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The Impact of Bullying and Nurture Experiences on Emotional Wellbeing

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Naomi Katherine Hughes

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Overview

This portfolio has three parts:

Part one: A systematic literature review of the effectiveness of nurture groups upon emotional wellbeing.

Part two: An empirical paper on the bullying experiences, perceived social support, and mental health of emerging adults.

Part three: Appendices including documents relevant parts one and two, and a reflective account of the research process.

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THE IMPACT OF BULLYING AND NURTURE EXPERIENCES

ON EMOTIONAL WELLBEING

PART ONE

Systematic Literature Review

The Effectiveness of Nurture Groups: A Systematic Review

Naomi Katherine Hughes & Dr Annette Schlösser*

Department of Clinical Psychology and Psychological Therapies

Hertford Building

University of Hull, Hull, HU6 7RX

*Corresponding author: Tel: +44 1482 464106

Email addresses: n.k.hughes@2007.hull.ac.uk, a.schlosser@hull.ac.uk

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Please see Appendix A for the Guidelines for Authors.

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The Effectiveness of Nurture Groups: A Systematic Review

Naomi Katherine Hughes and Annette Schlösser*

*University of Hull, UK

Children with emotional difficulties often experience problems at school in terms of academic progress and within peer relationships. They are also more likely to continue to experience emotional problems in their adult lives. Nurture groups (NGs) were developed in the 1960s by the educational psychologist Majorie Boxall (Boxall 2002), and their aim is to improve the emotional wellbeing of children who are struggling, through providing them with reparative attachment experiences. This review aims to evaluate the effectiveness of NGs. Eleven papers examining the effectiveness of NGs were included, as well as two papers which explored the particular communication styles adopted by NG teachers. There was evidence that NGs are effective in improving the emotional wellbeing of children, but there is a need for higher quality and longitudinal research. There is a paucity of research into secondary school NGs. The review highlighted the NG teachers' use of more positive verbal and nonverbal behaviour. Implications for future research are discussed.

Key words: *nurture group; emotional difficulties; children; school; intervention; SEBD*

* Corresponding author. The Department of Clinical Psychology and Psychological Therapies, Hertford Building, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: a.schlosser@hull.ac.uk.

Introduction

Research clearly demonstrates that children who have emotional difficulties are more likely to struggle to achieve and participate at school, and to engage with their peers (NICE 2008, 2009). It follows that these children can continue to struggle into their adolescence and adulthood, if they are not well supported. Indeed, over 50% of adults classified as experiencing mental health problems also experienced emotional problems as a child, and less than half of these adults had received appropriate support in their childhood years (Young Minds 2012).

In UK government literature, children who have particular difficulties managing their emotions or are withdrawn, and struggle to concentrate and/or relate to others, are referred to as having social, emotional, and behavioural difficulties (SEBD) (Department for Education and Skills 1994, 2001). Currently, the acronym BESD is used within educational settings to describe a range of problems that children may struggle with following a problematic early childhood. These children may also be deemed as having learning difficulties if their emotional, social, and/or behavioural struggles significantly interfere with their ability to learn (Department for Education and Skills 1994, 2001).

Since the publication of Every Child Matters (Department for Education & Skills 2003) and the subsequent revision of The Children Act (1989, 2004), it has been government policy that schools both enhance the emotional wellbeing of children and provide particular support for those experiencing social, emotional, and/or behavioural

problems. This is also reflected in the NICE guidelines (2008, 2009) and the Healthy Child Programme (Department for Children, Schools & Families 2009). The previous government also initiated the Targeted Mental Health in Schools project (TaMHS; Department for Children, Schools and Families, 2008), which set out a model for schools to support the social and emotional wellbeing of their pupils. TaMHS reported that the highest quality evidence favoured multi-component whole school approaches which involve social and emotional learning, teacher training, working with parents/carers, and small group work for pupils, focusing on problem-solving and social skills. The project emphasised the Social and Emotional Aspects of Learning (SEAL) programme, which was originally introduced into primary schools in 2005 (Department for Education 2005) as a national strategy aimed at promoting the social and emotional wellbeing of all children. SEAL programmes incorporate teaching sessions that promote the development of self-awareness, empathy, social skills, motivation and managing feelings, as well as a whole school approach (Department for Children, Schools & Families 2008). The TaMHS project also supported the provision of well-established nurture groups (NGs) for children with social, emotional, and/or behavioural difficulties, though they were not emphasised due to their less rigorous evidence base.

Since the coalition government came into office in May 2010, the status of initiatives set up by the previous government has become unclear. The coalition government released a White Paper: The Importance of Teaching (Department for Education 2010), which placed emphasis upon the use of clear discipline within schools and of giving headteachers more control over their schools.

As of 2012, a 'Healthy Schools' toolkit has been made available on the Department for Education's website (see http://www.education.gov.uk/schools/pupilsupport/ pastoralcare/ a0075278/healthy-schools). This toolkit also emphasises the autonomy of headteachers in deciding which evidence-based interventions to utilise within their schools, and provides tools and suggestions for measuring outcomes. NGs are one of the options headteachers can consider in supporting pupils who experience emotional, social, and/or behavioural difficulties. Indeed, the Ofsted survey 'Supporting Children with Challenging Behaviour through a Nurture Group Approach' (2011), recommended that the Department for Education and local authorities consider the value of NGs that are well-led, and help children make academic gains as well as improving their emotional and social development. The importance of clear and frequent communication between teachers and NG staff was also highlighted.

NGs were initially introduced during the 1960s, by the educational psychologist Marjorie Boxall, who worked in central London (Boxall 2002). The groups were developed for children who either were disruptive or withdrawn, experienced difficulties relaxing and concentrating, and/or struggled to make and maintain relationships. The majority of these children had missed out on essential healthy attachment experiences, often due to neglectful and/or otherwise abusive parenting. Parents often had high levels of stress and emotional difficulties of their own (Boxall 2002).

Given this, Boxall's philosophy for NGs was based upon providing such children with reparative attachment experiences within the school setting (Boxall 2002), described as using attachment theory (Bowlby 1965, 1969, 1980). This proposes that infants are

born with a biological predisposition to form emotional attachments, which provide them with comfort and security (Bowlby 1969). Through these attachments, a child develops internal working models of themselves and others which affect expectations of how others will respond to him or her. Those who do not have the opportunity to build secure attachments with their caregivers are likely to develop negative working models of others, which may adversely impact upon their emotional wellbeing, social and cognitive development (Bowlby 1969, 1980). NGs aim to provide children with the opportunity to build secure attachments with caring adults in a safe environment outside of home (Colwell & O'Connor 2003), with NG teachers offering a safe base to the children, which should enable the re-writing of internal working model scripts. It was hypothesised that by addressing the attachment needs of these children, their emotional wellbeing would improve, thus also improving their behaviour in class and with peers, enabling them to make the most of the available opportunities to learn and to develop friendships.

'Classic' NGs are provided for 4-8 year olds, and consist of 10-12 children, with a teacher and a teaching assistant (Boxall 2002). NGs have also been introduced for year 7 and 8 pupils in secondary schools, as a result of research showing evidence for heightened plasticity of the brain around early adolescence (Cooke et al. 2008). However, as acknowledged by Bowlby (1980), individuals continue to rely on intimate attachments throughout their lives. Although our first experience of attachments may be most influential, later relationships can offer opportunities to repair early traumas (Wallin 2007).

Nurture groups run for four and a half days per week and provide a structured intervention involving curriculum-based tasks, social learning and emotional literacy

tasks, and opportunities for play. There are plenty of opportunities to interact with an adult as well as the other children. Whilst attending a NG, children continue to also belong to their mainstream class, and still attend registration and end of day activities within their mainstream class. The children will usually attend the NG for two school terms before returning to their mainstream class on a full-time basis, which is usually treated as a gradual transition process (Seth-Smith, Levi, Pratt, Fonagy & Jaffey 2010).

There are deviations from the 'classic' NG model, such as part-time variations (Scott & Lee 2009; Cooke, Yeomans & Parkes 2008) and adaptations for secondary school groups which include discussion of adolescent issues (Cooke et al. 2008). It is currently estimated that there are around 1,500 NGs within the UK (Nurture Group Network 2010). They have also recently been introduced in Maltese schools (Cefai & Cooper 2011).

A number of studies have examined the effectiveness of NGs upon children's academic achievements and emotional wellbeing. However, to date, there has not been a systematic review to synthesise the findings of these studies in order to provide more robust conclusions. It therefore is important to conduct a review in this area, particularly in light of the current emphasis upon headteachers having increased autonomy in choosing evidence-based interventions to support their pupils. The systematic review will be conducted with the following research questions in mind:

- Are NGs effective in improving the emotional wellbeing of children with social, emotional and behavioural difficulties?
- If so, what are the particular strategies adopted which appear to be effective?

Method

Data Sources and Search Strategy

Searches were conducted in the following electronic databases: Academic Search Premier, PsycInfo, PsycArticles, Medline, CINAHL, ERIC, and Education Research Complete.

The search terms used were: "nurture group*" (* indicates truncation). As nurture groups refer to a specific intervention, and are not referred to by any other name, it was not deemed appropriate to use any other search terms. There were no restrictions applied in regards to publication date or place of publication.

All relevant articles were also hand searched for other relevant papers.

Study Selection (Inclusion and Exclusion Criteria)

Studies were selected based on the following inclusion criteria:

1. Peer-reviewed journal articles.
2. Nurture group intervention (classic or adapted).
3. Participants were school aged (4-18 years old).
4. Quantitative studies, focusing on the effectiveness of nurture groups OR observational studies examining particular strategies used by NG teachers.
5. A minimum of one outcome measure related to emotional wellbeing in quantitative studies.

Data Extraction and Synthesis

The following information was collected from studies: aim(s), design, sample characteristics, classic or adapted NG (if adapted, how so), variables included, measures and results. The review did not consider the qualitative data reported in some of the quantitative studies, due to the focus on effectiveness.

Details of Included and Excluded Studies

Electronic searches generated 183 articles. After removing articles that were not academic journal articles, 66 journal articles remained. Only 23 papers were nurture group studies. This number does not include duplicates, of which there were 12. Qualitative studies were then removed, as were studies which did not include measures of emotional wellbeing or did not examine the particular strategies adopted by NG teachers. This left a total of 13 papers to be reviewed. The main characteristics of the included studies are summarised in Table I. A flow diagram of the search process can be found in Appendix B.

[Table I here].

Study Quality Assessment

The Downs and Black checklist (1998) was used to assess the quality of the studies. The checklist consists of 27 items. Nine of the items have two possible responses of ‘yes’ or

'no' (Items 1-4 & 6-10), 16 of the items have three possible responses of 'yes', 'no', or 'unable to determine' (Items 11-26), one of the items has three possible responses of 'yes', 'partially', or 'no' (Item 5), and lastly, one of the items has five options based on power calculations (Item 27).

For use in the present review, the checklist was adapted to fit with the data collected (see Appendix C). Items 11, 12, 14, 15, 16, 19, 23 and 24 were deleted as they were not relevant to the studies. Item 13 was edited from "Were the staff, places, and facilities where the patients were treated, representative of the treatment the majority of patients receive?" to "Did the nurture group take place in a school environment?". Items 9 and 26 were edited from "follow-up" to "at any time point". This was because only one study included follow-up data (O'Connor & Colwell 2002), and other studies reported attrition between pre- and post-measurement (Cooper, Arnold & Boyd 2001; Cooper & Whitebread 2007; Reynolds, MacKay & Kearney 2009).

Results

Overview of Studies Included

Eleven of the 13 papers were studies of the effectiveness of nurture group (NG) interventions, based on questionnaire data. Two of the 13 papers looked more closely at the particular strategies or styles of communication and praise used in NGs. Both of those studies employed an observational design via event-sampling. One of these studies examined the frequency of verbal and non-verbal praise provided by NG teachers, and children's reactions to this. The other study examined teacher communication in nurture groups as compared to mainstream classrooms, using 11 different codes which were later converted into categories based on how self-esteem enhancing the behaviours were deemed to be.

Type of Nurture Group

Six of the studies stated that the NGs being evaluated adhered to the 'classic' model (Bani 2011; Cooper et al. 2001; Colwell & O'Connor 2003; Doyle 2005; O'Connor & Colwell 2002; Seth-Smith et al. 2010). Cooper and Whitebread (2007) evaluated a mixture of NGs, three of which were part-time but otherwise adhered to the 'classic' principles, and the remaining two departed significantly from the 'classic' model.

Four other studies reported on part-time NGs (Binnie & Allen 2008; Cooke et al. 2008; Scott & Lee 2009; Sanders 2007). However, in Sanders' (2007) study, it was stated that the majority of NG children in the infant school pilot project attended on a part-time basis, but it was not clear whether the NGs in the other two schools were also part-time groups. Cooke et al. (2008) reported on a NG set up in a secondary school which had been adapted by including discussions around adolescent issues as well as the addition of suitable craft activities, and an allocated time for saying goodbye at the end of the session. Scott and Lee (2009) stated that one of the NGs they evaluated did not always have two adults available, and one was four half days instead of five. Two studies did not specify whether the NGs being evaluated adhered to the 'classic' model, or were adapted (Gerrard 2005; Reynolds et al. 2009).

Age Group

The majority of the studies (n=11) focused on NGs set up in infant and primary schools (Bani 2011; Binnie & Allen 2008; Colwell & O'Connor 2003; Cooper et al. 2001; Cooper & Whitebread 2007; Doyle 2005; O'Connor & Colwell 2002; Reynolds et al. 2009; Sanders 2007; Scott & Lee 2009; Seth-Smith et al. 2010). One study reported on a NG adapted for secondary school children in years seven and eight (Cooke et al. 2008), whilst another included findings from one secondary school (Cooper & Whitebread 2007). One study did not state whether the NGs were taking place within an

infant, primary or secondary school, or the age range of the participating children (Gerrard 2005).

