Test Statistic: 20.169
Degrees of Freedom: 5
Asymptotic Sig. (2-sided test): .001

1. The test statistic is adjusted for ties.

Figure 47: Diagram to show independent samples Kruskal Wallis test measuring participant role and attitude when alone
26.2 Post hoc tests for the Kruskal Wallis test (when alone)

The Kruskal Wallis test shows a significant difference between adolescent attitude towards cyberbullying and the cyberbullying role taken but it does not inform exactly where the difference is. In order to explore these differences in more detail Mann Whitney tests can be used.

A number of Mann-Whitney tests inflates the Type I (believing there is a genuine effect in the population when there is not) error rate, however, adjustments such as the Bonferroni correction help to ensure that Type I errors don’t build up to more than .05 (Field, 2005). If a number of post hoc tests are used the critical value for significance can become so small that it is restrictive. Therefore it is important to be selective about the comparisons made (Field 2005).

There is no control group which would provide an obvious group to make comparisons with. Therefore it is beneficial to compare those groups which provided support for bullying (reinforcer and assistants) with those who support the victim (defenders) in order to explore whether attitude affects the cyberbullying role taken by adolescents.

The Bonferroni correction was applied which reduced the significance value for each variable to 0.025. The results for this analysis are shown in figure 48.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mann Whitney U</th>
<th>Significant sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVS TOTAL Assistant</td>
<td>86</td>
<td>U = 86, p = 0.023, r = 0.19</td>
</tr>
<tr>
<td>PVS TOTAL Defender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS TOTAL Reinforcer</td>
<td>172</td>
<td>U = 172, p = 0.001, r = 0.26</td>
</tr>
</tbody>
</table>

Figure 48: Table to show post hoc analysis of participant role and attitude when alone
26.3 The Kruskal Wallis test (when physically with others)

Figure 49: Diagram to show independent samples Kruskal Wallis test measuring participant role and attitude when physically with others

<table>
<thead>
<tr>
<th>Total N</th>
<th>232</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Statistic</td>
<td>25.153</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>5</td>
</tr>
<tr>
<td>Asymptotic Sig. (2-tailed test)</td>
<td>.000</td>
</tr>
</tbody>
</table>

1. The test statistic is adjusted for ties.

26.4 Post hoc tests for the Kruskal Wallis test (when physically with others)

Table to show post hoc analysis of attitude towards cyberbullying on the role taken (defender, reinforce, assistant) using the Mann Whitney U test with Bonferroni correction (adjusted significance p=0.025)

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mann Whitney U</th>
<th>Significant sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVS TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant</td>
<td>240</td>
<td>U = 240, p = 0.047,</td>
</tr>
<tr>
<td>Defender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVS TOTAL</td>
<td>Reinforcer</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>207</td>
<td>U = 207, p = 0.015, r = 0.27</td>
</tr>
</tbody>
</table>

Figure 50: Table to show post hoc analysis of participant role and attitude when physically with other
27 Participant role, attitude and gender: statistical analysis

27.1 The Mann – Whitney U test (when alone and when physically with others)

The Mann-Whitney U test tests differences between 2 independent groups when data are not normally distributed (Field, 2005). This test allows the differences between gender and attitude to be identified for cyberbullying behaviour.

<table>
<thead>
<tr>
<th>Cyberbullying behaviour</th>
<th>Independent variable</th>
<th>N</th>
<th>Mean rank</th>
<th>Mann Whitney U</th>
<th>Significance sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim WA</td>
<td>Male</td>
<td>140</td>
<td>116.34</td>
<td>6417.5</td>
<td>U = 6417.5 p = .0001</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>120</td>
<td>147.02</td>
<td></td>
<td>r = -0.29</td>
</tr>
<tr>
<td>Victim WPWO</td>
<td>Male</td>
<td>136</td>
<td>119.69</td>
<td>6962</td>
<td>U = 6962 p = .009</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>115</td>
<td>133.46</td>
<td></td>
<td>r = -0.17</td>
</tr>
<tr>
<td>Bully WA</td>
<td>Male</td>
<td>135</td>
<td>127.65</td>
<td>8053</td>
<td>U = 8053 p = .932 n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>119</td>
<td>127.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bully WPWO</td>
<td>Male</td>
<td>132</td>
<td>125.67</td>
<td>7810.5</td>
<td>U = 7810.5 p = .277 n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>114</td>
<td>120.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinforcer WA</td>
<td>Male</td>
<td>139</td>
<td>123.72</td>
<td>7467</td>
<td>U = 7467 p = .096</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>119</td>
<td>136.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinforcer WPWO</td>
<td>Male</td>
<td>132</td>
<td>120.24</td>
<td>7093.5</td>
<td>U = 7093.5 p = .268 n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>115</td>
<td>128.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant WA</td>
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<td>139</td>
<td>131.05</td>
<td>8486</td>
<td>U = 8486 p = .615</td>
</tr>
<tr>
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<td></td>
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<td>133</td>
<td>125.40</td>
<td>7767.5</td>
<td>U = 7767.5 p = .707 n.s.</td>
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<td>Female</td>
<td>115</td>
<td>123.46</td>
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<tr>
<td>Defender WA</td>
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<td>128</td>
<td>99.78</td>
<td>4516</td>
<td>U = 4516 p = .0001 r = .32</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>112</td>
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<td></td>
<td></td>
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<tr>
<td>Defender WPWO</td>
<td>Male</td>
<td>120</td>
<td>98.66</td>
<td>4579.5</td>
<td>U = 4579.5 p = .0001 r = -.26</td>
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<td></td>
<td>Female</td>
<td>108</td>
<td>132.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outsider WA</td>
<td>Male</td>
<td>133</td>
<td>127.14</td>
<td>7999</td>
<td>U = 7999 p = .612</td>
</tr>
<tr>
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<td>Female</td>
<td>116</td>
<td>122.54</td>
<td></td>
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<tr>
<td>Outsider WPWO</td>
<td>Male</td>
<td>126</td>
<td>120.21</td>
<td>7145</td>
<td>U = 7145 p = .589</td>
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<tr>
<td></td>
<td>Female</td>
<td>109</td>
<td>115.45</td>
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<tr>
<td>PVS total</td>
<td>Male</td>
<td>131</td>
<td>104.79</td>
<td>5082</td>
<td>U = 5082 p = .0001 r = .28</td>
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<tr>
<td></td>
<td>Female</td>
<td>112</td>
<td>142.12</td>
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</tr>
</tbody>
</table>

Figure 51: Table to show the affects of gender on participant role and attitude towards cyberbullying
28 Participant role, attitude and age: statistical analysis

28.1 The Kruskal-Wallis test

In order to explore whether cyberbullying roles were influenced by adolescent age the Kruskal Wallis test was used. The Kruskal Wallis tests compares several conditions when different participants take part in each condition and the data is not normally distributed (Field, 2005).

The Kruskal Wallis test tested whether differences in age significantly influenced cyberbullying behaviour. The results of the analysis are shown in figure 52. The Kruskal Wallis test identified significant difference between age and outsider behaviour when alone. In addition there were significant differences between age and defender behaviour when physically with others. There were no other significant differences associated with age and cyberbullying behaviours as defined by roles (victim, bully, reinforce, assistant, defender, outsider). The significant results show there is a difference between age and the aforementioned cyberbullying behaviours but this test does not highlight which age groups in particular are significantly different to each other.
### Cyberbullying behaviour

<table>
<thead>
<tr>
<th>Participant Role</th>
<th>Participants</th>
<th>Test statistic</th>
<th>Degrees of freedom</th>
<th>Significant sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim alone</td>
<td>261</td>
<td>5.928</td>
<td>3</td>
<td>0.115</td>
</tr>
<tr>
<td>Bully alone</td>
<td>255</td>
<td>0.762</td>
<td>3</td>
<td>0.859</td>
</tr>
<tr>
<td>Reinforcer alone</td>
<td>259</td>
<td>6.507</td>
<td>3</td>
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<td>Assistant alone</td>
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<td>4.279</td>
<td>3</td>
<td>0.233</td>
</tr>
<tr>
<td>Defender alone</td>
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<td>6.031</td>
<td>3</td>
<td>0.110</td>
</tr>
<tr>
<td>Outsider alone</td>
<td>250</td>
<td>11.602</td>
<td>3</td>
<td>0.009</td>
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<td>Victim when physically with others</td>
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<td>5.413</td>
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<td>0.144</td>
</tr>
<tr>
<td>Bully when physically with others</td>
<td>247</td>
<td>0.356</td>
<td>3</td>
<td>0.949</td>
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<tr>
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<td>1.921</td>
<td>3</td>
<td>0.589</td>
</tr>
<tr>
<td>Assistant when physically with others</td>
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<td>3</td>
<td>0.607</td>
</tr>
<tr>
<td>Defender when physically with others</td>
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<td>8.762</td>
<td>3</td>
<td>0.033</td>
</tr>
<tr>
<td>Outsider when physically with others</td>
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<td>7.617</td>
<td>3</td>
<td>0.055</td>
</tr>
</tbody>
</table>

**Figure 52: Table to show the influence of age on participant roles**

### 28.2 Independent sample Kruskal Wallis test

In order to explore whether there were links between attitude towards cyberbullying and age the Kruskal Wallis test was used. The results are shown in figure 53. The Kruskal Wallis test identified that there were no significant differences between age and attitude towards cyberbullying.