Design

One of the included studies was a case study reporting on a five year old boy's progress in a NG (Doyle 2005). The other 10 studies evaluated individual outcomes following NG attendance, and reported on a total number of NG children ranging from 17 (Sanders 2007) to 359 (Cooper & Whitebread 2007). One study did not report the number of NG children included (Cooke et al. 2008).

Seven out of the 11 effectiveness studies recruited control groups (Cooper et al. 2001; Cooper & Whitebread 2007; Gerrard 2005; Reynolds et al. 2009; Sanders 2007; Scott & Lee 2009; Seth-Smith et al. 2010), six of which were matched to some extent (Cooper et al. 2001; Cooper & Whitebread 2007; Reynolds et al. 2009; Sanders 2007; Scott & Lee 2009; Seth-Smith et al. 2010). Reynolds et al. (2009) initially matched schools based on levels of socio-economic deprivation, number of pupils on the school roll, and level of need according to a specially designed audit, before further matching the individual children based on level of need. Sanders (2007) also matched children based on level of need, this time according to the Boxall Profile. Scott & Lee (2009) matched children based on age, gender and learning or behavioural concerns. Cooper et al. (2001) used age, gender, educational attainment and level of SEBD as a way of matching NG and control group children. Cooper and Whitebread (2007) recruited four control groups matched by age, gender and academic ability. Seth-Smith et al. (2010) matched their control group and NG children based on gender and ethnicity.

The time between pre and post scores varied from three months (Doyle, 2005) to one year (Cooke et al. 2008; Cooper et al. 2001). However, one study (O'Connor & Colwell

2002) provided follow-up data for 12 of the children who had attended a NG, at a mean of 2.67 years since leaving the NG.

Measures

The Boxall Profile (BP; Bennathan & Boxall 1998) was included as an outcome measure in all of the studies evaluating the effectiveness of NGs. The BP has been found to have a high level of concordance with the SDQ, showing that both measures indicate the same children as having difficulties (Couture, Cooper & Royer, 2011). They also found the following Cronbach's alphas for the BP sub-strands, three of which consisted of good internal consistency (Organisation of experience: α= .87, Internalisation of controls: α=.83, Unsupported development: α=.83), one of which demonstrated poor internal consistency (Undeveloped behaviour: α=.51), with the remaining sub-strand indicating unacceptable internal consistency (Self-limiting features: α=.24). It seems important to note, however, that these latter two sub-strands, consist of 3 and 2 items each, respectively. Whilst Couture et al.'s (2011) study provides some evidence of reliability and validity for the BP, this has been the first study examining the psychometric properties of the BP.

Six of the studies that used the BP also included the Strengths and Difficulties Questionnaire – teacher version (SDQ-t; Goodman 1998) as an outcome measure (Binnie & Allen 2008; Cooper et al. 2001; Cooper & Whitebread 2007; Gerrard 2005; Reynolds et al. 2009, & Seth-Smith et al. 2010), one of which also included the SDQ parent/carer version (SDQ-p; Goodman 1998) (Binnie & Allen 2008). The SDQ has been found to have acceptable reliability and validity (Muris, Meesters and van der Berg, 2003; Goodman, 2001). Two of the studies included the Behavioural Indicators of Self-esteem (BIOS; Burnett 1999), which were also completed by teachers (Binnie & Allen 2008; Reynolds et al. 2009). The BIOS has also been found to be a reliable and

valid measure (Burnett, 1998). Three studies also used parent questionnaires or interviews (Binnie & Allen 2008; Cooper et al. 2001; Sanders 2007). Five studies included measures of academic progress (Cooper et al. 2001; Reynolds et al. 2009; Sanders 2007; Scott & Lee 2009; Seth-Smith et al. 2010). Qualitative data concerning the views of the NG children was collected in two of the studies (Cooper et al. 2001; Sanders 2007).

All studies used pre and post measures. One study also used measures mid-intervention (Scott & Lee 2009), and one study included measures for some participants at follow-up (O'Connor & Colwell 2002).

Quality of Studies

None of the studies reported on power calculations, and only two of the studies reported standard deviations (O'Connor & Colwell 2002; Seth-Smith et al. 2010). A random sample of the studies was also evaluated by an independent researcher. Inter-rater reliability was 91%. Overall, the effectiveness studies were of reasonable to poor quality, with quality ratings ranging between 10.5-73.7%, whilst the two observational studies were of high quality (90% & 100%) (see Appendix D).

Effectiveness of the Nurture Groups

Classic NGs

Seth-Smith et al. (2010) evaluated the progress of 41 children attending classic NGs and 36 control group children. When compared to control group children, NG children significantly improved on the 'peer problems', 'pro-social behaviour' and 'hyperactivity' subscales of the SDQ-t, but not the 'conduct difficulties' or 'emotional

difficulties' subscales. The control group children were matched on gender and ethnicity, and differences in age and academic ability were controlled for in the data analysis. Significant improvements for both NG and control group children were found on the 'organisation of experience' and 'internalisation of controls' sub-strands of the BP, though findings appeared more consistent for NG children. A significant interaction effect for the 'unsupported development' sub-strand was also found, in that there were substantial improvements for NG children when compared to control group children, whose improvements appeared less consistent. Academic achievement was also found to improve for both groups, but more consistently so for NG children. Those not receiving the intervention were found to experience increased emotional and conduct difficulties over the 6 month period.

Cooper et al. (2001) reported on interim findings from a study of 216 children attending classic NGs, compared to 64 matched children with SEBD in mainstream classes, and 62 matched children without SEBD in mainstream classes. When compared to control group children, NG children made significant improvements according to all sub-scales of the SDQ-t. NG children also made significant progress on both strands of the BP, though comparisons with control group children could not be made as the BP was only administered to those attending NGs. Teachers also perceived academic improvements for the NG children, and most parents of NG children reported a positive impact of the NG upon their child. It was stated that 61 NG children were lost between pre and post measurement, and therefore it is impossible to know what happened to these children i.e. why they left the NG, whether their wellbeing improved or deteriorated, etc.

O'Connor and Colwell (2002) reported on the progress of 68 children attending classic NGs for an average of 3 terms. They found that the NG children made significant improvements on all strands of the BP, particularly for 'participates constructively' and 'accommodates to others'. In the diagnostic profile, the greatest improvements were for

'disengaged' and 'avoids/rejects attachment'. Follow-up findings were reported on for 12 of these children, and improvements were sustained for 16 out of the 20 BP sub-strands, though there was some evidence of relapse for 'connects up experiences', 'undeveloped/insecure sense of self', 'shows negativity towards others', and 'wants/grabs, disregarding others'.

Doyle (2005) reported on a case study of a five year old boy who attended a 'classic' NG for 3 months. There was no evidence of statistical analysis, though raw scores were provided and it was stated that "vast improvements" on all strands of the BP were made. However, not all of his post-scores were within the normal range. Clearly, single case studies involve methodological weaknesses regarding generalisation and reliability.

Overall, each of the studies evaluating classic NGs found significant improvements for NG children, except for Doyle (2005) where statistical analysis was not possible. However, Seth-Smith et al. (2010) found that NG children did not improve on all of the sub-scales of the SDQ-t ('conduct difficulties' and 'emotional difficulties'), though Cooper et al. (2001) found significant improvements for NG children on all of the SDQ-t subscales. All of the studies found significant improvements on the BP. However, only Seth-Smith et al. (2010) administered the BP to both NG and control group children, and found that both improved significantly on this measure, although there were more consistent improvements for NG children. This study also benefitted from data analysis which did not aggregate changes across participants, and controlled for differences in the ages and academic ability of NG and control group children, suggesting more robust findings, whereas Cooper et al. (2001) did not include a control group. O'Connor and Colwell's (2002) study benefitted from a follow-up at an average of 2.67 following NG children. They found some evidence of relapse for 12 follow-up children, though clearly these findings are limited by the high attrition rate between the post and follow-up period. The areas of relapse were the following BP sub-strands: 'connects up

experiences', 'undeveloped/insecure sense of self', 'shows negativity towards others', and 'wants/grabs, disregarding others'. Implications of these findings of relapse could indicate that NGs are ineffective at promoting wellbeing in the long-term, that children may need to be in a NG for a longer time period, or that top-up interventions may be needed.

Adapted NGs

Binnie and Allen (2008) evaluated the progress of 36 children attended 6 part-time NGs. It was not clear whether the NGs otherwise adhered to the 'classic' model, though it was stated that 2 adults facilitated the groups. They found that the children made significant progress according to the BP, SDQ-t, SDQ-p, and the BIOS. Most parents also reported that their children's behaviour, self-esteem and academic progress improved over the course of the intervention. Most class teachers also reported benefits in these areas. The inclusion of multiple sources of assessment improves the validity of these findings.

Sanders (2007) reported on an infant school pilot project, whereby 17 reception and year 1 pupils attended part-time NGs. It was not stated whether the NGs otherwise adhered to the classic model. They compared the children attending NGs to 9 control group children matched on level of need according to the BP. They found that NG children significantly improved on the developmental strands of the BP, but not on all of the diagnostic profile sub-strands. The sub-strands they did not significantly improve on were "self-negating", "makes undifferentiated attachments", "craves attachment and reassurance", "shows negativism towards others", and "wants, grabs, disregards others". However, it is important to note the very young ages of these children and therefore what kind of improvements may be expected over the short term. Repeated experiences may be needed for these children to make progress in these areas.

Scott and Lee (2009) evaluated the progress of 25 NG children as compared to 25 control group children, who were matched on gender, age, and learning or behavioural concerns. They found that the NG children significantly improved on all areas of the BP, but that their academic progress was not significantly greater than that of the control group children. Upon separating age groups, they found that primary years 1-3 but not 4-7 made significant improvements on the BP, although there were only ten children in the older age group, adversely affecting the validity of the data analysis.

Cooke et al. (2008) reported on a NG adapted for secondary school children, which was part-time and adapted to cover adolescent issues. They reported that NG children made "clear improvements" on the developmental strand of the BP, when all scores were taken together, though not all of the post scores were in the normal range. They found inconsistent scores on the diagnostic profile of the BP. They did not report on the number of participants, and there was no evidence of statistical analysis, suggesting a lack of methodological robustness.

Overall, the studies that evaluated part-time NGs found at least some improvements for the children attending these groups. Scott and Lee (2009) and Binnie and Allen (2008) reported significant improvements on all strands of the BP for NG children, though the latter study did not include a control group. Sanders's (2007) study on infant school NGs found that the NG children, but not control group children, significantly improved on the developmental strands, but not all of the diagnostic profile. However, their sample size was small (n=17 in NG, n=9 control group children), perhaps reducing the validity of the statistical analysis. Cooke et al. (2008) reported similar findings of

greater improvements on the developmental strands as compared to the diagnostic profile of the BP, though their study was limited by serious methodological flaws.

Mixed model

Only one paper included various types of nurture groups. Cooper and Whitebread (2007) reported on the progress of 359 children in a variety of NGs including 21 classic NGs in primary schools, 3 part-time but otherwise classic NGs, 6 'variant 1' NGs, and 2 'variant 3' NGs in secondary schools. The progress of these children was compared to that of 187 children in 4 different matched control groups. They found that NG children significantly improved on the SDQ-t between term 1 and 2, as compared to children without SEBD and those with SEBD in schools without NGs, whose scores declined. Their scores were not significantly improved when compared to those with SEBD in schools with established NGs. Comparisons could not be made for term 4, as there was not enough available data. They also compared children in well-established NGs with those attending newly-established NGs, and that the former improved significantly more. NG children made significant improvements on all sub-strands of the BP, particularly between term 1 and 2, but for 'organisation of experience' significant improvements continued until term 4. There were high attrition rates, with 20% of the sample being lost between term 1 and 2, and only 42% of the sample remaining at term 4. This study benefits from its larger sample size, and use of 4 matched control groups, though it also suffered from a high attrition rate, and did not compare different types of NGs nor those in primary schools vs. secondary school NGs. This increased heterogeneity within the study, making it difficult to interpret whether these findings are due to an NG intervention per se, or whether the different types of NGs may have resulted in different outcomes.

Unclear/unspecified

There were three papers which feed into the unclear/unspecified category. Gerrard (2005) evaluated NGs in 17 schools, though it was not clear whether these were 'classic' or adapted NGs. Significant improvements on the SDQ-t and BP were reported for most of the children attending NGs, whereas control group children did not make progress on the SDQ-t. They were not also assessed using the BP, making these findings difficult to compare to other studies. There was a lack of information regarding the ages of NG children, types of NGs, and data analysis.

Reynolds et al. (2009) assessed the progress of 99 children in 16 schools with NGs. It was not clear whether the NGs were 'classic' or adapted. They also included a well-matched control group. Both NG and control group children were assessed using the SDQ-t, BP, BIOS, and the Baseline Assessment for Early Literacy, and only the NG children significantly improved on all measures except the SDQ-t where there was a trend in the right direction. They did not find any effects based on whether the children were from primary 1 or 2.

Overall, these studies of unspecified NGs indicate improvements for the children attending the NGs, in terms of their emotional wellbeing. However, the study by Gerrard (2005) is limited by lack of information regarding data analysis. Reynolds et al. (2009) found that NG children also improved academically, as well as emotionally. The quality of this study was enhanced by its large sample size, well-matched control group and data analysis which took into account the likelihood of Type 1 error.

Styles of Communication used in Nurture Groups

It is also important to outline research examining the styles of communication adopted by NG teachers, since the aim of this research has been to discover the particular

elements of NGs that may be effective. Two studies in this area (Bani 2011; Colwell & O'Connor 2003) will be outlined.

Bani (2011) adopted an observational design through event sampling four 'classic' NGs over a one-hour period. It was found that verbal praise was used twice more than nonverbal praise; only a third of praise was nonverbal. Also, verbal praise was mostly based on children's behaviour or schoolwork. The most common nonverbal praise was the use of eye contact, followed by the use of concrete rewards. Children were more likely to carry on behaving well after receiving verbal and nonverbal praise. Twenty-nine per cent of children responded to nonverbal praise with a nonverbal response (mostly smiling). Over half (65%) did not respond to praise if it was not related to something specific, and praise decreased over the observation period.

Colwell and O'Connor (2003) also used event sampling, over a 90 minute period in four 'classic' NGs and four mainstream classes, to compare the use of self-esteem enhancing strategies in each. They found that 86.4% of comments made by NG teachers appeared to be self-esteem enhancing, as compared to 50.7% for mainstream class teachers. Also, 97% of verbal comments made by NG teachers involved positive nonverbal behaviour, as compared to 64% for mainstream class teachers. Comments that were categorised as 'autonomy supportive' took place more often in NGs as compared to mainstream classes, and fewer 'controlling' comments were made in NGs. Furthermore, 'informative praise' was used more often in NGs, whereas 'bland praise' was used more often in mainstream classes. Teachers displayed more positive nonverbal behaviour in NGs, whereas mainstream class teachers displayed more negative nonverbal behaviour. Most of the comments made by mainstream class teachers were 'meeting belonging needs' (23.1%), but for NG teachers, most comments were 'positive class instruction' (45.3%).

Discussion and Implications

This review aimed to examine the effectiveness of nurture groups (NGs) upon the emotional wellbeing of children. Research into the specific communication styles used by NG teachers was also reviewed. Thirteen studies were included in the review, following the use of a systematic protocol. Due to the heterogeneity in the methodologies of these studies, a meta-analysis could not be conducted, so effectiveness was reviewed qualitatively. All of the effectiveness studies used the Boxall Profile, a teacher-rated measure to assess children's emotional, behavioural and social functioning. Just over half of the studies included the SDQ-t as an outcome measure, one of which also included the parent/carer version. Two studies also included the BIOS, which is a teacher-rated measure of self-esteem. Therefore, all except one of the studies relied mainly on teacher-rated measures, though three of the papers included parent questionnaires or interviews, and two included qualitative data from NG children.

Out of the studies that conducted statistical analyses, all found significant improvements on at least some strands of the BP. However, Seth-Smith et al. (2010) found that both control group and 'classic' NG children improved significantly on some strands of the BP, though they concluded that NG children had improved more consistently. They found no significant improvements for the 'undeveloped behaviour' sub-strand. This was not reported in the other studies, though it is important to bear in mind that Seth-Smith et al. (2010) used a more sophisticated statistical analysis which did not aggregate changes across participants. Having said this, Reynolds et al. (2009) also conducted a higher quality data analysis which took the likelihood of Type 1 errors into consideration, and reported no such findings. On the contrary, they found that NG children improved significantly on all five sub-strands as compared to the control group children. This study matched control group children to NG children on level of need,

whereas Seth-Smith et al. (2010) matched children based on gender and ethnicity, and both studies controlled for age. Matching based on level of need is an important factor in favour of the validity of Reynolds et al.'s (2009) findings, and together with higher participant numbers and an overall higher quality rating, perhaps gives some credence over Seth-Smith et al.'s (2010) findings. However, Reynolds et al. (2009) did not specify which types of NGs they were evaluating, making it difficult to interpret their findings in terms of identifying whether particular types of NGs are effective, or more effective, when compared to other types of NGs.

Scott and Lee (2009) found that improvements on both sections of the BP were significant only for primary one children, and not for primary two or three age groups. However, this was not supported by any of the other studies, with contradictory findings being presented by Sanders (2007), who found that infants did not make progress on some of the BP diagnostic profile sub-strands. It seems important to bear in mind the low number of participants in both Sanders (2007) and Scott and Lee's (2009) study. Evidence for the effectiveness of NGs in secondary schools is limited as Cooke et al. (2008) did not present any statistical findings and Cooper and Whitebread (2007) did not separate primary and secondary NGs in their analysis, plus the secondary NGs they included deviated considerably from the 'classic' model. Cooke et al. (2008) provided a strong rationale for NGs being adapted within secondary schools. Colley (2009) has also written about the value of secondary school NGs.

Cooper and Whitebread (2007) found that only scores on the BP strand 'organisation of experience' continued to improve between terms three (mid-intervention) and four (post-intervention) for NG children. O'Connor & Colwell (2002) found that NG children improved most significantly on the development strand, particularly on the following BP sub-strands: 'participates constructively' and 'accommodates to others', and that the most significant improvements on the diagnostic profile of the BP were for

the sub-strands 'disengaged' and 'avoids/rejects attachment'. This seems to fit from an attachment perspective, given that the aim of NGs is to provide children with the necessary attachment experiences they were unable to gain in their home environment. However, Sanders (2007) found that although NG children significantly improved on the development strand of the BP, they did not significantly improve on the following diagnostic sub-strands: 'self-negating', 'makes undifferentiated attachments', 'craves attachment and reassurance', 'shows negativism towards others', and 'wants, grabs and disregards others'. These findings should be interpreted with caution, however, due to the low sample size and very young ages of the children in this study.

Follow-up data was provided in only one of the studies. O'Connor and Colwell (2002) followed up 12 NG children at a mean of 2.67 years post-intervention and found that there were no significant relapses except for the following sub-strands: 'connects up experiences', 'has undeveloped/insecure sense of self', 'shows negativism', and 'wants, grabs and disregards others'. However, these results should be interpreted tentatively due to the high attrition rate of the study. Nevertheless, it seems important to consider how long-lasting the reported post-NG benefits may be for children. It seems logical that children without healthy attachment experiences at home may benefit from NGs, but short-term NGs may not be reparation enough for these children in the long-term if they continue to experience a suboptimal home environment after leaving the NG. It is clear that further, high quality, research in this area is needed to form robust conclusions.

In terms of the SDQ-t, 5 out of 6 of the studies that used statistical analyses found significant improvements on this measure for NG children (Binnie & Allen 2008; Cooper et al. 2001; Cooper & Whitebread 2007; Reynolds et al. 2009; Seth-Smith et al. 2010). It is possible, however, that the teachers may be biased in their scoring as they would be aware of which pupils are attending NGs. Binnie and Allen (2008) also found

significant improvements according to the SDQ-p, though they did not include a control group. However, Cooper and Whitebread (2007) found that, although NG children improved significantly compared to non-SEBD controls and SEBD controls in schools without NGs, they had only marginally higher improvements when compared to SEBD controls in the same schools. They also found that the improvement rate was greater in schools with well-established NGs. None of the other studies compared newly and well-established NGs, making it difficult to draw firm conclusions.

Introducing NGs into schools may have whole-school benefits in terms of mainstream class-teachers becoming more nurturing and children benefitting from this both directly and indirectly (other children becoming more secure and therefore getting along with peers better). Doyle (2003) wrote about incorporating NG principles into mainstream classrooms as part of a whole-school approach to increase children's emotional wellbeing. Common sense would dictate that longer-running NGs may equal more experienced NG teachers, who may therefore be well-practised in implementing the NG principles, possibly increasing the effectiveness of the intervention. However, the key aspect of leading a NG involves a nurturing approach, which seems more of a personality trait (Goldberg 1981a, 1981b; Costa & McRae 1992) than a skill per se. It is also possible that well-established NGs have become better integrated into the school, whereas newly-established ones may be interpreted by pupils as a place for 'problem children' or 'naughty kids', which may affect the effectiveness of the intervention.

Seth-Smith et al. (2010), who conducted one of the higher quality studies, found that although NG children made significantly more progress than control group children in terms of the hyperactivity, peer problems and pro-social behaviour subscales of the SDQ-t, they did not make significant improvements with respect to the emotional difficulties or conduct problems subscales. This was not replicated in other studies, though it is again important to bear in mind the higher quality data analysis conducted

in Seth-Smith et al.'s (2010) study. Perhaps the findings could be explained by some difficulties taking longer to improve than others. However, Reynolds et al. (2009) found no significant improvements for NG children according to the SDQ-t, though they reported a 'trend in the right direction'. They also used a highly formalised procedure to match the NG and control groups with sophisticated data analysis which accounted for Type 1 errors, increasing the validity of their findings. Their pre- and post-intervention time period was 6 months; it is possible that the children would have needed a longer-term NG in order to experience significant improvements.

Two studies also included the BIOS as an outcome measure (Binnie & Allen 2008; Reynolds et al. 2008) and both found significant improvements for NG children, though Binnie and Allen (2008) did not include a control group. Nevertheless, this provides evidence that NGs improve the self-esteem of participating children, as rated by their teachers.

Methodologically, a few of the studies were limited by not including a control group (Binnie & Allen 2008; O'Connor & Colwell 2002; Cooke et al. 2008). Also, two of the studies included small sample sizes (Sanders 2007; Scott & Lee 2009), making it difficult to compare NG and control group children, and reducing the validity of the findings. The quality of two of the studies was compromised by not stating which types of NGs were being evaluated (Gerrard 2005; Reynolds et al. 2009), making it difficult to interpret findings and compare different types of NGs. Furthermore, one study (Cooper & Whitebread 2007) took data from various types of NGs and did not separate these out in analyses, again allowing no comparison of different types of NGs. Attrition rates were a problem in Cooper et al.'s (2001) study, making it difficult to generalise findings without any information regarding the reasons why these children either left the NG or were not able to be assessed as post-measurement. Although follow-up data was included in O'Connor & Colwell (2002), this sample too had suffered a high

attrition rate, reducing the generalizability of the findings. Two studies were particularly poor methodologically, due to gaps in basic information and a lack of statistical analysis (Gerrard 2005; Cooke et al. 2008). More robust findings came from Seth-Smith et al. (2010) and Reynolds et al. (2009), though the latter failed to specify the type of NGs being evaluated. Also, although a single case study was included (Doyle 2005), it is difficult to generalise findings from such studies due to their methodological limitations.

Ideally, future studies should recruit larger samples, ensuring well-matched control groups are included where possible. They should report clear descriptions of the NGs being evaluated, the characteristics of the NG and control group children, including those lost to post or follow-up measurement, clearer and more thorough write-ups of methodologies, report data analyses and results including standard deviations, conduct more sophisticated data analyses which do not aggregate data across participants, and explicitly discuss confounding variables and control for these.

All except one of the studies relied, in terms of quantitative data, on teacher-reports. It would have been useful to include the SDQ child version in comparing SDQ parent/carer and teacher versions. Generally, a battery of measures that takes into account the perceptions of child, parent/carer as well as the teacher would create a more reliable overall picture of the effects of NGs by triangulating findings.

The exploration of particular communication styles or strategies used in NGs represents a new field of research attempting to identify the underpinning mechanisms that may lead to improving the emotional wellbeing of NG children. This research is in its early stages, but clearly NG teachers adopt more positive, encouraging communication (both verbally and non-verbally) when compared to mainstream class teachers. It is not surprising that there are similarities here to parenting behaviour known to facilitate

secure attachments between parent and infant, such as the importance of eye contact and shared attention (Siegel 2001).

Limitations of Review

This review aimed to evaluate the effectiveness of NGs upon the emotional wellbeing of children, and successfully provided an overview of the available studies in this area. However, the review would have been improved through the availability of higher quality studies, including randomised controlled trials and control group studies with matched controls. Understandably perhaps in this area, there is a lack of randomised controlled trials for instance, as this could mean that some children would not receive input for their emotional difficulties, but would be assigned to a non-treatment or treatment as usual control group.

Although inter-rater reliability was sought for rating the quality of the included studies, the review was conducted by a single researcher, with the help of a research supervisor, possibly reducing the reliability of the initial search.

In addition, only published studies were included, which could give rise to publication bias. However, it is published research that is considered by governmental and educational bodies, so there is a call for higher quality research in this area to be submitted for publication in order to provide these bodies with the important evidence they require.

Conclusions and Implications for Future Research

Overall, this review provides evidence that NGs are an effective intervention in improving the emotional wellbeing of children with social, emotional and behavioural difficulties, at least in the short-term. There did not appear to be significant differences between part-time or 'classic' NGs in terms of effectiveness. There is a lack of research

into NGs within secondary schools, so there is a call for more research in this area. Furthermore, a lack of follow-up data makes it difficult to interpret improvements as short- or long-term effects of NGs. Therefore, there is also a need for further research adopting longitudinal designs, to evaluate the long-term effects of NGs upon children's emotional wellbeing.

Quality of the research varied, and highlighted a need for clearer, more robust and thorough methodologies and more transparent write-ups of studies. The reliance on teacher-rated quantitative measures in all but one of the studies represented missed opportunities to make comparisons with child and parent/carer reports via comparable versions of the questionnaires. Given this, future research would benefit from including comparable quantitative measures for the NG children themselves, their parent(s)/carer(s), as well as their NG or class-teacher.

Research has also considered the benefits of NGs upon the whole school, in terms of the emotional wellbeing of children within schools of established NGs, even if they are not participating in the NG. Further research in this area is expected, in particular research linked to studies examining the specific 'key' elements of NGs with respect to promoting the development of secure attachments, and thus, emotional wellbeing.