<table>
<thead>
<tr>
<th>Participant Role</th>
<th>Participants</th>
<th>Test statistic</th>
<th>Degrees of freedom</th>
<th>Significant sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVS Total</td>
<td>243</td>
<td>2.614</td>
<td>3</td>
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</tbody>
</table>

**Figure 53: Table to show the influence of age on adapted PVS scores**
29 Study One researcher reflections

I found it challenging to generate initial ideas for my research and changed my mind about its specific focus. When I began I was anxious to start data collection to increase my feelings of control over the research process and this impacted the measures (PRS & PVS) adaptation. If I were to engage in the same piece of research it would be beneficial to give students more freedom to discuss the particular behaviours they feel are relevant in cyberbullying situations as opposed to presenting them with behaviour statements and asking them to generate cyberbullying equivalents.

During data collection I felt disconnected from the study. Due to time constraints and school preferences, the questionnaires were completed in form groups with tutors providing instructions. While this enabled me to work with schools, collect data and limited my influence on participant responses, I put my trust in the form tutors and had little control over the process. I met with the tutors and provided instructions for questionnaire completion but the administration may have been different to what I expected.

Training as an educational psychologist has reinforced the importance of promoting the voice of children and young people and within research there has been a shift from ‘research on’ children to ‘research by’ children (Burton, Smith, & Woods, 2010). As I reflect on Study One it feels as though my research has been ‘on’ children and there has been limited opportunity for them to voice their views and opinions. While I feel the findings provide important information to increase the understanding of cyberbullying and inform intervention techniques within the participating schools I do not feel comfortable with the lack of voice I gave to the children and young people who took part.
30 Part transcript from a Year 7 girls focus group: Study Two

MB: So on a scale from one to ten where one is it never happens and ten is it happens all the time, how likely is it that others will join in cyber bullying when it has already been started?
P1: 7
P2: 7
P3: 6
P4: I think 8
P5: 7

MB: So we’ve got kind of a range between 6 (P3) to 8 (P4). Ok so we are saying that it is quite likely that if cyber bullying is already started then other people will join in. What things might people do to join in?
P2: Set like rumours and spread everything around and make things worse.
MB: Ok
P4: Yeah
MB: Ok and when...where does that happen typically?
P3: School and like if you are with that person like other people want to get involved and stir things up and make things happen that hasn't.
MB: Is that when you are physically with other people in a group?
P3: Mmmhm
MB: So if you are physically with other people and a message comes online and you see it...how does that affect behaviour?
P1: They might like share it...they might like share the argument or something.
P2: They will just like pass it on so it’s like everyone can see it like on..
MB: Ok and for what reasons do you think that people do it?
P5: To try and like...if they are friends with the cyber bully they are trying to like help their friend with it or maybe they don't like it as well so they are just trying to cause havoc and stuff like that.
MB: Ok. Anything else, any other things that people may do?
P1: Yeah...like say if it is on a photo like there is a comment or something...someone could like comment on it and then like tell all their friends to go on and it and that.
MB: Ok so anything else that we think?
P4: Sometimes it will like in the chat room with someone and then the bully asks other people in and then they start getting involved and adding their little comments to it and like....yeah

MB: Ok so in that situation do people know each other or do people not know each other?
P4: It depends because sometimes you can be added where you've like got a friend there and they can add somebody else that you might not know.

MB: Ok...And anything else that we think that people can do to join in? (PAUSE) No? Feel like we've got most things? Ok...how does it affect the situation do you think when cyber bullying has already started and other people join in. How does that effect the situation?
P1: It makes it worse

P2: Because then you can like have ten people against one person.

MB: Ok can you tell me about that?
P1: Because like...ten people being horrible to one person...that one person is going to feel like the whole world is against them.

P3: Yeah

MB: Ok

P2: Like no one likes that everyone is against them.

MB: Ok

P1: and then they can like also add their little...

P5: Their little friends...

P1: yeah like their little comments to it and like horrible to that which is making it even worse...like joining it in and giving their comments in.

MB: And...if other people have added things is it more likely that people will just continue to add things do you think?

Multiple: Yeah

P4: and some people like when there is like more people involved things can be said differently so if someone like...so if like the cyber bully says something and then their friends are obviously going to um turn that around and make it like...I don't know how to say it but like somethings been said and then someone else stirs it up and says something different.

P5: Like twist the words
P4: Yeah
P5: They will twist their words around
P4: Yeah and so...and then that person doesn't want you knowing what people are saying about them.
MB: So there is like a message that comes but then the meaning of the message is...
P4: Yeah...People will take it differently
MB: Ok so is there something about writing online that changes the communication
P4: Yeah
MB: Tell me about that.
P4: If like you could see how upset they were they might stop it because they don't like seeing how upset you can be.
MB: Ok
P1: And how it can hurt people.
MB: Ok so you feel that if the person who is doing the cyber bullying knew how upset the victim was...
P3: and how it is like hurting them to do it and how like it is ruining their lives
MB: Ok
P3: Whereas if it is online they can't really express their feelings there as easily.
MB: What about the rest of you – what do you think?
P5: it is like if they are in an argument...just like...just like if you are having a fight with someone over the internet you don't know if they are actually laughing at you. Because you could be like saying something really upset and the other person could be like laughing at you and you just don't know. And then...and you just don't really know what is going on to be honest.
31 Semi Structured Interview Schedule

Interview schedule:

1) Rich picture – Draw a typical cyberbullying experience.
   - Tell me about your pictures (do people agree/disagree)
     o What is happening (type of technology)?
     o When is it happening?
     o Where is it happening?
     o Who is involved?
     o Do the people know each other?

2) Reinforcer/Assistant cyber bystanders:
   - On a scale from 1 – 10 (where 1 is it never happens and 10 is it happens all the time) how likely is it that others will join in cyberbullying when it has already been started?
   - What things might those who join in do?
   - How does this affect the situation?
   - Are there aspects of digital/online communication that encourage people who see cyberbullying to join in?
   - What may stop people from joining in the cyberbullying when it has already been started?

3) Defender/Outsider:
   - On a scale from 1 – 10 (where 1 is it never happens and 10 is it happens all the time) how likely is it that others will try to stop cyberbullying when it has already been started?
   - What things might people do to try to stop the cyberbullying?
   - Will it make a difference?
   - Are there aspects of digital/online communication that encourage people who see cyberbullying to try to stop it?
   - When cyberbullying happens what are the best ways for others to help?
   - What will encourage those who see cyberbullying to try to stop it?
   - What stops people from helping when cyberbullying has started?

4) Social relationship and involvement:
   - You see that several nasty comments were posted online about one of your best friend’s which would hurt their feelings– what would you do?
   - You see that several nasty comments were posted online about someone you know which would hurt their feelings– what would you do?
   - You see that several nasty comments were posted online about a stranger which would hurt their feelings – what would you do?
5) Scenarios – exploring the difference in behaviour according to social groupings:

**Victim:**

A person finds a website that has a cartoon making fun of them on it. This is not the first time it has happened.

On a scale from 1 to 10 (where 1 is not upset at all and 10 is extremely upset) how upset would the person be if they saw the website when:

- They were alone
- They were physically with other people
- Tell me why the scores are the same/different

**Assistant:**

Someone makes a video of themselves in a silly costume just for laughs and does not expect anyone to find it. The video is found and posted on You Tube. A number of people have made comments and forwarded it to others.

On a scale from 1 to 10 (where 1 is not likely at all and 10 is extremely likely) how likely would people be to join in when:

- They saw the video by themselves
- They saw the video when they were physically with other people
- Tell me why the scores are the same/different

**Defender:**

A comment is put onto someone’s Facebook page that says ‘Teacher’s pet’. A number of other people have posted mean comments.

On a scale from 1 to 10 (where 1 is not likely at all and 10 is extremely likely) how likely would people be to try to stop the cyberbullying:

- If they saw the comments when alone
- If they saw the comments when they were physically with other people
- Tell me why the scores are the same/different
Scenario selection for the interview schedule

In order to explore the differences found in Study One between participant behaviour ‘when alone’ and ‘when physically with others’, students were presented with scenarios and asked to rate victim, assistant and defender behaviour in the aforementioned groupings. The scoring was used to generate discussion relating to how social grouping affects behaviour.

Mishna and Van Wert (2013) highlight that it is often easier to discuss other people than ourselves, especially when sensitive topics are talked about. Therefore they state that vignettes are a helpful tool. Exploring sensitive topics through vignettes allows adolescents to offer their perspective and creates a platform through which they can discuss their own experiences (Barter & Renold, 2000). However they also ensure that participants do not need to discuss their own stories if they do not feel comfortable.

With this in mind, three scenarios were used from Bauman and Newman’s (2012) study which explored differences between distress associated with conventional and cyber bullying. While the scenarios were developed for university students, Bauman and Newman (2012) highlight that the scenarios were more common in middle or high school. Therefore they were deemed appropriate for Study Two.

(N.B. – References located in Study Two reference pages)
Figure 54: An example of a ‘typical cyberbullying experience’ rich picture
34  Contact summary sheet: adapted from Miles and Huberman (1994)

Year 8 boys’ focus group (20.01.2014)

Issues

Students drew their rich pictures and then discussed. Four out of five students included information about bystanders. The majority of conversations revolved around cyberbullying within social groups (students knew who they were cyberbullied by or who was assisting or reinforcing the behaviour). Students discussed the role the computer played when cyberbullying. There appeared to be reduced thoughts about how it might affect others.