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Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
~Bani, 2011	Classic	Observational (event sampling, 1 hour period)	N=24 4 NGs, 4-7 year olds	Verbal praise Nonverbal (NV) praise Children's responses	Types of praise assigned to various categories, children's responses also put into categories	Verbal praise used twice as much as NV praise. Only 33% of praise was NV. Most common verbal praise was based on children's behaviour or work (50%) Most common NV praise was use of eye contact, followed by use of concrete rewards. Children more likely to continue appropriate behaviour following verbal praise and NV praise. 29% of children responded to NV praise with a NV response, most commonly smiling. 65% did not respond to non-specific praise. Praise decreased over the observation- Hawthorne Effect? Or different activities?	90%
Binnie & Allen, 2008	Part-time	Pre- and post-intervention (8 months between)	N=36 (mean age 7), 6 NGs Within1 LEA.	BP BIOS SDQ(t, p) Parent Questionnaire (PQ) Staff Questionnaire (SQ) Headteacher Questionnaire (HQ)	T-tests	BP* BIOS* SDQ(t, p)* PQ (n=30)- 97% responded NG had overall positive impact on their child: 86% positive impact on behaviour, 80% improved self-esteem, 91% perceived improvement in academic progress SQ (n=46)- 94% overall positive impact, 86% improved behaviour, 95% improved self-esteem, 67% improved academic progress. HQ (n=6)- 83% overall positive impact on school, 83% positive impact on children, 67% positive impact on involved families, 67% positive impact on staff.	66.7%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
~Colwell & O'Connor, 2003	Classic	Observational (event sampling, 90 minute period), comparison to 'normal' classroom	NG children=28 Mainstream class children=120, 5-6 year olds (4 NGs and 4 mainsteam classes in 4 different schools)	11 categories of teacher behaviour used to code observations. They were then to be converted to self-esteem category scores.	Verbal statements assigned to categories, NV behaviour assigned to either of 2 NV categories. Independent judge also sorted written statements into categories. Agreement= 82.9%. Totals were calculated for NGs and normal classroom. Chi-square tests were performed for all 9 self-esteem categories.	86.4% of statements made by NG teachers seemed to be self-esteem enhancing. This was higher than for normal classroom teachers (50.7%). Highest group of statements used by normal class teachers= meeting belonging needs (23.1%). For NG teachers, largest group of statements=positive class instruction (45.3%). 97.7% of verbal statements by NG teachers also consisted of positive NV behaviour. This did not happen as much in normal classrooms (64%). Statistically significant findings: More autonomy supportive statements are used in NGs as compared to normal classes. Fewer controlling statements in NGs. Informative praise used more in NGs, bland praise used more in normal classes. Inappropriate behaviour more likely to be handled positively in NGs and negatively in normal classrooms. Greater positive NV behaviour in NG, greater negative NV behaviour in normal classes (by teachers). Strong trend- more statements to meet belonging needs in mainstream classes.	100%
Cooke, Yeomans & Parkes, 2008	Adapted for older age group (KS3), part-time (Yr 7=1 afternoon each day, Yr 8= 1 afternoon 2x p/w)	Pre and post-intervention (1 year between	N not reported	BP	No evidence of statistical analysis.	'Clear improvement' on developmental strands of Boxall Profile (when all scores considered together). Some post scores were not in the 'normal' range. Inconsistent scores with respect to the diagnostic profile (greatest improvement here seemed to be for 'avoids/rejects attachment').	37.5%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
Cooper, Arnold & Boyd, 2001	Classic	Pre and term 3 for SDQ-t, pre and end of term 2 for BPs. 2 control groups (matched on age, gender, educational attainment and level of SEBD)	N=342, 216 NG, 64 matched children with SEBD in mainstream NG schools, 62 matched children without SEBD in mainstream classes, 4-10 yr olds. 8 LEAs.	BP SDQ(t) Teacher rated educational progress (TREP) Parent questionnaire (PQ) Pupil perceptions	Repeated measures analysis of variance for BP scores Chi square analyses for SDQ scores	Interim findings only. SDQ(t): NG children compared to children with SEBD in mainstream classes and non-SEBD controls* BP* 96% of staff perceived that the NG had a positive impact on the whole school. TREP: Teachers perceived improvements in the academic progress of NG children. PQ: Most parents perceived positive impact of NG upon their children.	68.4%
Cooper & Whitebread, 2007	Classic	Pre, mid, and post (for NG and CG 1 &2 data gathered over 4 consecutive terms, for CG 3 &4 data collected at start and end of a 2 term period)	N=546 (4-14 year olds). N=359 in NGs, rest in one of 4 matched control groups. 11 LEAs. All NGs located in schools in areas of relatively high social deprivation and low educational attainment.	BP SDQ(t)	Statistical comparisons of mean improvements. Independent samples t-test. Chi-square analyses.	SDQ(t)- NG children compared to non-SEBD controls* Rate of improvement greater in longer-established NGs* NG children compared to same school SEBD control group marginally not statistically significant (between term 1 and 2). From term 1 and term 4, findings 'rather equivocal'- NG children scores improved at a lower level of significance (p=0.41) but not so for SEBD control group (p=702). Children with SEBD in mainstream classes in established NG schools compared to children with SEBD in schools without NGs* BP- Substrand 'organisation of experience'* for NG children. Improvements most marked for the first 2 terms except for' organisation of experience' (continued improving to term 4).	68.4%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
Doyle, 2005	Classic	Case study, pre and post measure (3 months between)	1 (case study), 5 year old boy	BP	No evidence of statistical analyses	BP- vast improvements, though not all areas in normal range at post-measure.	54.5%
Gerrard, 2005	Not specified	Pre and post intervention (period of time between varied) + control group	N=108 (BPs), N=133 (SDQ), 17 schools took part, 2 control schools, n= 11, Ages not specified.	BP SDQ(t) Teacher questionnaires	Type of statistical analysis not stated.	BP: Only 8 NG children did not significantly improve. SDQ(t):Of 133 NG children, 110 had significantly improved SDQ scores. No significant change in SDQs of control group children.	10.5%
O'Connor & Colwell, 2002	Classic	Pre, post, and follow-up for 12 of the children (mean time elapsed since exit= 2.67 years). Mean attendance= 3 terms	N= 68, mean age at entry= 5.25 years	BP	T-tests	**T1 & T2:** BP* Overall improvement greatest in Section 1 (participates constructively and accommodates to others). The most significant changes in section 2: disengaged, and avoids/rejects attachment sub-strands. **T3:** No significant difference 16/20 substrands Some evidence of relapse in following sub-strands: 'connects up experiences', 'undeveloped/insecure sense of self', 'shows negativity towards others' and 'wants/grabs, disregarding others'.	58.8%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
Reynolds, MacKay & Kearney, 2009	Not specified	Pre and post intervention (6 months between) + matched control group	N=221, NG=117, matched controls=104, 16 NGs, 5-7 year olds, 32 schools (16 of which matched control schools selected by highly formalised procedure- matched on socio-economic status, number of pupils on roll, and level of need as assessed by a specially designed audit). Individual children further matched on level of need according to BP.	BP SDQ(t) Baseline assessment for early literacy (MacKay, 1999; 2006) BIOS	2x2 ANCOVA Bonferroni adjustment due to increased likelihood of type 1 error Stepwise multiple regression	BP* SDQ(t)- trend of scores in the right direction but did not reach significance level. BIOS* No significant effects based on whether primary 1 or 2. Best predictor of academic achievement= 'unsupported development' sub-strand of BP (accounted for almost a quarter of variance). That sub-strand along with 'internalisation of controls' and 'organisation of experience' together accounted for just over half the variance	73.7%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
Sanders, 2007	Majority attended part-time in the infant school pilot project, not clear for other schools	Pre and post measure + matched control group	N=29 NG children, provision info collected, N=17, reception year and year 1 NG pupils in a pilot project infant school (BP, 2 terms length), N=19 KS1 NG pupils in 3 schools (Pupil Assessment Forms, average 2 terms), Control group in school without NG N=9, matched on level of need according to BP.	Provision questionnaire BP Pupil Assessment Forms Pupil Interviews Staff questionnaire Parent Interviews Naturalistic Observations	T-test to compare BP pre and post scores T-tests to compare BP scores for NG as compared to control group children.	2 schools provided information about the provision needed for 29 children who had attended NGs for approx. 2.5 terms= 1 child excluded, 1 returned to class with additional support, 1 SEN statement, 1 placed in special provision, 10% moved from locality, 51% return to class without additional support. NG children BP* except sub-strands R, S, U, Y & Z ('self-negating', 'makes undifferentiated attachments', 'craves attachment and reassurance', 'shows negativism towards others', and 'wants, grabs and disregards others'). The greatest gains were made in the developmental sub-strand. Control group children's BP scores- generally positive shifts, but only one was significant (shows insightful engagement). Three children's scores indicated a decline in areas measured over time. Comparison between NG and CG children's scores* at 0.05 level. NG children- two thirds of staff ratings indicated that the children had made academic gains, were more motivated academically, and more able to work independently. Also greater capacity to take risks in learning. Reduction in permanent exclusions and improved attendance.	50%
Scott & Lee, 2009	Part-time, 4 nurture groups (variants of the classic model), 1 did not always have 2 adults present, one was four half days.	Pre, mid, and post intervention (7 months between pre and post) + matched control group (age, gender and learning/behavioural concerns)	N=25, 4-10 year olds, control group n=25. 4 schools in 1 LEA. Schools in areas of deprivation.	BP Literacy measures Numeracy measures Teachers weekly diaries	Comparison of the aggregated gains of the NG children compared to the control group children	NG- BP* (both sections; <0.01 diagnostic profile, <0.05 developmental strands) Primary 1 &3- motor skills* School 2 (mainly upper primary) did make significant gains in the developmental strands towards the end of the intervention. Significant gains for Primary 1-3 but not 4-7 when compared.	63.2%

Study	Classic or adapted NG?	Design	Sample	Main variables & measures	Data Analysis	Findings	Quality Rating
Seth-Smith et al. 2010	Classic	Pre- and post intervention (around 6 months between) + matched control group (in terms of gender & ethnicity)	NG N=41, controls=36. 4-8 year olds (mean age= 5 years 9 months), 10 NG schools, 5 control group schools from 1 LEA. Varying urban, semi-rural and socially diverse. Mainsteam infant & primary schools.	BP SDQ(t) Formal assessments of academic attainment	Mixed effects linear growth curve models for each outcome measure using a multi-level mixed-effects linear regression	Significant differences between groups= NG children younger and lower in academic levels at point of recruitment- These differences were then controlled for. NG children- SDQ(t) *in terms of hyperactivity, peer problems, and pro-social behaviour, but not conduct difficulties or emotional difficulties. BP-'organisation of experience' * in both groups but consistently in NG. Same for 'internalisation of controls' but substantially less advantage for NG children. 'Undeveloped behaviour'= no change. 'Unsupported development' = substantially decreased for NG, less consistently for control group. Academic attainment* for both groups but more consistently for NG children. Results demonstrated increasing levels of emotional difficulty and conduct problems in children not receiving the intervention.	68.4%

Table I. **Summary of main characteristics of included studies.**

List of included abbreviations: NG= Nurture Group; CG= Control Group, SEBD= Social, emotional and behavioural difficulties; KS3= Key stage 3; BP= Boxall Profile (teacher-rated measure); SDQ= Strengths and Difficulties Questionnaire; t = teacher version; p = parent version; BIOS= Behavioural Indicators of Self-Esteem (teacher-rated measure)

The use of * indicates a statistically significant improvement.
The use of ~ indicates studies that explored the communication styles adopted by NG teachers (these were not case-control studies).

PART TWO

Empirical Paper

The Childhood and Later Bullying Experiences of Emerging Adults, Their Perceived Social Support and Mental Health

Naomi Katherine Hughes & Dr Annette Schlösser*

Department of Clinical Psychology & Psychological Therapies,
Hertford Building, University of Hull, HU6 7RX, UK

*Corresponding author: Tel: 01482 464106

Email addresses: n.k.hughes@2007.hull.ac.uk, a.schlosser@hull.ac.uk

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The Childhood and Later Bullying Experiences of Emerging Adults, Their Perceived Social Support and Mental Health

Naomi Katherine Hughes, Dr Annette Schlösser*
University of Hull, UK

Schoolchildren and adolescents who are bullied experience a range of emotional and behavioural difficulties (Ballard, Tucky & Remley, 1999; Beran, 2005; Conners-Burrow, Johnson, Whiteside-Mansell, McKelvey & Gargus, 2009; Nansel et al. 2001; Olweus, 1993; Rigby, 1999) and lower perceived social support than non-victims (Analitis et al. 2009; Flashophler, Elfstrom, Vanderzee & Sink, 2009; Holt & Espelage, 2007). This study aimed to extend these findings within an emerging adult population to provide a lifespan perspective. An online questionnaire included the Retrospective Bullying Questionnaire (RBQ; Schäfer et al. 2004), the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988), and the Kessler Psychological Distress Scale (Kessler, 2001). Data from 1, 274 undergraduate University students was analysed. Findings revealed that only specific types of bullying in primary and secondary school were linked to psychological distress and/or lower perceived social support. Experiences of being bullied after leaving school were linked to increased psychological distress and lower perceived social support from all sources, whereas having been bullied at University was not. Limitations and implications are discussed.

Key words: *bullying; victim; emerging adults; University students; mental health; emotional wellbeing; perceived social support*

*Corresponding author. The Department of Clinical Psychology and Psychological Therapies, Hertford Building, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: a.schlosser@hull.ac.uk

Overview of Literature

Bullying has been defined as repeated negative actions perpetrated by a single person or group upon a single person or group with the intent to harm and with an imbalance of power between the perpetrator(s) and victim(s) (Olweus, 1993). Bullying can be direct, e.g. physical attacks, or indirect, e.g. social isolation, intentional exclusion (Olweus, 1993). Olweus (2001) distinguished between victims, bullies, bully-victims (those who are victimised but are also bullies themselves) and those who are not involved.

There has been much research into bullying among schoolchildren (Coleyshaw, 2010). Between 14-75% of children are bullied at school (Clarke & Kiselica, 1997). A recent study (Analitis et al. 2009) found that nearly a third (29.7%) of 1,247 8-18 year olds in the UK reported being bullied at school. Children and adolescents who are victims of bullying are more likely to experience increased insecurity, anxiety (Nansel et al. 2001), loneliness, low self-esteem (Rigby, 1999; Nansel et al. 2001; Beran, 2005), depression (Beran, 2005; Conners-Burrow et al. 2009; Nansel et al. 2001; Rigby, 1999), suicidal ideation (Heikkilä et al. 2013), academic difficulties (Ballard et al. 1999; Olweus, 1993), and poorer health (Analitis et al. 2009; Rigby, 1999) compared to those who are not involved in bullying.

Those uninvolved in bullying report higher levels of perceived social support (Analitis et al. 2009; Conners-Burrow et al., 2009; Flashophler et al. 2009; Holt & Espelage, 2007) and a better quality of life (Flashophler et al. 2009). Children who experience bullying have more emotional and behavioural resilience if they also experience maternal warmth, sibling warmth, and a positive home environment (Bowes, Maughan, Caspi, Moffitt & Arseneault, 2010).

Despite considerable research into bullying in schools, there has been relatively little research into bullying among University undergraduate students (Coleyshaw, 2010). Further research into bullying among this age group deserves further attention to provide a lifespan perspective. Arnett (2000) discusses a culturally constructed emerging adult stage of development, between the ages of 18 and 25. This is different from adolescence and young adulthood, as unlike adolescents and young adults, emerging adults are relatively independent from social roles, and from the expectations associated with such social roles (Arnett, 2000). In addition, emerging adulthood involves change and exploration, as young people evaluate the decisions they make about their educational/occupational futures, relationships, and views about the world. Although they have moved away from childhood or adolescent dependence, typically they do not yet have normative adult responsibilities (such as raising a family or financial independence) (Arnett 2000). Erikson discussed how adolescents may continue to experiment in a 'protracted' way into college years, and referred to this as a 'psychosocial moratorium' in which sexual and cognitive maturation has occurred, but the person has yet to have traditional adult commitments (Erikson & Erikson, 1997). Emerging adulthood and psychosocial moratorium seem particularly relevant to young people attending University, who tend to live away from home i.e. they enjoy some level of independence, but without traditional adult responsibilities.

Only a few studies have investigated the prevalence of bullying within the University student population. The National Union of Students (NUS; 2008) reported that 7% of 3,135 students in the UK claimed to have been bullied at University, most commonly by another student (79%). American studies have found higher prevalence rates; 19.9% (Pontzer, 2010) and 21% (Chapell et al. 2006), and both concluded that those who were bullied at University were more likely to report having been bullied as a child also. In the

UK, the Kidscape survey (1999) found that out of 828 adults who claimed to have been bullied at school, 36% also reported being bullied whilst in higher education or in the workplace, compared to only 3% in the control group.

Schäfer et al. (2004) investigated the bullying experiences, attachment style, self-perception, and friendship quality of 884 University students and schoolteachers across Germany, Spain, and England. Over a quarter (28%) of the respondents reported having been bullied at school and 8% of respondents were 'stable' victims i.e. people who had been bullied at both primary and secondary school. Those who had reported being bullied, and particularly those who had been bullied at both primary and secondary school, had lower general self-esteem and self-esteem towards others, increased emotional loneliness, a fearful attachment profile and difficulty trusting friends. Pontzer (2010) concluded that shame internalisation was the strongest associated variable with being a victim. Being a bully victim has also been linked to contemplation of suicide (Kidscape, 1999; Schäfer et al. 2004).

Theoretical framework

Monks et al.'s (2009) review summarises the role of attachment, evolution, social learning, social-cognitive, and sociocultural theories in explaining the phenomenon of bullying. Attachment theory provides an understanding of why certain people are bullied, or why people who have been bullied in the past may be vulnerable to further bullying (Bowlby, 1969, 1973, 1980, 1982).

Those with insecure attachments are more likely to either bully others or be bullied themselves (Earl & Burns, 2009; Sheilds & Cichetti, 2001; Troy & Sroufe, 1987; Underwood, 2003; Walden & Beran, 2010). However, the relationship between a

person's early attachment experiences and later mental health is by no means seen as linear (Sroufe, Carlson, Levy & Egeland, 1999). Current circumstances may help or hinder a person with adverse early life experiences to reach 'normal adaptation', as changes in stressor(s)/support(s) predict changes in attachment security (Bowlby, 1969, 1973).

Stress can be managed and coped with in different ways. Stress-buffering theory, based on Lazarus' (1966) and Lazarus and Folkman's (1984) stress and coping theory, proposes that a person may not experience the adverse effects of stress if they receive social support (Lakey & Orehek, 2011). A further distinction is made between social support and perceived social support. Perceived social support is defined as the view that social support would be available if required (Sarason, Pierce, Shearin, Sarason, Waltz & Poppe, 1991), and is linked to good mental health (Lakey & Orehek, 2011).

In addition, given the increased likelihood that victims of bullying may experience insecure attachments as well as being bullied, it follows that they may have experienced repeated relational trauma, potentially putting them at risk for experiencing symptoms of PTSD. This may be particularly true for those with disorganised attachments (Liotti, 2004).

[Figure 1 here]

Research Questions

The research aim was to find out if there is a relationship between the reported childhood, and/or recent or current bullying experiences of emerging adults, their perceived social support and mental health. The research questions related to this are:

When compared to those who haven't been bullied, are emerging adults who report childhood and/or recent or current bullying experiences more likely to report:

1. Lower perceived social support?
2. Poorer quality relationships with their parent(s)/carer(s)?
3. Poorer mental health?
4. PTSD-type symptoms?

Also:

5. Will 'stable' victims of bullying (those who have been bullied at both primary and secondary school) be more likely to report lower perceived social support, poorer mental health, and more PTSD-type symptoms?
6. Will those who have been bullied at primary and/or secondary school be more likely to report having been bullied/currently being bullied at University?

Method

Participants

A total of 1, 453 University undergraduate students were recruited from national and international universities via Facebook and Google advertising, opportunity sampling and emailing University departments. However, participants outside of the 18-25 age bracket, and part-time students, were removed from analysis, due to the focus on the emerging adult stage of development. This left a total of 1, 274 participants. There was missing data from 320 participants.

Procedure

Ethical approval was granted from the Post-graduate Medical Institute, University of Hull (Appendix G). An information and consent form was included at the start of the survey (Appendix E), as was a list of useful contacts for support lines (Appendix F). An email address for the researcher was provided on each page of the survey, so that participants could email for the list of support contacts if they felt distressed and wanted to terminate the survey before its ending.

Measures

Retrospective Bullying Questionnaire (RBQ) (Appendix H) This is a 44-item questionnaire developed by Schäfer et al. (2004). It was developed following substantial pilot work and consists of mainly tick-box items with some open-ended questions. The RBQ also includes a 5-item trauma subscale, which consists of Likert scale responses to questions about trauma reactions to bullying experiences. An extra response was added to first trauma subscale question, which was 'I have never been bullied'. Questions about 'college/university' were changed to 'university'. Schäfer et al. (2004) assessed test-retest reliability of the measure through administration to 26 German students (3 male, 23 female). Spearman correlations coefficients revealed good/acceptable reliability (primary school items: r=.88, secondary school items: r=.87, trauma subscale= r=.77).

Kessler Psychological Distress Scale (K10) (Appendix I) The K10 is a 10-item questionnaire (α=.91) developed by Kessler (2001), which aims to provide a global score of distress. The questions ask about anxious and depressive symptoms that the person may have experienced in the past month. Responses are based on a five-point Likert scale. Total scores range from 10 to 50, with scores under 20 indicating the respondent is

'likely to be well', 20-24 indicating 'mild' mood problems, 25-29 indicating 'moderate' mood problems, and scores over 30 indicating 'severe' mood problems (Kessler, 2001). It was decided to choose this measure as it is a useful screening tool for mental health difficulties, and because of its strong psychometric properties.

Multidimensional Scale of Perceived Social Support (MSPSS)(Appendix J) The MSPSS is a 12-item perceived social support measure developed by Zimet et al. (1988). It consists of seven-point Likert responses to each item, and scores can be divided into 3 subscales according to source of support (family, friend, or significant other). Higher scores indicate higher levels of perceived social support. In this study, Cronbach's alphas for each of these subscales were .90, .93, and .93 respectively. This measure was chosen because of the interest in source rather than type of support, and because of its strong psychometric properties.

An online questionnaire was devised on the QuestionPro.com website. Permission to use an online version of all measures was granted. A number of demographic questions were also included: age, gender, ethnicity, living situation, where 'home' is, whether participants were on a full-time or part-time course, whether the participant had a partner or not, whether participants had parent(s) or carer(s) who they are in contact with, and a 5-point rating scale regarding the quality of these relationships.

Data Analysis

Cross-tabulations, one-way and multi-way ANOVAs were conducted on SPSS version 19 (see Appendix K & L). Cross-tabulations were chosen to look at the relationships between the bullying factors, whilst one-way and multi-way ANOVAs were chosen to

look at the relationships between bullying and mental health, PTSD-type symptoms, and perceived social support. Results will be summarised below. Partial eta squared will be presented in symbol form as η_p^2. Levene's tests of homogeneity of variance were completed for each multi-way ANOVA. All were non-significant, except for the multi-way ANOVA for PTSD-type symptoms (from the trauma subscale of the RBQ). Therefore, bootstrapping was performed as a method of re-sampling (Davison & Hinkley, 2006) to ensure the accuracy of results. The overall findings remained the same after bootstrapping.

Results

Descriptives

Just over a third of participants were male (34.8%; n= 443), while 65.2% were female (n=831). When compared to the 45.1% male and 54.9% female full-time UK student population in 2011/12 according to the Higher Education Statistics Agency (see http://www.hesa.ac.uk/content/view/1897/239/), slightly more females completed this study. After removing those outside of the 18-25 age bracket for analysis, the mean age was 20.16 years old (*SD*=1.424). Table 1 displays the ethnicities of participants. The majority of participants were white (n=1038, 77.1%). Table 2 displays the regional locations of participants, the majority of whom were from the UK and Ireland (n=989; 77.7%).

[Tables 1 & 2 here]

Under half of participants lived in student houses with other students (45%; n=573), while 22.9% lived in student halls (n=292). Twenty-one per cent lived with their parent(s)/carer(s) (n=267), while 1.5% lived with other relative(s) (n=19). The remainder

either lived alone (3.8%; n=48), lived with non-student friends (1.5%; n=19), or 'other' living situation (4.4%; n=56).

In terms of school bullying experiences, 8.2% stated that they were never involved in bullying and never saw it happen (n=98), 30.9% indicated that they were never involved but sometimes saw it happen (n=370), 40.3% responded that they would sometimes get bullied by others (n=483), 2.7% indicated that they would sometimes join in bullying others (n=32), and 17.9% stated that at various times, they were both a bully and a victim (n=215). There was missing data for 6% (n=76) of the total sample.

The majority of participants indicated that they had not been bullied since leaving school (85.1%; n=825), whereas 2.6% responded that they had been bullied by their family since leaving school (n=25), and 12.3% stated that they had been bullied by others (n=119). There was missing data for 23.9% (n=305) of the total sample.

A majority also indicated that they had never experienced bullying at their university (84.6%; n=628), whilst 15.4% indicated that they had experienced bullying at their university (n=114). There was missing data for 41.8% (n=532) of the total sample. However, a proportion of these (around 200) would have automatically skipped this question if they responded that they had never been bullied to the first trauma subscale question.

Means and standard deviations for the measures can be found in Appendix K. Although qualitative data from the open-ended questions of the RBQ was collected, it will not be presented in this paper as it is beyond the scope of this study.

Cross-tabulations

All of the two-way cross-tabulations between the bullying factors were significant (see Appendix L), except for:

- Bullied at University and verbal bullying primary (χ^2=4.49, *df*=2, *p*=.106)
- Bullied at University and physical bullying primary (χ^2= 5.16, *df*=2, *p*=.076).

Further analysis

In this section the research questions will be addressed consecutively, including data from the one-way and multi-way ANOVAs.

1. *Are emerging adults who report childhood and/or recent or current bullying experiences more likely to report lower perceived social support than those who haven't been bullied?*

Those indirectly bullied at primary school were more likely to report higher perceived social support from a significant other (F(2, 737)=3.95, p=0.02, η_p^2= .011), whilst those who reported physical bullying at secondary school were more likely to report lower perceived social support from a significant other (F(2, 737)=4.73, p=0.009, η_p^2=.013).

Those who reported indirect bullying at secondary school were more likely to report lower perceived social support from family (F(2, 737)=3.45, p=0.032, η_p^2=.009).

Although having been bullied at University was significant in the one-way ANOVAs for MSPSS Friends and Family subscales (see Appendix K), it was no longer significant when the other independent variables were being controlled for.

Upon examination of the multi-way ANOVA parameter estimates, those who were not bullied after school were more likely to report higher perceived social support from their friends (*B*=2.17, *SE*=.664, *t*=3.26, *df*=721, *p*=.001), family (*B*=2.12, *SE*=.70, *t*=3.12, *p*=.002), and significant other (*B*=1.57, *SE*=.78, *t*=2.03, *df*=721, *p*=.043), than those who were bullied by others. Those who were bullied by their family since leaving school were more likely to report lower perceived support from their family (*B*=-6.19, *SE*=1.40, *t*=-4.42, *df*=721, *p*<0.001) than those who were bullied by others.

2. *Are emerging adults who report childhood and/or recent or current bullying experiences more likely to report poor quality relationships with their parent(s)/carer(s)?*

Those who reported having been bullied by their family since leaving school were more likely to report poorer quality relationships with their parent(s)/carer(s), as compared to those who reported being bullied by others (*B*=.95, *SE*=.20, *t*=4.89, *p*<0.001).

Bullying at University was neither significant in the one-way nor multi-way ANOVAs (see Appendix K).

3. *Are emerging adults who report childhood and/or recent or current bullying experiences more likely to report poorer mental health than those who haven't been bullied?*

Those who experienced indirect bullying at primary school (*F*(2, 739)=3.61, *p*=0.027, η_p^2=.010), and verbal bullying at primary school (*F*(2, 739)=5.32, *p*=0.005, η_p^2= .014)

were significantly more likely to report poorer mental health. Those who reported being bullied by their family were also more likely to report poorer mental health (*B*=4.29, *SE*=1.69, *t*=2.55, *df*=723, *p*=.011), whilst those who had not reported bullying since leaving school were more likely to report less psychological distress, than those who had been bullied by others (*B*=-2.46, *SE*=.85, *t*=-2.91, *df*=723, *p*=.004).

4. *Are emerging adults who report childhood and/or recent or current bullying experiences more likely to report experiencing PTSD-type symptoms?*

Those who experienced physical bullying at primary school ($F(2, 740)=3.62$, $p=0.027$, $\eta_p^2=.010$), verbal bullying at primary school ($F(2, 740)=3.25$, $p=0.039$, $\eta_p^2=.009$), and indirect bullying at primary school reported more PTSD-type symptoms ($F(2, 740)=4.23$, $p=0.015$, $\eta_p^2= .047$) . Those who had not been bullied since leaving school reported fewer PTSD-type symptoms than those who had been bullied by others (*B*=-1.89, *SE*=.48, *t*=-5.17, *df*=724, *p*=.001).