Important points

- The majority of students independently highlighted the role of the bystander in cyberbullying situations.
- The majority of cyberbullying does not appear to be anonymous.
- The computer (or other online devices) appeared to reduce the thought processes associated with how actions may affect others.

New questions to consider

- I need to be aware of time. When students arrived at the interview room, we only had 50 minutes. Students had a lot to say and it is important that I am able to cover each of the intended areas.
- I need to be more concise in my follow up questions and attempt to gain more pupil reflection by asking questions such as ‘tell me more about that’.

Reflections

I was pleased with the introductions. Students appeared comfortable to share information and were aware of the staff they could approach if required. I need to improve my time management. Students’ discussion moved away from intended areas at times and I was reluctant to redirect the conversation; however this meant that the scenarios were rushed and students had more to say when we finished. In addition, I become preoccupied with time and this affected my ability to actively listen. While one student described his rich
picture I noticed that another student added a bystander to his drawing. He may have felt pressured to do so or I may have encouraged others with my language and non verbal cues and influenced behaviour.
Validating focus group themes

It was hoped that the themes generated from analysis of the focus group data would be presented to the adolescent participants to ensure they accurately represented their original ideas and thoughts. However the participating school was reluctant to allow students to miss further classroom time to participate in this activity in the time I had available. I continue to be in contact with the school and hope to be able to organize a convenient time for this to happen. However if I am unsuccessful I plan to validate the themes with another group of students at a later date.
### Focus group scaling question scores

<table>
<thead>
<tr>
<th>Student</th>
<th>Reinforce/Assist</th>
<th>Defend/Outside</th>
<th>Victim</th>
<th>Assistant</th>
<th>Defender</th>
</tr>
</thead>
<tbody>
<tr>
<td>7B</td>
<td>8</td>
<td>7</td>
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<td>5</td>
<td>7</td>
</tr>
<tr>
<td>7B</td>
<td>7</td>
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<td>NS</td>
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</tr>
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<td>9</td>
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<td>8G</td>
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<td>6.96</td>
<td>5.72</td>
<td>8.16</td>
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<td></td>
</tr>
</tbody>
</table>

#### Female scores

| Total | 99   | 73   | 105  | 97   | 82   | 93   | 67   | 42   |
| # of  | 14   | 15   | 12   | 13   | 12   | 12   | 14   | 11   |
| Mean  | 7.07 | 4.87 | 8.75 | 7.46 | 6.83 | 7.75 | 4.79 | 3.82 |

#### Male scores

| Total | 89   | 81.5 | 99   | 36   | 60   | 92   | 80   | 57   |
| # of  | 13   | 12   | 13   | 6    | 9    | 12   | 13   | 11   |
| Mean  | 6.84 | 6.79 | 7.6  | 6    | 6.66 | 7.66 | 6.15 | 5.18 |

Figure S55: Table to show focus group scaling question scores
37 Stages of Thematic Analysis

Focus group transcriptions were analysed using the six stages of thematic analysis (Braun & Clarke, 2006).

37.1 Stage 1 and 2

During the first phase I familiarized myself with the data by repeatedly listening to the audio recordings of the interviews, by reading the interview transcriptions and by reviewing the notes I had taken during the focus groups. Once I felt I had immersed myself into the data I began to generate initial codes, which started the second phase of analysis. The codes identified features of the data which I perceived to be interesting. Initially 28 codes were identified:

- Cyberbullying on what device
- What happens in cyberbullying
- Where cyberbullying happens
- Adults’ involvement
- Anonymity
- Asynchronous
- Audio and visual cues
- Longer lasting effects
- Misinterpretation
- Power
- Cyberbullying relationships
- Empathy
- Links with traditional bullying
- Importance of online communication for adolescents
- Assistant behaviour
- Bully behaviour
- Defender behaviour
- Outsider behaviour
- Reinforcer behaviour
- Victim behaviour
- Popularity
- Social grouping
- Status
- Solutions
- Encourages cyberbullying behaviour
- Discourages cyberbullying behaviour
- Improves cyberbullying situation
• Makes cyberbullying situation worse

An example of how the codes were generated from the focus group transcriptions is shown below:

P1: Well there is two bystanders, one on each side. Well what happens is the cyberbully doesn’t even know the victim and is just doing it over a social network site, and then well the cyberbully is bullying the victim and she got a bystander and she can see everything on her phone and the bystander this side is on the bully’s side but she is not getting involved.

I: Ok

P1: So then rumours start happening at her school and she just doesn’t know what to do.

MB: Ok, so rumours happen for who?

P1: Urm the victim. Everyone is talking about her.

MB: Ok and why are they talking about her?

P1: Urm because, well what the cyberbully said was on an online networking site everyone can see, so they are on the cyberbully’s side.

MB: You said that the bystander on the bully’s side was involved, what types of things were happening?

P1: Urm telling the cyberbully like what to say.

MB: Ok, and then on the victim’s side, what is the bystander doing?

P1: Urm, it’s not what...she’s not watching, like, she is just seeing everything through her phone and then she knows that if something else happens then she’s just going to tell someone.

MB: Ok, so is the bystander on the victim’s side with the victim or in a different place?

P1: Different place.

MB: What would need to happen for her to become involved?

P1: Maybe see everything that is happening and then tell someone and make it better.

| Anonymity |
| Outsider behaviour |
| Links with traditional bullying |
| Longer lasting effects |
| Reinforcer behaviour |
| Outsider behaviour |
| Solutions |

Figure 56: Table to show stage 2 coding process using thematic analysis
37.2 Stage 3 and 4

During phase 3 the coded and collated data was sorted into potential themes. The codes were analysed to consider how they may combine to form overarching themes. This led to the development of 15 initial themes.

- Effects of online communication
- Characteristics of cyberbullying situation
- Computer Mediated Communication
- Feelings evoked from a cyberbullying situation
- Participant role behaviour
- Cyberbullying relationships
- Social Influence
- Popularity and status of those already involved
- Links with traditional bullying
- Coping strategies
- Decision to become involved
- Effects of the cyberbullying situation
- Importance of others already involved
- Escalation of cyberbullying
- Adults

During phase 4 the initial themes were refined. This led to some of the themes being dropped as there was not enough data to support them or themes being collapsed into each other as the information from two or more initial themes was closely related. An example of the collated extracts to show phase 3 and 4 is shown in figure 57.
### 37.2.1 Examples of extracts from the CMC theme

<table>
<thead>
<tr>
<th>Participant</th>
<th>Quote</th>
<th>Codes</th>
</tr>
</thead>
</table>
| YR7B        | **P:** They could like change their user name every other day  
MB: Ok, Ok  
P: So like people won’t be able to track them because they will have different profiles like every two days. | • Anonymity |
| YR8G        | **P:** you don’t have to like fight back  
P: yeah  
**M:** ok so you can say something and you’re not going to get a response back, someone isn’t going to kinda fight back  
P: yeah and it isn’t like really - if they comment you have a chance to like think it through whereas if they said it right to you and you stopped and like talked thinking about it, they would say oh you don’t know what to say next and start like being horrible to you because you don’t have any comebacks. | • Asynchronous |
| YR8G        | **P:** cause it is easier to say stuff online that actually in real life  
P: yeah  
**M:** ok  
P: yeah it is a lot easier than saying it out loud  
**M:** And why is that, for what reasons  
**P:** Cause you don’t have to see the person like | • Lack of audio visual cues |
| YR8G        | **P:** Well I got like, I did more like on Ask FM, which is anonymous. I can’t say that word. So like the bullies are bullying the victim on Ask FM and saying really mean stuff and people are just watch it and don’t do anything about it, they just read it and don’t like report it cause you can report it on Facebook and stuff but they just watch and the victim tells the parent but you can’t really do anything and then they tell their friends but no one can really do anything cause its anonymous. | • Anonymity |
| YR7B        | **MB:** Ok, do you think there is something about having a phone that makes it more likely for people to...  
**Unknown:** It is just tempting because like I | • Lack of audio visual cues |
| YR9B | P: People might not know each other like someone might say something that they thought was funny and then someone says well that’s not funny and then you just say something horrible even though they don’t even know you and they spread like rumours like oh so and so is gay or something like that. | • Anonymity  
• Lack of audio visual cues |

Figure 57: Table to show extracts categorised into the theme 'Computer Mediated Communication'
37.3 Stage 5 and 6

At stage 5 themes were refined and defined in order to understand what each captured and meant. In addition the themes working titles were finalized for the final analysis. At stage 6 analyses of the themes was completed when they were used to support the final version of this report.
38 Additional quotations to support arguments made in the main text

38.1 Quotation a:

John: It is probably like one hundred thousand million that you’ll see the exact same person in real life the next day and that’s if you even go out so like he has the highest chance of not seeing that person so you feel more confident you can just shout racist abuse.

38.2 Quotation b:

Mel: But like what we said before I don’t know like the person goes to another school or if you don’t know them and it has just been like over the internet I don’t know how things can get sorted out because like you don’t even know them yourself so.. and their name might be a fake name so you don’t even know their name.