5. *Will 'stable' victims of bullying (those who have been bullied at both primary and secondary school) be more likely to report lower perceived social support, poorer mental health, and more PTSD-type symptoms?*

One-way ANOVAs were performed to compare those who had reported any type of bullying at *both* primary and secondary school, those who had reported any type of bullying at *either* primary and secondary school, and those who had *not* reported any bullying experiences at primary or secondary school. Levene's tests of homogeneity of variance were significant for PTSD symptoms, the K10, MSPSS Family, and 'How well

do you get on with parent(s)/carer(s)?', so bootstrapping was performed for these tests. However, overall results remained the same after the bootstrapping.

Stability of school bullying was significantly related to PTSD type symptoms ($F(2, 742)=16.11$, $p<0.001$), K10 total score ($F(2, 1004)=40.69$, $p<0.001$), MSPSS Family ($F(2, 951)=10.94$, $p<0.001$), MSPSS Friends ($F(2, 951)=4.54$, $p=0.011$), and quality of parent/carer relationships ($F(2, 987)=7.48$, $p=0.001$), but not MSPSS Significant Other ($F(2, 951)=.14$, $p=.870$).

6. *Will those who have been bullied at primary and/or secondary school be more likely to report having been bullied/currently being bullied at University?*

Those bullied at primary school were more likely to be bullied at secondary school for all types of bullying (see Appendix L). There were significant relationships between all types of primary and secondary school bullying and been bullied since leaving school (see Appendix L). However, a closer look at the percentages revealed unexpected findings for physical bullying: a majority of those who reported having been bullied by others since leaving school had not reported any physical bullying at primary school (51.3%) and/or secondary school (53.8%). A majority of those who reported having been bullied at University had not reported any physical bullying at primary school (55.3%) and/or secondary school (56.1%). Those who were bullied by their family since leaving school did not appear more likely to report physical bullying at primary school (36% of those bullied by their family indicated they had experienced both types of physical bullying i.e. hit/punched and stolen from, 28% indicated they had experienced one type of physical bullying, and 36% indicated they had not experienced any physical bullying at primary school) or secondary school (32% indicated they had experienced both types of physical bullying, 16% had experienced one type of physical bullying, and 52% had

not experienced any type of physical bullying at secondary school). This differed from the other types of bullying, where clearly higher percentages of school victims reported having been bullied since leaving school. Those indirectly bullied at primary school were significantly more likely to report bullying at University, but those verbally and/or physically bullied at primary school were not significantly more likely to. Those who were indirectly and/or verbally bullied at secondary school were significantly more likely to report bullying at University.

Discussion

The purpose of this study was to provide a lifespan perspective of bullying by investigating the bullying experiences of emerging adults. Existing research into bullying within schools revealed that victims of bullying experienced psychological distress and lower perceived social support. This study sought to find out whether the same was true for emerging adults who had experienced bullying, either in the past or currently.

The prevalence of bullying at University found in this study was lower than the prevalence of school bullying reported in Analitis et al.'s (2009) large scale study. School settings are generally more confined and structured than University settings, and accommodate young people who are younger in age and potentially less emotionally mature, possibly explaining the higher rate of bullying in schools.

Physical bullying at secondary school has an impact on intimate relationships, perhaps indicating that physical bullying may impact a young person's ability to form supportive romantic relationships, possibly due to difficulties trusting another person enough to become intimate with them. This supports Schäfer et al.'s (2004) findings that

victimisation at secondary school (including stable victims) was linked to poorer self-esteem in relation to the opposite sex, and a fearful attachment style.

However, those indirectly bullied at primary school were more likely to report higher perceived social support from a significant other which could suggest that those left out in primary school may seek support from someone separate to their peer group at school. Also, those who experienced indirect bullying at secondary school were more likely to report lower perceived social support from family; perhaps those indirectly bullied at secondary school are either also more likely to have parallel experiences of feeling excluded by their own families, or have families who feel powerless to intervene.

Although verbal and indirect bullying experiences at primary school were linked to poorer emotional wellbeing, all three types of bullying at primary school were linked to traumatic responses. Whilst being a victim of bullying has been linked to increased trauma symptoms, no studies have found a link between primary school bullying specifically and trauma symptoms as an adult (Sesar, Barišić, Pandža & Dodaj 2012; Nilsson, Gustafsson, & Svedin, 2012).

Primary school bullying appears to have more of an impact on psychological distress than secondary school bullying, perhaps due to the victims' younger age and earlier stage of development, when they may be more likely to internalise bullying experiences as a reflection of themselves and/or find the emotional impact more difficult to verbalise and therefore manage. This could then lead victims to become more vulnerable to further bullying experiences.

However, bullying should not be seen as an individually experienced event; it is important to bear in mind the systemic forces which allow bullying to occur. The anti-

bullying programme, KiVa, developed in Finland, both acknowledges and works with these systemic factors, emphasising the importance of every child in preventing and responding effectively to bullying situations (see http://www.kivaprogram.net/kiva). This approach could be useful in British schools, as it has been found to be an effective anti-bullying intervention (Kärnä, Voeten, Little, Poskiparta, Kaljonen, & Salmivalli, 2011).

Stability of school bullying was important, with significant differences between stable victims and those who reported bullying at either primary or secondary school and those who reported none. Stable victims experienced higher levels of psychological distress, PTSD symptoms, lower perceived social support from friends and family, and poorer parent/carer relationships. This supports existing research by Schäfer et al. (2004), who concluded that stable victims experienced lower self-esteem, emotional loneliness, and a fearful attachment style. However, perceived support from significant other was not significantly lower for stable victims, contradicting Schäfer et al.'s findings. Therefore, in this study, stable victims may have found a supportive significant other despite their adversities. It is possible that this was facilitated by the University setting where students meet lots of new people and have new socialising opportunities.

Experiences of being bullied since leaving school were also related to higher scores of psychological distress and PTSD-type symptoms, lower levels of perceived social support from all sources, and poorer quality parent/carer relationships, especially for those who had been bullied by their family. This links to attachment theory (Bowlby, 1969, 1973, 1980, 1982), particularly disorganised attachment (Main & Solomon, 1990), as this involves experiencing an attachment figure as frightened or frightening (Main & Hesse, 1990; Howe, 2005) and appears predictive of emotional difficulties (Rutter, Kreppner & Sonuga-Barker, 2009).

Bullying at University was not found to be significantly linked to psychological distress and perceived social support, suggesting the alternative importance of other potential bullying settings after school, including workplace and community bullying, and bullying within the family. Bullying at University may encompass a variety of experiences, some of which participants are able to avoid or get out of (such as bullying in lectures or sports teams), and others harder to escape e.g. student halls or houses. Having said this, 21% of the sample lived with their parent(s)/carer(s), preventing the possibility of residential bullying experiences for those participants. Further research into this area may shed more light on these findings.

Overall, the effect sizes in the current study were small, so findings should be interpreted tentatively. Nevertheless, these findings do extend existing research into the effects of bullying upon schoolchildren, though causality cannot be inferred due to the correlational nature of the research.

Limitations

The sample was self-selected, possibly resulting in sample bias. For example, it may be that undergraduate students being bullied whilst the survey was online, may have decided not to complete it due to current distress. This may have resulted in an under-reporting of bullying at University. Alternatively, those who had experiences of bullying may have been more likely to complete the questionnaire, due to the relevance of their experiences, possibly resulting in an over-reporting of bullying at University. The percentage of participants bullied at University in this study (15.4%) is higher than the 7% who reported bullying at University in the NUS study (NUS, 2008), though slightly lower

than the 19.9% prevalence rate within the study at Pennsylvania University (Pontzer, 2010) , and the 21% prevalence rate of Chapell et al.'s (2006) American study.

The sample is not representative of undergraduate students from a variety of ethnicities, as the majority of students were from white backgrounds, with relatively low numbers of students from ethnic minority backgrounds. Future research would benefit from ensuring representation of these groups, which could clarify whether, and to what extent, racial or ethnic bullying was part of the students' experiences.

A further issue relates to the validity of the construct of 'emerging adults' (Arnett, 2000). Twenty one per cent of the sample lived with their parent(s)/carer(s), rather than independently, suggesting that 'protracted adolescence' may be a more fitting categorisation (Erikson & Erikson, 1997). This may have biased the sample.

In addition, statistical analyses revealed negative skewness of the social support measure residuals, in that the model over-predicted the social support perceived by some participants. This may have affected the validity of the findings concerning the perceived support of bully victims and non-victims.

Finally, there was a high percentage of missing data in response to the later questions, including the social support variables, bullying since leaving school and bullying at University. Clearly, this will have had an impact on the results, though it is impossible to assess how, as participants would have left the survey for a variety of reasons.

Conclusions

The present findings suggests that primary school bullying has a long-term negative impact on emotional wellbeing, and that more recent bullying experiences, particularly within the family, increase psychological distress, at least in the short-term. Stability of bullying, regardless of type of bullying, was found to be significantly related to all except one of the outcomes. This highlights the importance of early intervention in primary schools and the opportunity schools have to transform bully victims' trajectories into early adulthood. Implications include the importance of supporting those affected by bullying within schools, colleges, and Universities. Schools could consider introducing the KiVa anti-bullying programme as a way of working with the systemic factors involved in bullying (Kärnä et al. 2011).

On an individual level, supporting those with attachment difficulties clearly has an important function in preventing bullying and re-victimisation too, albeit indirectly. School staff members have a key role in identifying and helping those with attachment difficulties, if these issues are affecting wellbeing and increasing vulnerability. Further training may be appropriate for staff members who feel de-skilled in this area.

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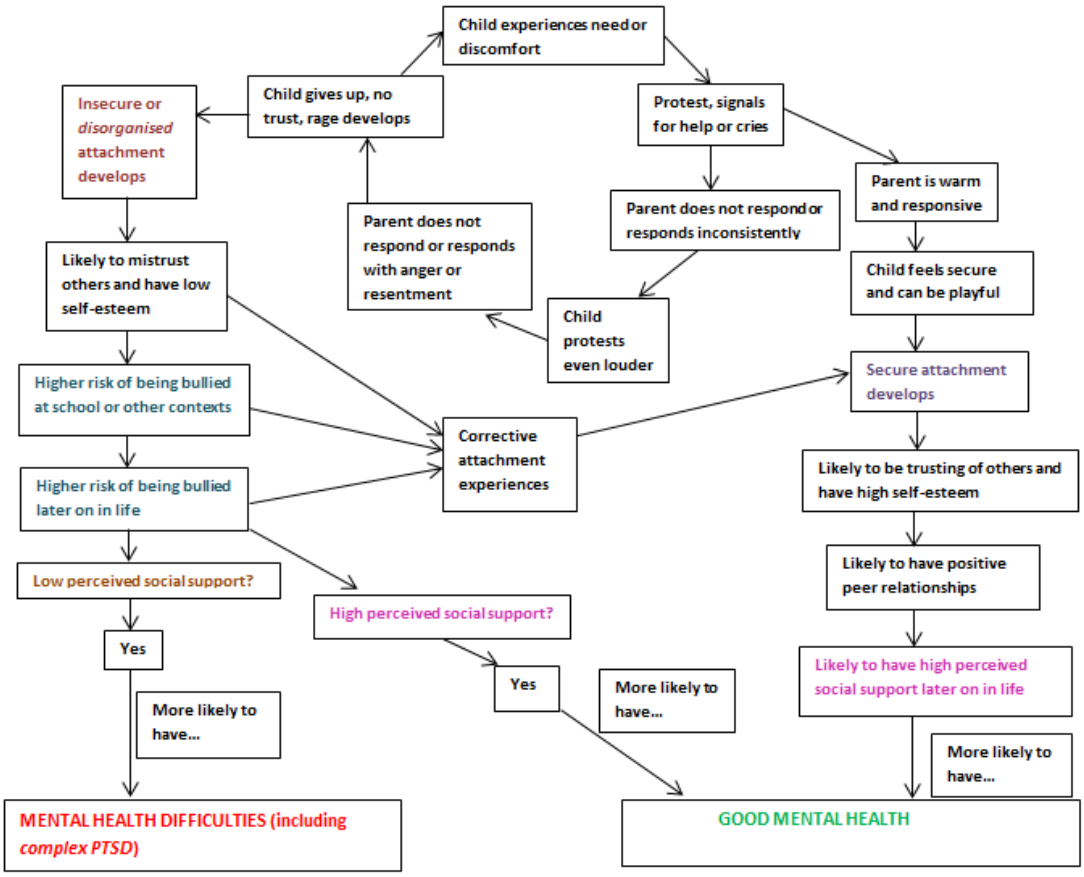

*Figure 1***.** Diagram adapted from 'Disturbed Attachment Cycle' (Bunce & Rickards, 2004).

Ethnicity	N	% of total sample
White British	672	52.7%
Other White Background	180	14.1%
White Irish	131	10.3%
Chinese	85	6.7%
White Scottish	55	4.3%
Other Asian Background	26	2%
Indian	25	2%
Black (or Black British) African	21	1.6%
Any Other Ethnic Group	21	1.6%
Pakistani	14	1.1%
White Asian	10	0.8%
Other Mixed Background	10	0.8%
White and Black Caribbean	8	0.6%
Bangladeshi	8	0.6%
Black (or Black British) Caribbean	6	0.5%
White and Black African	2	0.2%

Table 1. Ethnicities of participants

Region	Number of participants	Percentage of participants
UK & Ireland	989	77.7%
Europe	10	1%
North America	59	4.7%
Asia	3	0.3%
Other	4	0.4%
Unknown	209	16.4%

Table 2. Regional location of participants

Part 3- Appendices

Appendix A. Guidelines for Authors

Author Guidelines for Emotional and Behavioural Difficulties

***Note to Authors:** please make sure your contact address information is clearly visible on the **outside** of all packages you are sending to Editors. ***

Manuscripts ideally up to 8000 words should be sent electronically to the Editors: Professor Harry Daniels, Dept of Education, University of Oxford, 15 Norham Gardens, Oxford, OX2 6PY, UK c/o ebdjournal@gmail.com

Books for review should be sent to: Joan Pritchard, Reviews Editor, SEBDA, 30 Roan Court, Macclesfield, Cheshire, SK11 7AQ, UK.