38.3 Quotation c:

Fred: like what Bill was saying, on ask fm you can actually make yourself anonymous so people can’t actually see who you are or see your profile or anything and then you can speak to them anonymously so they don’t know who you are, you can just tell them to stop bullying. But that also kind of helps others join in as well cause you can bully them online and they wouldn’t be able to see you as well.

38.4 Quotation d:

Interviewer: what stops people from helping the victim?
Alice: they don’t want to get involved
Interviewer: ok
Alice: yeah being scared of that person like say the bully could be someone who is like bigger and like stronger and they don’t want them..they don’t want to get hurt.
Interviewer: ok and how do you know they are bigger and stronger if it is online?
Alice: we don’t know….we just like think. We don’t know anything about that person.
Mel: if someone says something horrible to you you feel like so small inside and you just feel like you are nothing.

38.5 Quotation e:

Dave: Because like it, erm, you don’t know them then you don’t really know to find them or to do anything about them because you don’t know where they are but if you do know them you know where they are so you can just like bully them.
John: Also like Dave said...erm if...it happens more with people you do know because erm, if you don’t know they person then you don’t know what like angers them or like stuff, whereas if you know them you know what sort of things you can say to bully them about.

38.6 Quotation f:

Kelly: On Twitter, you have favourite, retweet and reply and it is so easy to comment, it is almost like you are not yourself, that you are not conscious that you are actually commenting, but it is just so easy to do like with texting.
38.7 Quotation g:

Lucy: when you are with your friends you are not really sensible because you want to mess around a lot
Erin: yeah
Lucy: and sometimes you just get carried away and then like you see...like say if you saw that they would tell you to write a load of stuff just as a joke but to someone else it wouldn’t be like a joke it would be sick.
Erin: and when you are on your own you’ve got no one else to like share, to like ask them to see, you like think more about what you are doing.

38.8 Quotation h:

Ellie: You would be less likely to join in on your own because they have got their own personal thinking, like they are thinking for themselves, not what their friends are thinking ‘ar if I do this my friends will be impressed with me’
Liz: and your friends would see it online and then join in
Ellie: if you had seen like your friends had already seen it and commented and said horrible stuff then you would join in, erm, if none of your other friends had commented and it was just a random stranger you probably wouldn’t.

38.9 Quotation i:

Interviewer: what do others think?
Jo: If you were with like loads of other friends then I don’t think you would really stand up for them depending on if you know the person because if you know them you might laugh and agree and then just move on but if they are one of your good friends and then when you are with your other friends maybe you will all stand up for them together so I don’t know. It is sort of like, I don’t know it’s quite a hard one. I don’t think you are very likely to stand up for people when you are with a crowd.
Interviewer: Ok so you are more likely to stand up for people when you are by yourself. Why may that be?
Jo: Because maybe like those people in the group don’t want to stand up for them and if you say I want to stand up for them they might say I don’t why are you doing that.
Charlie: they could be like well abusive back, if the people you are with like don’t like the person or they have done something to the person then they might encourage you not to stand up for the person and just leave it.

38.10 Quotation j:

Jane: it is not always easy cause a lot of people just want to fit in, not everyone, but a lot of people want to fit in.
Eve: Everybody wants to fit in now and again, everybody does cause otherwise they will feel like..
Jane: a sheep
Eve: ..they are being left out.
Interviewer: Can you tell me about being a sheep?
Jane: well with a sheep they all follow, say one walks off the rest of them will all go. So the most popular person starts a new trend the rest will follow so if one popular person starts cyberbullying someone they will all follow.
38.11 Quotation: k

Jill: Yeah cause usually their friends don’t want to get involved otherwise they could get bullied as well and if you get involved everyone else is like ‘oh they got involved’ and now they are getting bullied and where as if you are on the bullies side you are not really going to get bullied back cause you are the bully who will bully them.

Interviewer: ok

Jill: and sometimes the victim, if they go and like get really upset and tell their friend it will make them look weak and that is why they don’t tell many people cause they don’t want to look like they can’t handle it themselves.

38.12 Quotation: l

Fred: you try not to get dragged into it. If like you are going to say anything you can like tell them what to do, but if it’s like your friend and it is serious you might like get involved and tell the person to stop but it can come back on you.

38.13 Quotation: m

Emma: erm, if other people join in, the bully is less likely to let it go and the other people, if the bully who started it off lets it go the other people might just carry it on

Rebecca: if one person says one thing it is quite easy to forget it, but if other people are saying the same thing over and over again then it is really hard to get it out of your brain cause loads of people are pretty much embedding that into your head making sure you remember what they have put.

Jasmine: especially if it’s on line you can see it over and over again.

38.14 Quotation: n

Masie: and sometimes the victim, if they go and like get really upset and tell their friend, it will make them look weak and that is why they don’t tell many people cause they don’t want to look like they can’t handle it themselves.

38.15 Quotation: o

John: block or report it but also trying to get your friends together, like the victims friends, just to help push him up again because obviously when you are bullied you go down quite a fair bit whereas sometimes you can, it just helps, like not like in a physical sense, but just mentally it can really help.

Interviewer: doing it online or face to face?

John: well either really. I mean it can make you feel a lot better if you get a text message to say ‘hay the bully was wrong you are not that bad, you are a good friend etc etc’ that can make you feel a lot better.

Will: yeah like it can really help to build up your self esteem and stuff knowing that there is someone there looking over you and stuff, helping you.

38.16 Quotation: p

John: So people normally just like, the teachers can help sometimes by saying helpful things and like making sure they are ok like every day once they come to school but sometimes they could have like useless information that you know you are not going to use.
38.17 Quotation q:

Bob: Sometimes because if you do sometimes then they will just say stop playing the game and like they will delete your account. But sometimes if your account is built up really good and you spent like proper money on it like to get extra cash to get better things you don’t want to delete it and you just don’t want...Like I got a steam account and I have all of my favourite games. It was about 100 quids worth of games but I got told to delete the account because I was getting bullied and I didn’t because that is my money and I spent it on it and I don’t want to just see it get deleted.

38.18 Quotation r:

Interviewer: And what about the parents or adult or teacher. Is that a helpful way do you think?
Kim: well I don’t think it is but then people do.
Sally: I don’t
Kay: I don’t
Interviewer: so why is it not helpful?
Kim: Well if you tell your parent they just call school
Sally: and it kind of makes it worse
Kim: And then school gets involved
Sally: and it makes the bullying worse
Kay: and the bully finds out
Kim: the school can’t do a lot, cause they have got a lot on their hands and they can’t stop and sit down with the people
39 Trustworthiness of thematic analysis

The following themes were generated by an Educational Psychologist familiar with thematic analysis, who coded a transcript from Study Two. Extracts from the transcript and the EP’s comments are organised by research questions. Themes and their related extracts are colour coded.

Relationship to Victim

Proximity to Bullying Incident

Victimisation

Education and Understanding

Misconstruing Intention through Social Media

Personal Involvement

<table>
<thead>
<tr>
<th>What promotes adolescents participation in cyber bullying?</th>
<th>What inhibits adolescent participation in cyber bullying?</th>
<th>What influences do adolescents perceive bystanders have in cyber bullying situations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand becoming ‘involved’ as both bullying and retaliating to bullies</td>
<td>Whether the adolescent knows the victim or not, e.g. if victim is family they won’t become involved as perpetrator although may stand up for family</td>
<td>Easy to encourage (“egged on”) people to bully / make comment online</td>
</tr>
<tr>
<td>Involvement depends on whether an individual knows the victim / group of people being bullied</td>
<td>It can be easier to stand back rather than become involved and take the attitude that ‘whatever happens, happens’</td>
<td>Bystanders can indirectly encourage bullying to continue by ‘liking’ social media comments</td>
</tr>
<tr>
<td>Family is a factor – more likely to stick up for your family</td>
<td>More knowledge of consequences can stop some people (although adults don’t always know how to stop it)</td>
<td>If people join in then the comments are ‘embedded’ in the victims mind</td>
</tr>
<tr>
<td>Easier to make comments / bully online than face to face – feelings of it being easier to be ‘caught up’ or ‘join in’ with cyber bullying for people who wouldn’t normally engage in bullying behaviours</td>
<td>Adolescents don’t typically get involved if it’s a stranger – best to stay out of it</td>
<td>If bystanders support the bully (or like comments), the bullying might be ‘ten times worse’</td>
</tr>
<tr>
<td>There is a worry of being victimised if they don’t join in</td>
<td>Also, if it’s between two individuals it is better to leave it for them to sort out</td>
<td>Social media can cause lots more people to become involved – more behaviour from bystanders than encourages bullying</td>
</tr>
<tr>
<td>Staying part of a social group in the hope that, when the bullying stops, they will still have friends and be part of the group – fear of being victimised</td>
<td></td>
<td>Bystanders are at risk of being bullied if they have information to give the bullies, i.e. if they are seen to be a good friend of victim</td>
</tr>
<tr>
<td>Social media has made it easier</td>
<td></td>
<td>Bystanders can stop bullying</td>
</tr>
</tbody>
</table>
to become involved by ‘liking’ comments or ‘retweeting’ tweets – comments on social media can be taken the wrong way and misinterpreted

Lack of respect for / understanding of consequences can encourage cyber bullying

Easy to join in when friends are commenting online

Adolescents will retaliate and join in with bullying if it is seen to be against their friend