Manuscripts submitted should be original, not under review by any other publication and not published elsewhere.
All pages should be numbered. To allow anonymous refereeing, all submissions must be properly formatted for blind reviewing. Authors' names and institutions should be typed on a separate sheet and submitted with the manuscript. The full postal and email address of the author who will check proofs and receive correspondence and offprints should be included also.
Each paper should be accompanied on separate sheets by an abstract of 100 to 150 words.

Style guidelines
Description of the Journal's article style , Quick guide
Description of the Journal's reference style , Quick guide
Any consistent spelling style may be used. Use single quotation marks with double within if needed.
This journal requires a short paragraph of biographical details for all contributors.
If you have any questions about references or formatting your article, please contact authorqueries@tandf.co.uk (please mention the journal title in your email).

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Tables and captions to illustrations. Tables must be separate and not included as part of the text. The captions to illustrations should be gathered together and also on a separate sheet. Tables and figures should be numbered consecutively by Arabic numerals. The approximate position of tables and figures should be indicated in the manuscript. Captions should include keys to any symbols used.

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Author Guidelines for the British Journal of Developmental Psychology

The British Journal of Developmental Psychology publishes full-length, empirical, conceptual, review and discussion papers, as well as brief reports, in all of the following areas:

- motor, perceptual, cognitive, social and emotional development in infancy;
- social, emotional and personality development in childhood, adolescence and adulthood;
- cognitive and socio-cognitive development in childhood, adolescence and adulthood, including the development of language, mathematics, theory of mind, drawings, spatial cognition, biological and societal understanding;
- atypical development, including developmental disorders, learning difficulties/disabilities and sensory impairments;

• the impact of genetic, biological, familial, interpersonal, educational, societal and cultural factors upon human psychological development;

• comparative approaches to behavioural development that help to elucidate developmental processes in humans; and

• theoretical approaches to development, including neo-Piagetian, information processing, naïve theory, dynamic systems, ecological and sociocultural approaches. The following types of paper are invited:

• papers reporting original empirical investigations;

• theoretical papers which may be analyses of, or commentaries on, established theories in developmental psychology, or presentations of theoretical innovations, extensions or integrations;

• review papers, which should aim to provide systematic overviews, analyses, evaluations or interpretations of research in a given field of developmental psychology, and identify issues requiring further research;

• methodological papers dealing with any methodological issues of particular relevance to developmental psychologists.

In those cases deemed appropriate, peer commentaries on key papers/reviews will be solicited from other researchers in the relevant field. These peer commentaries will be published immediately after the target article, with the authors(s) of the article being invited to write a response to the commentaries. Only papers which report methodologically sound and rigorous research or which make a substantive contribution to the discipline are accepted for publication in the journal.

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

The word limit for papers submitted for consideration to BJDP is 5000 words and any papers that are over this word limit will be returned to the authors. The word limit does not include abstract, references, figures, and tables. Appendices however are included in the word limit. In very exceptional cases the Editor retains discretion to publish papers beyond this length where the clear and concise expression of the scientific content requires greater length (e.g., explanation of a new theory or a substantially new method). The authors should contact the Editor first in such a case.

3. Submission and reviewing

All manuscripts must be submitted via Editorial Manager. You may like to use the Submission Checklist to help you prepare your paper. The Journal operates a policy of anonymous peer review. Before submitting, please read the terms and conditions of submission and the declaration of competing interests.

4. Manuscript requirements

• Contributions must be typed in double spacing with wide margins. All sheets must be numbered.

• Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. You may like to use this template.

• Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.

• Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi.

• All articles should be preceded by an Abstract of between 100 and 200 words, giving a concise statement of the intention, results or conclusions of the article.

• For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide doi numbers where possible for journal articles.

• SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.

• In normal circumstances, effect size should be incorporated.

• Authors are requested to avoid the use of sexist language.

• Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.

• For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association.

5. Brief reports

Brief reports should be limited to 2000 words or the equivalent in tables and text. The title should indicate exactly but as briefly as possible the subject of the article. Papers will be evaluated by the Editor and referees in terms of their theoretical interest, practical interest, relevance to the Journal and readability. They will be treated as a priority during the review process and then published in the next available issue once they are accepted, so that they are available as quickly as possible.

6. Supporting Information

Supporting Information can be a useful way for an author to include important but ancillary information with the online version of an article. Examples of Supporting Information include appendices, additional tables, data sets, figures, movie files, audio clips, and other related nonessential multimedia files. Supporting Information should be cited within the article text,

and a descriptive legend should be included. Please indicate clearly on submission which material is for online only publication. It is published as supplied by the author, and a proof is not made available prior to publication; for these reasons, authors should provide any Supporting Information in the desired final format.

For further information on recommended file types and requirements for submission, please visit the Supporting Information page on Author Services.

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Author Services enables authors to track their article – once it has been accepted – through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The author will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript. Visit Author Services for more details on online production tracking and for a wealth of resources including FAQs and tips on article preparation, submission and more.

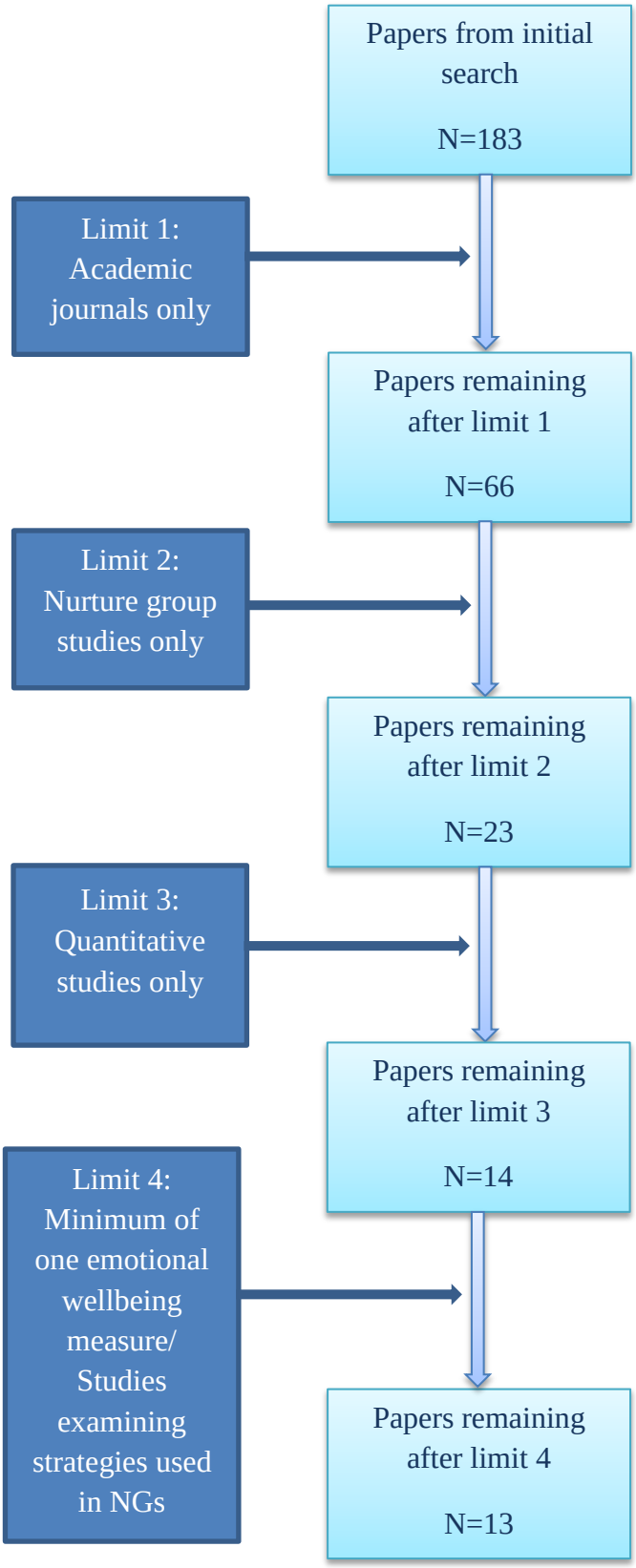
9. Copyright and licences

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to login into Author Services, where via the Wiley Author Licensing Service (WALS) they will be able to complete the license agreement on behalf of all authors on the paper.

For authors signing the copyright transfer agreement

If the OnlineOpen option is not selected the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the Copyright FAQs.

Appendix B. Search Strategy



Appendix C. Quality checklist, adapted version of the Down's and Black Checklist (1998)

1. Is the hypothesis/aim/objective of the study clearly described?	Yes/No
2. Are the main outcomes to be measured clearly described in the Introduction or Methods section?	Yes/No
3. Are the characteristics of the patients included in the study clearly described?	Yes/No
4. Are the interventions of interest clearly described?	Yes/No
5. Are the distributions of principal confounders in each group of subjects to be compared clearly described?	Yes/Partially/No
6. Are the main findings of the study clearly described?	Yes/No
7. Does the study provide estimates of the random variability in the data for the main outcomes?	Yes/No
8. Have all important adverse events that may be a consequence of the intervention been reported?	Yes/No
9. Have the characteristics of patients lost at any time point been described?	Yes/No
10. Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?	Yes/No
11. Did the nurture group take place in a school environment?	Yes/No/Unable to determine
12. Is the time period between the intervention and outcome the same for cases and controls?	Yes/No/Unable to determine
13. Were the statistical tests used to assess the main outcomes appropriate?	Yes/No/Unable to determine
14. Were the main outcome measures used accurate (valid and reliable)	Yes/No/Unable to determine
15. Were the cases and controls recruited from the same school?	Yes/No/Unable to determine
16. Were the cases and controls recruited over the same period of time?	Yes/No/Unable to determine
17. Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?	Yes/No/Unable to determine
18. Were losses of participants at any time point taken into account?	Yes/No/Unable to determine
19. Did the study have sufficient power to detect a clinically important effect when the probability for a difference being due to chance is less than 5%?	0-5

Appendix D. Quality scores for included studies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Bani, 2011	1	1	1	1	1	1	n/a	0	n/a	n/a	1	n/a	1	1	n/a	n/a	n/a	n/a	n/a	**9 (90%)**
Binnie & Allen, 2008	1	1	1	1	0	1	0	0	n/a	1	1	n/a	1	1	n/a	n/a	0	1	0	**10 (66.7%)**
Colwell & O'Connor, 2003	1	1	1	1	1	1	n/a	1	n/a	n/a	1	n/a	1	1	1	n/a	n/a	n/a	n/a	**11 (100%)**
Cooke et al. 2008	1	1	1	1	0	0	0	0	0	0	1	n/a	0	1	n/a	n/a	0	0	0	**6 (37.5%)**
Cooper et al. 2001	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	**13 (68.4%)**
Cooper & Whitebread, 2007	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	**13 (68.4%)**
Doyle, 2005	0	1	1	1	0	1	0	0	n/a	n/a	1	n/a	n/a	1	n/a	n/a	0	n/a	n/a	**6 (54.5%)**
Gerrard, 2005	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	**2 (10.5%)**
O'Connor & Colwell, 2002	1	1	1	1	1	1	1	0	0	0	1	0	1	1	n/a	n/a	0	0	0	**10 (58.8%)**
Reynolds et al. 2009	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1	0	**14 (73.7%)**
Sanders, 2007	1	1	1	0	1	1	0	0	n/a	0	1	0	1	1	0	0	0	1	0	**9 (50%)**
Scott & Lee, 2009	1	1	1	1	0	1	0	0	0	1	1	1	1	1	0	1	0	1	0	**12 (63.2%)**
Seth-Smith et al. 2010	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	0	1	1	0	**13 (68.4%)**
TOTALS	11	12	12	11	8	11	2	1	0	6	13	4	10	13	3	4	2	5	0	

Appendix E. Information Sheet

If you feel distressed at any point, please do not hesitate to email me: naomi.researcher@live.co.uk. I can then send you a list of helpful support contacts.

This survey is open to any ***undergraduate*** University student. Please do not fill the survey in if this does not apply to you.

The survey will include questions about:
• Your experiences at school/college/university, including bullying experiences
• Your mental health (current experiences of anxiety, depression and PTSD symptoms)
• Your support network (e.g. friends, family) and how well supported you feel by them

The purpose of the study is to identify if there is a link between bullying experiences, perceived social support, and mental health. We are interested in the experiences of people who have not been bullied, as well as people who have. The survey is being conducted as part of my thesis on the Clinical Psychology course (I am a Trainee Clinical Psychologist). Results of the survey may be published but the findings will not be personally identifiable.

Completing the survey is optional. If you think you may find answering questions about any of the above too difficult, then you may decide not to begin the survey. If you do not wish to take part you can exit this page by closing the browser.

If you do decide to take part, your answers will be anonymous, and you will not be asked for your name or any other personal details such as the University you attend or your contact details. You can exit the survey at any time and your data will not be saved. However, once you have completed the survey you won't be able to withdraw your answers due to the anonymous nature of answers. The survey has been peer reviewed and approved by the Postgraduate Medical Institute Ethics Committee at the University of Hull.

If you have any further queries, I can be contacted by email: naomi.researcher@live.co.uk.

If you have read all of the above and wish to take part, please tick the box below to confirm you understand the information you have read and are happy to proceed to the survey.

☐ I am happy to proceed to the survey.

Appendix F. Thank You Page and List of Support Contacts

Thank you for taking part! Your participation is greatly appreciated.

If you want to talk to someone about your experiences, please don't hesitate. Listed below are helplines and websites. It is not a full list of organisations but they should provide sufficient help for bullying and crisis situations.

If you are feeling distressed, you may wish to contact one of the below organisations, your GP/health provider, other health professional, or a University lecturer/personal tutor or friend.