Although they might need to retaliate or tell the bullies to stop – some discussion later that telling people to stop bullying doesn’t work and that you have got to retaliate (stand up to?) to stop bullies

Bystanders not getting involved (especially if argument is between two people) can help to stop it

If bystanders become involved then they may “suffer the consequences”

Bystanders can support victims although it can be best to do it privately rather than in public forum

<table>
<thead>
<tr>
<th>How does social grouping affect adolescent cyber bullying bystander behaviour?</th>
<th>What are the gender differences in bystander behaviour in cyber bullying situations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents can join in with bullying in the hope that, when the bullying stops, they will still have friends and remain part of the group</td>
<td><em>I didn’t feel able to comment on this area as I only read one focus group transcript.</em></td>
</tr>
<tr>
<td>Adolescents can worry about being victimised by not joining in</td>
<td></td>
</tr>
<tr>
<td>A sense of ‘there’s always going to be bullies in life / school’ so we have to learn to deal with it</td>
<td></td>
</tr>
<tr>
<td>Strangers to the group, e.g. new adolescents in school, can be targeted</td>
<td></td>
</tr>
<tr>
<td>Bullying often happens between two friendship groups, not always between individuals</td>
<td></td>
</tr>
<tr>
<td>Older year groups bully younger year groups</td>
<td></td>
</tr>
<tr>
<td>Adults can’t stop cyber bullying as they don’t understand it – teachers often make it worse</td>
<td></td>
</tr>
<tr>
<td>You should help individuals if they are being bullied by a group but don’t get involved with the group if it’s not your social group of friends</td>
<td></td>
</tr>
</tbody>
</table>

Figure 58: Tables to show extracts and an independent analyst’s comments from a transcript generated to explore the trustworthiness of the thematic analysis findings.
40 Study Two researcher reflections

It is not possible to conduct research that is value-neutral (Ritchie & Lewis, 2006), so it is important to understand how researcher actions influence results. The fact that I am a white, married, 35 year old male, enrolled on a doctoral training course affected my relationships and interactions with participants. It influenced my follow up questions and my interpretation of the data. Furthermore my background, personal characteristics and my presentation affected the amount of information participants were willing to reveal (Denscombe, 2007). In addition while I reflected on the interview process (Appendix 34) to try to remain passive and neutral (Denscombe, 2007) it is possible that my questioning and body language reinforced participant’s comments that I valued. Furthermore I coded and analysed the data to produce themes that I wasn’t able to validate with the participants (Appendix 35). While Braun and Clarke (2006) suggest that researcher judgment is necessary to determine what a theme is, my reading and ideas influenced this process.

In addition I felt more comfortable during Study Two as Study One data collection and analysis had finished and I felt I was progressing. Furthermore Study Two aligned to the principles I learnt while training as an educational psychologist. I enjoyed building relationships and interacting with participants in focus groups but most importantly I created a platform for them to share their views, thoughts and opinions.
41 Literature Review

The literature review is related and linked to Study One and Study Two but has already been marked by the University of Exeter. It is included to provide more information regarding cyberbullying and the role of bystander.

Introduction:

Adolescents in the United Kingdom (UK) have grown up in a world in which there is extensive use of social interactive technologies (text messaging, mobile phones, email, social networking sites, Instant Messenger) in everyday life. For many adolescents their offline and online worlds fall into one social arena (Subrahmanyam & Smahel, 2011) and adolescents spend increasing amounts of time communicating via computers, smart phones or other electronic devices (Smith et al., 2008). The development of modern communication technologies over the last decade has created a number of new online interaction possibilities. These developments are not limited to adolescents’ personal lives and have also brought about changes to education. Networks and wireless communications are removing barriers and providing access to virtually limitless resources and information. It seems clear that technology is providing educators with advantages that will change the views and opinions of schools and learning (Diamanduros, Downs, & Jenkins, 2008), and while there appear to be many benefits it is also important to recognise a range of negative issues that the utilization of technology can produce.

This range of negative issues has been recognised at a national level within the UK, which led to the development of the UK Council for Child Internet Safety in 2008. Furthermore within schools the Education and Inspections Act (2006) states that schools must have measures to prevent all forms of bullying and from January 2012 a new OFSTED (schools inspection) framework was introduced requiring schools to demonstrate the impact of their anti bullying work. In addition a range of local and national organisations such as the South West Grid for learning (SWGfl) and the Child Exploitation and Online Protection (CEOP) group have been set up to keep children safe online. Yet despite these types of initiatives, researchers recognise that risks, such as cyberbullying, bring significant and worrying issues for children and young people (Lenhart, 2007, Li 2007, Oliver & Candappa, 2003).
There is evidence that being victim of online antisocial behaviour can result in serious psychosomatic and psychosocial health problems. Studies have found that individuals who are cyberbullied can feel fearful, depressed, confused, guilty, lonely, embarrassed, angry, sad and experience low self esteem and more interpersonal problems than non victims (Mishna, Saini, & Solomon, 2009; Perren, Dooley, Shaw & Cross, 2010; Raskouskas, 2010) especially when they respond ineffectively (Machmutav, Perren, Sticca & Alsakar, 2012). Other studies have found evidence for physical and behavioural consequences associated with cyberbullying such as a drop in academic performance, offline interpersonal victimisation, problems with peers, aggressive behaviour and the use of drugs and alcohol (Beran & Li, 2007; Katzer, Fetchenhauer & Belschak, 2009). It has also been suggested by some researchers (Mishna et al., 2009; Twyman, Saylor, Taylor, Comeaux, 2010) that the effects of cyberbullying may be more severe than the effects of face to face bullying due to the anonymity of the perpetrator and the difficulty associated with removing online messages. Therefore, it seems beneficial to explore potential solutions that may help to reduce the occurrence of cyberbullying.

Educational Psychologists (EP) may contribute to the aforementioned outcome by supporting schools, professionals and children. This may be done by aiding the development of anti bullying policies and practice, by providing training and information sessions that link students and staff, and by offering therapeutic support to individuals affected by cyberbullying (Ahmed, 2006; Campbell, 2005). Ackers (2012) states that if EPs are to maintain these roles and keep up to date in the area of cyberbullying they should communicate with children and young people to develop specific, current knowledge. Furthermore, Diamandrous et al. (2008) have suggested that school psychologists are in a unique position to have a vital role in addressing issues of cyberbullying and its psychological impact on children and adolescents; that they can assess the prevalence and severity of cyberbullying and that they can develop and advise on prevention programmes.

This research study aims to explore cyberbullying and the bystander, to develop an understanding of the roles observers take while witnessing bullying in the cyber world. Furthermore it will explore the ways that adolescents perceive they can make a difference when witnessing cyberbullying, focusing on barriers to intervening and how bystanders may be encouraged to act against bullying behaviour. The study will take two forms; an initial
survey will gather information relating to the general aims, and findings will be used to inform focus group discussion to explore the perceived difference bystanders can make to cyberbullying.

Therefore this paper will explore the literature and examine links between traditional bullying and cyberbullying focusing on gender and age comparisons. It will explore the psychology of Computer Mediated Communication (CMC) and examine the role that bystanders may play in preventing cyberbullying. Finally this paper will identify gaps in the literature which will be explored to inform the aforementioned research study.

**Searching for sources:**

A range of literature is available in the area of adolescence and cyberbullying and given that cyberbullying research is still in a formative stage, much literature focuses on its prevalence, frequency among specific groups, and the negative outcomes associated with it. This next section will explore the literature which has been selected as relevant to this research study. In order to identify research that was specifically relevant, searches using a number of techniques were employed.

A number of key words, phrases and search engines (as shown in figure 1) were used to identify primary source materials. Additionally citation searches of these articles helped to find other relevant literature. Primary sources were included if they could be partly generalised to the current research study and had adequate reliability and validity. Some government initiatives were searched and relevant information from book chapters was also included.

**Figure 1: Search engines and key words used for literature searches.**

<table>
<thead>
<tr>
<th>Search Engines</th>
<th>Key words</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCO E-Journals</td>
<td>Cyberbullying</td>
</tr>
<tr>
<td>PsychARTICLES</td>
<td>Bullying</td>
</tr>
<tr>
<td>JSTOR</td>
<td>Adolescent(s)</td>
</tr>
<tr>
<td>Education Research Complete</td>
<td>Internet</td>
</tr>
<tr>
<td>ERIC PlusText</td>
<td>Bystander</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>Peers</td>
</tr>
<tr>
<td>Individual searches through specific journals relating to Educational Psychology</td>
<td>Victimisation</td>
</tr>
<tr>
<td></td>
<td>Computer Meditated Communication</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
</tbody>
</table>
Online lives:

The use of social interactive technologies (SIT) has taken a prominent role in the lives of adolescents in recent years and has provided them new contexts in which to engage. The internet has been described as an indispensible and central element in the lives of adolescents (Lenhart, Purcell, Smith, & Zickuhr, 2010) and for the majority of them electronic communication tools such as chat rooms and social networking sites are “critical tools for their social life” (Kowalski, Limber, & Agatston, 2008, p. 2). As part of a larger European Union kids on line survey, Livingstone (2012) reported data relating to 9 – 16 year old children living in the UK. Her survey found that 91% of UK children go online at school and 95% access the internet at home. In addition half of UK children go online via a mobile device meaning they have access to the internet or can interact with others in many places at any time. The average time spent online was 102 minutes per day. While this was a national study only 1032 nine to sixteen year olds were interviewed, therefore it is difficult to generalise from the findings.

Technological advances and the use of SIT have created opportunities for adolescents in cyberspace but also present dangers. (Spears, Slee, Owens, & Johnson, 2008). A United Nations International Children’s Emergency Fund (UNICEF) report published in 2011 revealed how young people’s wellbeing has become increasingly compromised with greater exposure to the risk of sharing personal details and images with online contacts; indecent behaviour; stalking; sexual online contact and behaviour; online gambling and cyberbullying.

Cyberbullying and bullying - a comparison:

In the past decade research into cyberbullying has received much attention. Tokunaga (2010), attempting to provide unity to the inconsistent definitions of cyberbullying, stated “cyberbullying is any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others” (p. 278). This definition has similarities to definitions of face to face bullying (Olweus, 1993) such as repetitiveness and intentionality but there are important differences between both forms.
One difference is that Tokunaga (2010) did not make reference to power imbalance, which is referred to in traditional bullying definitions (Olweus, 1993). In traditional bullying this could relate to physical or psychological weakness but may also be due to popularity or rejection in a peer group. These forms of imbalance are not so clear in cyberbullying as physical strength or strength in numbers are not necessary (Slonje, Smith & Frisen, 2013).

One possible area of power imbalance in cyberbullying relates to individuals’ technical abilities with SIT. Vandebosch and Cleemput (2008), using data from 53 focus groups, found that pupils with more advanced internet skills were more likely to experience negative mobile phone and internet activities. Furthermore Ybarra and Mitchell (2004) found that cyberbullies, when compared with other young people who did not cyberbully, were more likely to rate themselves as internet experts. While it appears that power imbalances can play a part in understanding how cyberbullying is defined, it is important to remember that many acts such as sending an unpleasant text message or uploading a picture to the internet are not complicated. Slonje et al. (2013) suggested that technological skills are a minor factor in much of the text message and website bullying experienced by school age pupils.

Another difference is the perception that perpetrators of cyberbullying are often unknown or have used fake identities, which Vandebosch and Van Cleemput (2008) argue can also contribute to power imbalances. While many studies have reported that victims of antisocial online behaviour are unaware of who their perpetrators is (Dehue, Boleman, & Vollink, 2008; Dempsey, Sulkowski, Dempsey, & Starch, 2011; Huang & Chou, 2010; Ybarra, Diener-West, & Leaf, 2007) other studies have found that cyberbullying often occurs in the context of relationships (Hoft & Mitchell, 2008; Mishna et al., 2009; National Children’s Home, 2002). Research by the National Children’s Home (2005) found that 73% of participants (770 youth aged between 11 and 19 years) knew the person who had cyberbullied them. Furthermore Mishna, Cook, Gadalla, Daciuk, and Solomon (2010) conducted a survey with 2186 Canadian adolescents aged 10 – 17 years and found that in 89% of reported incidents the identity of the perpetrator was known and was likely to be considered a friend or a student at the respondent’s school or a school in the area. As part of the study, Mishna et al. (2010) conducted focus groups and asked students for their views of cyberbullying but did not enquire about their actual experiences. Interestingly, the vast majority of focus
group participants said cyberbullying was anonymous, which contradicted students’ reported experiences. These findings suggest that while anonymity may aid some individuals to use electronic devices to bully, the opportunity for anonymous communication is not used by all cyberbullies.

It is also important to point out that while focus groups provide information more quickly, are easier to set up, utilise more mature forms of communication and stimulate group interaction when compared to other qualitative methods (Kruger, 1994), they can increase the likelihood of eliciting participant responses that may be biased by pressure to socially conform to group norms or to present in socially desirable ways (Kruger, 1994). Furthermore discussion of highly private or complex issues, such as cyberbullying, may be constrained and researchers have less control over the direction of discussion due to the unpredictable nature of group interaction (Kruger, 1994).

Further differences between face to face and cyberbullying relate to the lack of non verbal cues in online bullying and therefore the increased risk of misinterpretation of the message by the victim (Vandebash & Cleemput, 2009) which may offer an explanation for Mishna et al. (2010) findings. It is also important to note that cyberbullying can take place almost anywhere and at any time of the day so there are few places for victims to escape (Mishna et al., 2009) and that the potential audience is much larger and the bullying is visible for longer when compared to more traditional forms (Patchin & Hinduja, 2011; Slonje & Smith, 2008; Ybarra et al., 2007). With this in mind, some researchers (Vandebosh & Cleemput, 2009) argue that a single act such as writing a negative comment or uploading an embarrassing picture can be defined as cyberbullying as it can be seen by multiple people and therefore viewed as a repetitive act.

It appears that characteristics of cyberbullying, namely that it can be done almost anywhere, at any time of the day and the potential for it to be anonymous, may increase its prevalence in comparison to more traditional bullying but is this the case?

Bullying has been a common phenomenon in schools for a number of decades and has even been viewed as an accepted and predictable part of childhood. However, with the many studies that have been conducted around the world, there is growing recognition that bullying is a public health issue that must be addressed (Blosnich & Bossarte, 2011).
There have been many large scale surveys throughout the world which have estimated that prevalence rates range from 9% to 73% (Mishna, 2012) with an average prevalence of 35% (Craig & Harel, 2004). It is likely that these prevalence rates vary considerably due to differences across countries and cultures, the developmental stage and age of the children involved, and the inconsistent ways bullying has been defined or categorised (Craig, Henderson, & Murphy, 2000). It is also likely that bullying rates are different due to methods of data collection (self report questionnaires or peer and teacher ratings); providing or not providing a definition of bullying to pupils; the type of rating categories used, and the time period which has been considered.

If, as Olweus (2012) suggests, cyberbullying should not be viewed in isolation from more traditional forms, it seems important to explore similarities to and differences from both. When considering age the evidence suggests that traditional bullying is more prevalent amongst younger children (Mishna, 2012). A study in Australia with more than 38,000 participants between the ages of 8 – 18 found that bullying decreased with age (Rigby, 2002) as older students abandoned bullying tactics and recognised they could become more dominant in a group by using non-aggressive ways of relating to others. However, it is important to note that students were asked ‘How often they had been bullied this year’. Given the developmental differences between 8 and 18 year olds it seems possible that this data may not have represented actual events accurately. Despite this flaw other researchers have found that bullying decreases with age (Olweus, 1993; Smith, Madsen & Moody, 1999), however Eslea and Rees (2001) reported that this may be due to children’s changing definitions of bullying (children may not classify verbal teasing as bullying). Furthermore Pelligrini and Long (2002) studied bullying patterns in a 2 year longitudinal study of children transitioning from primary to secondary school in the UK. Using self report, peer nomination, direct observation and teacher questionnaires they found that bullying increased during the transition. These results suggest that more studies are needed to understand how bullying and victimisation changes across age groups.

Research on gender and bullying is contradictory and while there is evidence that boys bully more than girls (Craig & Harel, 2004), differences in victimization between girls and boys are small or have no clear pattern (Craig & Harel, 2004). While boys tend to bully physically or directly (Craig & Pepler, 2007), considerable research findings indicate that girls are more
likely to bully through indirect or relational means (Crick, 1996; Pellegrini & Roseth, 2006). However some studies have shown that girls and boys do not differ in the amount of indirect aggression they engage in (Baldry, 2004). It should be noted that Baldry (2004) used self report measures and asked students to answer statements including ‘no one would stay with me at recess’ or ‘no one would talk to me.’ It is possible that participants did not consider these behaviours bullying which may have contributed to the similarity of the findings in his study. Furthermore some studies state that boys are more likely to be victims and perpetrators of indirect and direct aggression (O’Connell, Pepler, & Craig, 1999), while others suggest that although the forms of bullying may vary, girls and boys are equally involved (Crick & Grotepeter, 1995). Craig and Pepler (2007) suggest that establishing dominance is more important for boys and this may be achieved with overt aggression whereas friendships are thought to be more important for girls which are damaged with indirect aggression.

The exploration of age as a predictor in cyberbullying has received much attention in the literature, however the majority of studies show a lack of association between age and cyberbullying victimisation. Despite this some studies have found significant relationships. Kowalski and Limber (2007) surveyed 3,767 children, using self reports, from grades 6, 7, and 8 from six schools in south-eastern and north-western United States (US). They found that those in grade 7 (aged 11 – 12) and grade 8 (aged 12 – 13) were significantly more likely to cyberbully others when using Instant Messenger than students in lower grades. Furthermore their study found that students in grade 8 used text messaging more frequently to cyberbully others in comparison to their younger peers. Guerra and Williams (2007) found similar results. 3,339 US children from grade 5 (aged 9 – 10), grade 8 and grade 11 (aged 15 – 16) completed questionnaires including measures of cyberbullying perpetration and victimization. The researchers found that 5th graders experienced the least victimization with a prevalence of 4.5%. The proportion of students’ cyberbullied reached its highest point in 8th graders (12.9%) and dropped amongst older students (9.9%). Although these studies found similar results there were some differences in the procedures used. Kowalski and Limber (2007) used Olweus (1993) definition of bullying with an amendment for cyberbullying but Guerra and Williams (2007) study did not define bullying. In addition Kowalski and Limber (2007) were concerned with pupils experiences in the ‘last couple of
months’ while Guerra and Williams (2007) conducted their study in the spring and used the reference period ‘since the school year began’. Therefore it is difficult to draw accurate conclusions when comparing these studies.

In a review of the cyberbullying literature, Tokunaga (2010) reported a lack of consistency in the data with the greatest frequency of cyberbullying victimization occurring between the ages of 11 – 13 with a decline thereafter. While a reduction in victimization with age is consistent with traditional bullying, it would appear that the peak found in some studies occurs at an older age in cyberbullying. A reason for this increased peak age could be that cyberbullying involves individuals using devices such as smart phones or computers and that some social networking sites have minimum age requirements of 13. Despite this, Livingstone (2012) reports that on average 9 – 16 year olds were 8 when they first used the internet and that 28% of 9 – 10 year olds and 59% of 11 – 12 year olds living in the UK have a social network profile suggesting that minimum age requirements need to be monitored more carefully. This may suggest that future research will find younger children involved in cyberbullying as both perpetrators and victims.

Similarly to the findings of cyberbullying and age there are inconsistent findings regarding links between cyberbullying and gender. Given that girls are more likely to engage in indirect or relational bullying it would appear that it is not unreasonable to hypothesize that girls are more likely to cyberbully, however this is not consistently shown in the literature. While a minority of studies have found that girls are more likely to cyberbully (Li, 2006; Ybarra & Mitchell, 2004) and be victims of cyberbullying (Dehue et al., 2008; Kowalski & Limber, 2007; Ybarra & Mitchell, 2004) the majority of studies reveal no particular gender is targeted more than others (Hinduja & Patchin, 2008; Li, 2007; Juven & Gross, 2008; Wolak, Mitchell, & Finkelhar, 2007).

To summarise, Smith (2012) described seven features that differ between cyberbullying and traditional bullying. He suggested that cyberbullying is dependent on some degree of technological expertise; that it is indirect rather than face to face; that the perpetrator does not usually see the victim’s reaction in the short term; that there are a variety of bystander roles (the bystander may be with the perpetrator when an act is sent or posted; with the victim when it is received; or with neither, when receiving the message or visiting the relevant internet sites); that a cyberbully is not rewarded for showing power over others in
front of witnesses; that the potential audience is increased and that cyberbullying can occur in a variety of places and is not bound by the hours a student is at school.

**Assessment Methods:**

A range of assessment techniques have been used to collect data regarding bullying in schools, but the most prevalent is through survey methods which allow for information to be gathered from self, peer, teacher and parent reports (Crothers & Levinson, 2004).

A popular and established self report measure is the Olweus Bully Victim Questionnaire (Olweus, 1996) which explores multiple aspects of bullying. The Bully Victim Questionnaire has been influential in design and implementation of subsequent approaches (Espelage & Holt, 2001).

Self report measures do not require a great deal of time, are easy to administer and are inexpensive (Crothers & Levinson, 2004). They provide a unique individual view and are helpful when tracking behaviours related to cyberbullying given the potential for anonymous interactions. However self reports of bullying can underestimate actual behaviour because perpetrators, in the interest of maintaining social desirability, are often reluctant to identify themselves (Pellegrini & Bortini, 2000).

A number of peer nomination measures have been developed ranging from children receiving ‘like’ or ‘dislike’ nominations (Dodge, Coie, Pettit & Price, 1990) to children separating photos of their classmates into ‘those who bully’ and ‘those who do not bully’ piles (Bowers, Smith & Binney, 1994).

Peer nomination methods have several flaws. Social pressure or friendship groups may influence nomination of certain peers and informed consent procedures may limit all children in a class participating. Furthermore recent social difficulties within a classroom can lead to nominations that do not support typical trends.

Other measures that can be used are teacher reports. While teacher reports offer additional perspectives, some behaviour within a school environment are likely to be concealed from teachers and most relationally victimized children are not likely to make teachers aware of this behaviour (Griffin & Cross, 2004).
Qualitative approaches have been identified as offering value to meaningful interpretation of data and explorative analysis of new phenomenon (Banister, Burman, Parker, Taylor & Tindle, 1994). Approaches include focus groups (discussed earlier), individual interviews, observational techniques or keeping diaries.

As survey methods are often unable to reflect the complex and subtle nature of social interaction, observation can be used to provide unbiased analysis of focal participant’s behaviour when definitions are clearly articulated and interrater reliability is established (Crothers & Levinson, 2004). Despite this, time constraints and the degree of effort required are likely factors preventing this method becoming more commonly used (Griffin & Cross, 2004). Furthermore it would be extremely challenging to use this method in cyberbullying research due to the nature of online communication.

The instruments used to assess bullying behaviour in any particular study influence the quality and type of data that can be collected and therefore contribute to the conclusions that are made. In addition results will be influenced by the sample, the informant, the time period considered, and the types and frequency of bullying that were measured.

**Computer Mediated Communication:**

While there are similarities and differences between bullying and cyberbullying, it is clear that cyberbullying is now viewed as a serious societal concern. Although Olweus (2012) suggests that cyberbullying must be studied in relation to traditional bullying, it is also important to recognise that cyberbullying has unique and distinctly different factors. Focus group participants (Mishna et al., 2010) suggested that technology has extended bullying from school to a child’s home which in effect can result in continuous bullying. Participants also stated that while mobile phones were often banned from school, students were able to find ways to continue to use them. Furthermore the ability to assume a peer’s identity or anonymously post messages is quite different from traditional bullying. It also seems likely that the use of CMC is likely to affect the behaviour of those engaged in online bullying in comparison to the face to face interactions that would occur in traditional bullying. Therefore it seems important to explore how behaviour may change when using online as opposed to face to face methods of communicating.
Research on psychology and the internet has, in general, shown that people behave differently online in comparison to similar offline situations (Joinson, 2003 & Suler, 2004). This difference in behaviour has been called disinhibition (Joinson, 1998) or an online disinhibition effect (Suler, 2004).

Suler (2004) suggests that the disinhibition effect can work in one of two ways. People may share personal information revealing fears, wishes or emotions in an act known as benign disinhibition or people may be rude or show threatening behaviour, which is called toxic disinhibition. Suler (2004) argues that different factors individually or collectively may be involved in the disinhibition effect.

A key factor of toxic disinhibition, and an element of cyberbullying, is anonymity. Anonymity allows those online to separate online behaviours from their in-person lifestyle and identity, which may increase the likelihood of individuals making negative comments or posting inappropriate pictures of others. While in its most extreme form it results in an individual being unidentifiable, research suggests that a cyberbully is often known to their victims. Therefore it appears possible that the audiovisual anonymity during cyberbullying may affect behaviour. A lack of non-verbal cues such as eye contact, frowns or head shaking may lead to a greater willingness to victimise others.

It has been assumed that anonymity causes a decrease in an individual’s sense of individuality and personal responsibility (Diener, 1979) and recent studies on CMC have found similar results. Furthermore Matheson and Zanna (1988) argue that evidence from CMC suggests that people have increased private self awareness and reduced public self awareness. This is likely to affect the interactions of cyberbullies and victims but also those who observe it.

Therefore, it seems possible that a reason cyberbullies engage in cyberbullying behaviour is due to a decrease in self control and a lack of individual regulation due to the absence of restraints that may occur in face to face interactions. Furthermore, due to the context of cyberbullying, those who witness it, the bystanders, may behave in different ways in comparison to face to face interactions for similar reasons. If bystanders witness cyberbullying it is difficult for them to know how many others are witnessing or have witnessed the event, which may lead to the diffusion of responsibility caused by the
bystander effect and therefore a lack of supportive behaviour (Latane & Darley, 1970; Thornberg, 2007). Furthermore given that those who witness cyberbullying are unlikely to see a victim’s emotional response, they may underestimate the severity of the act. In addition, the lack of visual cues may decrease empathy of those who witness the event and may therefore limit any potential intervention. It is also important to note that, given the audiovisual anonymity of cyberbullying, unless support for a victim or rejection of the bullying is explicitly expressed, the behaviour may continue as the bully, victim and bystanders are not able to adjust their behaviour due to non verbal cues.

The bystander:

While research into cyberbullying and the role of the bystander is in its infancy and there are only a handful of studies on the subject there has been much research on this topic in bullying. Studies utilizing naturalistic observations at school found that peers are present in 85% of all bullying episodes (Hawkins, Pepler, & Craig, 2001). This led researchers to study how bystanders react to bullying and how their reactions may contribute to the problem or help to resolve it (Salmivalli, Lagerspetz, Bjorkquist, Osterman & Kaukiainen, 1996). Using a peer nomination procedure to identify the roles children have in the bullying process, Salmivalli et al. (1996) identified four participants’ roles in addition to the bully or victim. Assistants of bullies join the ringleader while reinforcers provide positive feedback to the bully by laughing or cheering. Outsiders withdraw from the bullying situation while defenders comfort and support the victims and take their side. It is clear that the roles taken by witnesses of bullying have an important impact on bullies, victims and observers. When others join a bully and offer positive feedback it is likely that the bully will receive positive reinforcement, whereas if the bully is challenged and others take sides with the victim negative feedback is provided to the bully. In an observational study, Hawkins et al. (2001) found that bystanders support for a victim often stopped bullying episodes.

Although there are obvious benefits if bystanders are able to defend a victim, children who witness bullying do not seem to use their potential to stop it (Salmivalli, 2010). While most children are against bullying and report that they would support peers in hypothetical situations (Rigby & Johnson, 2006; Whitney & Smith, 1993) a study of 6th and 8th graders in Finland (Salmivalli, Lappalainen, & Lagerspetz, 1998) identified 17 – 20% of students as defenders but 20 – 29% as reinforcers or assistors to the bully. Furthermore 26 – 30%
withdrew from the bullying situation and did not take sides allowing it to continue. So, while children may report they are likely to aid a victim, in reality this does not appear to be the case.

Salmivalli (2010), in a review of bullying and the peer group, highlights multiple reasons why children do not intervene more in bullying situations. It appears the bystander effect and diffusion of responsibility may limit involvement as those watching may feel that someone else will take action; if nobody does the event may not be viewed as serious. Furthermore as most bullying acts consist of verbal attacks, the bullying may appear mild and assumed to be a joke (Terasahjo & Salmivalli, 2003). In addition as bullies are often perceived as powerful and popular, it may appear difficult for observers to stand up to them. It has also been found (Garandeau & Cillessen, 2006) that behaving aggressively towards a target of bullying may allow individuals to feel they belong to a peer group and therefore fit in. Over time, this may develop into a strong negative bias regarding the victimised classmate as Schuster (2001) found that identified victimised classmates were seen as personally responsible for their mistakes more often than non victimised classmates.

There are also individual differences that affect how individuals may behave when witnessing bullying. Research suggests that those who are empathic (Caravita, Diblasio, & Salmivalli, 2009), who have strong anti-bullying attitudes (Salmivalli & Voeten, 2004), and who have high self efficacy related to defending (Poyhonen & Salmivalli, 2008) are more likely to support or defend victimised peers. Defenders are also usually cognitively skilled (Caravita, Diblasio, & Salmivalli, 2010) and emotionally stable (Tani, Greenman, Schnider, & Fregoso, 2003). Furthermore a study (Rigby & Johnson, 2006) involving 200 late primary and early secondary school students found that younger children were significantly more likely to express their intention to intervene in a bullying situation compared to their older peers. Finally girls are nominated as defenders more often than boys by victims (Sainio, Veenstra, Huitsing, & Salmivalli, 2011) and classmates (Poyhonen, Juvonen, & Salmivalli, 2010).

Not surprisingly, those who approve of bullying are more likely to adopt pro-bullying roles such as being a bully, assistant or reinforcer (Salmivalli & Voeten, 2004). Those who take up these positions also appear to lack empathic understanding for victims (Poyhonen & Salmivalli, 2008). Those who withdraw from bullying situation tend to have empathy for the victim but lack self efficacy to defend (Poyhonen & Salmivalli, 2008).
Some studies have also explored how individual differences may affect behaviour when witnessing cyberbullying. Wachs (2012) explored moral disengagement and emotional and social difficulties in bullying and cyberbullying with 517 German students in grades 5 – 10. The research found that those engaged in traditional bullying felt worse than those who engaged in cyberbullying. However, while participants were given Olweus (1999) definition of traditional bullying, a non specific cyberbullying definition was used. This may have resulted in a lack of understanding of what cyberbullying is. Furthermore Slonje et al. (2013) investigated remorse felt by students who had bullied others. 70% of those who had traditionally bullied others felt remorse. In comparison only 42% of those who had cyberbullied reported remorse after their actions. These findings suggest that the nature of cyberbullying may offer less opportunity for feelings of empathy to occur, which may affect potential interventions.

It seems probable that cyber bystanders may also be influenced by factors that stop intervention in face to face bullying. However, given the aforementioned features of the online environment bystanders cyber activities would be subjected to less monitoring from the bully and therefore online bystanders may be more willing to intervene. In comparison to school bullying, the bully and the bystanders are distant and mutually invisible online (Machackova, Dedkova, Sevcikova, & Cerna, 2013). Therefore it would appear that although a bystander’s actions many not stay anonymous; the distance may increase private self awareness and allow bystanders to more easily express support to victims.

Given that victims of cyberbullying rarely inform adults or parents of victimizations it is necessary to examine the role bystanders could play in cyberbully prevention. Studies report that victims only told their parents 1 – 9% of the time (Aricak et al., 2008; Slonje & Smith, 2007) for several reasons. Some youth feel that it is important to learn how to effectively manage their own problems while using communication technologies (Juvoven & Gross, 2008) while other feel their access to the internet may be limited if they alert parents. Instead of informing parents, many victims consult friends for support and advice (Aricak et al., 2008; Slonje & Smith, 2008). Therefore friends or bystanders are ideally placed to intervene during cyberbullying episodes and have the power to reduce future cyberbullying. This means it is important to explore research regarding cyberbullying and the bystander.
A handful of studies have been published to date exploring cyberbullying and the bystander. Barlinska, Szuster, and Winiewski (2013) explored negative bystander behaviour with pupils aged between 11 and 18 from Poland. The authors concluded that negative bystander behaviours occur more often in cyberspace than offline situations and that intervention involving both effective and cognitive empathy may limit negative bystander behaviour.

In contrast, a study by Machackova et al. (2013) explored bystanders’ support of cyberbullied schoolmates with 156 Czech students aged between 12 – 18. This study found that while age, gender, self esteem and problematic relationships with peers had no effect as a predictor of supportive behaviour, prosocial behaviour did predict supportive behaviour. Furthermore contextual factors such as existing relationships with the victim, upset feelings evoked by witnessing victimisation and direct requests for help from the victim triggered support while strong relationships with bullies inhibited it. Importantly, those who were asked about their experiences were directed to recall cyberbullying incidents without reference to a time period. Therefore incidents recalled from several months or years earlier may be difficult to remember accurately and affect the results of the study.

A study by Wachs (2012) focused, in part, on exploring the different participant roles students in German schools take in bullying and cyberbullying acts. Students were asked to answer questions such as ‘how often they had bullied or cyberbullied others’ or ‘how often they had defended someone who was being bullied or cyberbullied’. The study found that 8.5% of students identified themselves as traditional bullies while 6.2% stated they were cyberbullies. 9.8% were traditional victims while 5.0% were cybervictims. 5.0% of students could be identified as bully-victims while 4.2% were both a cyberbully and cybervictim. In addition, 7.9% were traditional assistants and 4.2% were cyberassistants. Furthermore 8.5% were traditional defenders and 5.0% were cyberdefenders. Finally 27.6% identified themselves as a bystander in traditional bullying while 11.2% suggested they were cyberbystanders.

The results show a similar distribution of both traditional and cyber forms of bullying with the exception that there were fewer bullies and more victims for traditional bullying. It is also important to note that there were fewer cyberbystanders than traditional bystanders. Interestingly, Wachs (2012) did not use a specific definition of cyberbullying and instead
adapted Olweus’ (1999) definition of traditional bullying; explaining that cyberbullying was the same but involved the use of information communication technologies. Given the earlier discussion of definitional problems within the cyberbullying literature this may have made it difficult for students to distinguish between the two similar definitions. Furthermore, it seems problematic that students were assigned to a participant group from answering single questions. It is possible that students may have, for example, forwarded e-mails or pictures to others without realising that this may be viewed as ‘helping the cyberbully’.

**Gaps in the literature and my research study:**

Research into cyberbullying is still in its infancy and for this reason a large proportion of the available literature relates to its prevalence, frequency among specific groups and the negative outcomes associated with it. Tokunaga (2010) calls for a move away from simple yes/no responses and it is therefore important to explore the views of adolescents, described by some as the defining users of the internet (Lenhart, Madden, & Hitlin, 2005), in more detail.

While numerous articles have explored how cyberbullying affects victims, there has been limited research into how cyberbullying may be tackled. To do this it appears important to make comparisons with strategies employed in traditional bullying.

One such strategy focuses on peer involvement, identifying how group members are seen as having different roles within a bullying event that are influenced by individual characteristics and environmental factors. When bullying is placed in the group context it helps improve understanding as to an individual’s motivation to bully, why support is or is not offered to victims and how those who observe it can encourage or inhibit bullying behaviour. While this view, namely bystander behaviour in bullying situations, is increasingly perceived as key for solving the problems of cyberbullying (Kraft, 2011; Spears et al., 2008) there has been limited exploration as to the role bystanders take during cyberbullying episodes.

Therefore this study will adapt the Participant Role Scales (Salmivalli, 1998) to explore the specific roles that 11 to 16 year olds take during cyberbullying episodes. Furthermore this measure will explore the unique factors relating to cyberbullying such as the variety of bystander roles including bystanders being with a perpetrator or victim when cyberbullying occurs. The study will also use an adapted version of the Pro-Victim Scale (Rigby & Slee,
1991) to identify whether pupils attitudes towards cyberbullying correlate to the roles they take. It seems likely that those who have strong anti cyberbullying views would support or defend victimized peers, however given the unique factors of computer mediated communication this may not be the case.

Data collected from these measures will inform focus group exploration of adolescent perceptions as to what may encourage bystanders to intervene and what may prevent them from becoming involved in cyberbullying situations. Findings from this study will be used by the schools in which the research takes place to inform their cyberbullying prevention strategies.
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