If you are currently being bullied, it is advised that you speak to a member of staff at University to help this to stop.

Emotional support helplines

The Samaritans

Tel: 08457 90 90 90 (numbers for local branches may also be available- see website).

Ireland tel: 1850 60 90 90

Email: jo@samaritans.org

Website: www.samaritans.org.uk/

Postal address: Freepost RSRB-KKBY-CYJK, Chris, P.O. Box 90 90, Stirling, FK8 2SA.

The Samaritans provide confidential emotional support for anyone in crisis. They can be contacted by telephone 24 hours a day. You can also visit your local branch for face-to-face support, or contact them by letter or e-mail.

Support Line

Tel: 01708 765 200

Email: info@supportline.org.uk

Postal address: SupportLine, PO Box 2860, Romford, Essex RM7 1JA

Support Line offer confidential emotional support to children, young adults and adults by telephone (hours vary), email and post. They also keep details of counsellors, agencies and support groups throughout the UK.

Outside of the UK:

Befrienders Worldwide

Provides details of organisations who offer confidential emotional support for anyone in crisis across 40 countries.

Website: www.befrienders.org

Ongoing mental health difficulties

If you are experiencing ongoing mental health difficulties, and feel distressed after completing the survey, it might be helpful to speak to your GP/health provider, other health professional, or a trusted University lecturer, personal tutor or friend. If you can't get hold of someone but you want to speak to someone quickly, you may wish to contact one of the above helplines.

Counselling

If you are considering counselling to help you talk about your experiences, your University student counselling service may be able to help. Their details should be on the Internet.

Alternatively, the following organisations may be useful:

British Association for Counselling and Psychotherapy

Tel: 01455 883300

Website: www.bacp.co.uk

Email: bacp@bacp.co.uk

Postal address: British Association for Counselling and Psychotherapy

BACP House, 15 St John's Business Park, Lutterworth, Leicestershire LE17 4HB, United Kingdom

Members of the BACP have experience of a wide range of counselling. If you write to them enclosing a stamped addressed envelope, they will send you a list of counsellors in your area.

You can also look up private counsellors in your area through the BACP directory on the following website: http://www.itsgoodtotalk.org.uk/therapists/

British Psychological Society

Tel: 0116 254 9568

Website: www.bps.org.uk

Email: enquiries@bps.org.uk

Members of the BPS are qualified as Chartered Psychologists.

Find a Psychologist offering private therapy in your area: http://www.bps.org.uk/bpslegacy/dcp

Appendix G. Ethical Approval Letter

UNIVERSITY OF Hull

SRK/JBK

17 July 2012

Miss N Hughes
Department of Clinical Psychology & Psychological Therapies
Hertford Building
University of Hull
Cottingham Road
HULL HU6 7RX

Dear Naomi

Re: An Investigation into the Relationship between Current, Recent and Childhood Bullying Experiences of Emerging Adults, their Perceived Social Support and Mental Health

Thank you for sending me the revised documentation for your research project. I can confirm that these changes are appropriate and I am now able to fully approve your research proposal.

May I once again take this opportunity of wishing you every success with your research.

Yours sincerely

STEPHEN R KILLICK
CHAIR – PGMI ETHICS COMMITTEE

Professor Nicholas D Stafford MB FRCS
Director - Postgraduate Medical Institute
Postgraduate Medical Institute, Hertford Building (Room 203)
The University of Hull
Hull, HU6 7RX, UK
T: +44 (0) 1482 463346/463213
F: +44 (0) 1482 463421
N.D.Stafford@hull.ac.uk

Appendix H. Retrospective Bullying Questionnaire (RBQ)

RETROSPECTIVE BULLYING QUESTIONNAIRE*

The following questions are about bullying. BULLYING IS INTENTIONAL HURTFUL BEHAVIOR. IT CAN BE PHYSICAL OR PSYCHOLOGICAL. IT IS OFTEN REPEATED AND CHARACTERIZED BY AN INEQUALITY OF POWER SO THAT IT IS DIFFICULT FOR THE VICTIM TO DEFEND HIM/HER SELF.

All answers will be treated confidentially.

ARE YOU MALE FEMALE
AGE: _____

PLEASE THINK BACK TO YOUR SCHOOL DAYS. YOU MAY HAVE SEEN SOME BULLYING AT SCHOOL, AND YOU MAY HAVE BEEN INVOLVED IN SOME WAY.
(Tick the choice which best describes your own experiences at school)

I was not involved at all, and I never saw it happen
I was not involved at all, but I saw it happen sometimes
I would sometimes join in bullying others
I would sometimes get bullied by others
At various times, I was both a bully and a victim

CAN YOU BRIEFLY DESCRIBE AN INCIDENT IN WHICH YOU OBSERVED SOMEONE ELSE BEING BULLIED OR AN INCIDENT IN WHICH YOU FELT YOU WERE BULLIED?

_____

_____

_____

* © Schäfer et al. (2004).

PART I: PRIMARY SCHOOL

This part deals with your experiences at primary school (4 - 11 years).

1. Did you have a happy time at primary school?

detested disliked neutral liked a bit liked a lot

2. Did you have a happy time at home with your family while in primary school?

detested disliked neutral liked a bit liked a lot

THE NEXT QUESTIONS ARE ABOUT PHYSICAL FORMS OF BULLYING - HITTING AND KICKING, AND HAVING THINGS STOLEN FROM YOU.

3. Were you physically bullied at primary school?

hit/punched yes no
stolen from yes no

4. Did this happen

never rarely sometimes frequently constantly

5. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT VERBAL FORMS OF BULLYING - BEING CALLED NASTY NAMES, AND BEING THREATENED.

6. Were you verbally bullied at primary school?

called names yes no
threatened yes no

7. Did this happen

never rarely sometimes frequently constantly

8. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT INDIRECT FORMS OF BULLYING - HAVING LIES OR NASTY RUMOURS TOLD ABOUT YOU BEHIND YOUR BACK, OR BEING DELIBERATELY EXCLUDED FROM SOCIAL GROUPS.

9. Were you indirectly bullied at primary school?

had lies told about you	**yes**	**no**
excluded	**yes**	**no**

10. Did this happen

never rarely sometimes frequently constantly

11. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT BULLYING IN GENERAL.

12. How long did the bullying attacks usually last?

I wasn't bullied just a few days weeks months a year or more

13. How many pupils bullied you in primary school?

I wasn't bullied
Mainly by one boy
By several boys
Mainly by one girl
By several girls
By both boys and girls

14. If you were bullied, why do you think this happened?

Please turn the page.

PART II: SECONDARY SCHOOL

This part deals with your experiences at secondary school (11-18 years)

15. Did you have a happy time at secondary school?

detested disliked neutral liked a bit liked a lot

16. Did you have a happy time at home with your family while in secondary school?

detested disliked neutral liked a bit liked a lot

THE NEXT QUESTIONS ARE ABOUT PHYSICAL FORMS OF BULLYING - HITTING AND KICKING, AND HAVING THINGS STOLEN FROM YOU.

17. Were you physically bullied at secondary school?

hit/punched yes no
stolen from yes no

18. Did this happen

never rarely sometimes frequently constantly

19. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT VERBAL FORMS OF BULLYING - BEING CALLED NASTY NAMES, AND BEING THREATENED.

20. Were you verbally bullied at secondary school?

called names yes no
threatened yes no

21. Did this happen

never rarely sometimes frequently constantly

22. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT INDIRECT FORMS OF BULLYING - HAVING LIES OR NASTY RUMOURS TOLD ABOUT YOU BEHIND YOUR BACK, OR BEING DELIBERATELY EXCLUDED FROM SOCIAL GROUPS.

23. Were you indirectly bullied at secondary school?

had lies told about you	**yes**	**no**
excluded	**yes**	**no**

24. Did this happen

never rarely sometimes frequently constantly

25. How serious did you consider these bullying-attacks to be at that time?

I wasn't bullied not at all only a bit quite serious extremely serious

THE NEXT QUESTIONS ARE ABOUT BULLYING IN GENERAL.

26. How long did the bullying-attacks usually last?

I wasn't bullied just a few days weeks months a year or more

27. How many pupils bullied you in secondary school?

I wasn't bullied
Mainly by one boy
By several boys
Mainly by one girl
By several girls
By both boys and girls

28. If you were bullied, why do you think this happened?

_____

_____

_____

_____

Please turn the page.

PART III: GENERAL EXPERIENCES AT SCHOOL

29. Which were the main ways you used to cope with the bullying?
(Please tick one or more options)

I wasn't bullied at school
I talked to the bullies
I tried to make fun of it
I tried to avoid the situation
I tried to stay away from school
I tried to ignore it
I fought back
I got help from friends
I got help from a teacher
I got help from family / parents
I did not really cope
Other (please specify)

30. Did you ever take part in bullying anyone while you were at school?

hit/punched	**yes**	**no**
stolen from	**yes**	**no**
called names	**yes**	**no**
threatened	**yes**	**no**
told lies about	**yes**	**no**
excluded	**yes**	**no**

31. Did this happen

never **rarely** **sometimes** **frequently** **constantly**

32. How often did you try to avoid school by pretending to be sick or by playing truant because you were being bullied?

I wasn't bullied at school
Never
Only once or twice
Sometimes
Maybe once a week
Several times a week

33. When you were being bullied, did you ever, even for a second, think about hurting yourself or taking your own life?

I wasn't bullied at school
No, never
Yes, once
Yes, more than once

34. Have you been bullied since leaving school?

I haven't been bullied since leaving school
I have been bullied by my family
I have been bullied by others (please specify):
_____

RECOLLECTIONS OF BEING BULLIED AT SCHOOL
(Only answer these questions, if you were bullied):

35. Do you have vivid memories of the bullying event(s) which keep coming back causing you distress?

no never not often sometimes often always

36. Do you have dreams or nightmares about the bullying event(s)?

no never not often sometimes often always

37. Do you ever feel like you are re-living the bullying event(s) again?

no never not often sometimes often always

38. Do you ever have sudden vivid recollections or 'flashbacks' to the bullying event(s)?

no never not often sometimes often always

39. Do you ever feel distressed in situations which remind you of the bullying event(s)?

no never not often sometimes often always

40. If you were bullied, do you feel it had any long-term effects? If so, please describe below:

_____

_____

_____

_____

Please turn the page.

THE NEXT QUESTIONS ARE ABOUT BULLYING AFTER SECONDARY SCHOOL.

41. Have you ever experienced bullying at your College/University?

No, I wasn't bullied in my College/University
Yes, I was bullied in my College/University

42. Please state whether you have been bullied at your College/University over the last six months?

No	**Yes, several times per month**
Yes, very rarely	**Yes, several times per week**
Yes, now and then	**Yes, almost daily**

43. IF YES, when did the bullying start?

Within the last 6 months	**Between 6 and 12 months ago**
Between 1 and 2 years ago	**More than 2 years ago**

44. IF you have been bullied, what did you do?
(Please tick one or more options)

Tried to avoid the situation
Tried to ignore it
Confronted the bully
Went to the Student's Union
Talked to my tutor/ a member of staff
Discussed it with other students
Saw my doctor (GP)
I went for counseling
I got psychiatric help
Made use of the College's/University's grievance procedure
I left the College
Did not really cope _____
Other (please specify) _____

THANK YOU VERY MUCH FOR YOUR CO-OPERATION.

TEAR OFF THIS SHEET IF YOU WANT TO KEEP IT FOR YOURSELF, OR FOR ANYONE ELSE

If you want to talk to someone about your experiences, please don't hesitate.

Listed below are helplines and (website) addresses. It is not a full list of organisations but they should provide sufficient help for bullying and crisis situations.

The Samaritans

10 The Grove
Slough
Berkshire SL1 1QP

Cris, PO Box 90 90
Stirling, FK8 2SA

Tel 01753 216500 or 0345 909090
e-mail jo@samaritans.org/
on the web: http://www.samaritans.org.uk/

The Samaritans provide confidential emotional support for anyone in crisis. They can be contacted by telephone, face-to-face visit, letter or e-mail. Trained volunteers will listen to your bullying story without judging you or telling you what to do.

British Association for Counselling

1 Regent Place
Rugby
Warwickshire
CV21 2PJ
tel 01788 578328 fax 01788 562189
e-mail bac@bac.co.uk

Members of the BAC have experience of a wide range of counselling. Write enclosing an SAE for a list of counsellors in your area.

National Workplace Bullying Advice Line

Dept C5
PO Box 67
Didcot
Oxon OX11 0YH
Advice line 01235 834 548
Fax 01235 861721
http://www.successunlimited.co.uk/

Websites on bullying:

BBC BULLYING SURVIVAL GUIDE http://www.bbc.co.uk/education/bully/
Provides information, guidelines for dealing with all aspects of bullying, a help and resources list and accounts of celebrities who were bullied when they were at school.
BULLY ONLINE http://succesunlimited.co.uk/
Tim Field shares his insight into workplace bullying. Lots of information and many useful links.

Appendix I. Kessler Psychological Distress Scale (K10)

Kessler Psychological Distress Scale (K10)

Source: Kessler R. Professor of Health Care Policy, Harvard Medical School, Boston, USA.

This is a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4 week period.

Why use the K10

The use of a consumer self-report measure is a desirable method of assessment because it is a genuine attempt on the part of the clinician to collect information on the patient's current condition and to establish a productive dialogue. When completing the K10 the consumer should be provided with privacy.
(Information sourced from the NSW Mental health Outcomes and Assessment Training (MH-OAT) facilitator's Manual, NSW Health Department 2001)

How to administer the questionnaire

As a general rule, patients who rate most commonly "Some of the time" or "All of the time" categories are in need of a more detailed assessment. Referral information should be provided to these individuals. Patients who rate most commonly "A little of the time" or "None of the time" may also benefit from early intervention and promotional information to assist raising awareness of the conditions of depression and anxiety as well as strategies to prevent future mental health issues.

(Information sourced from the NSW Mental health Outcomes and Assessment Training (MH-OAT) facilitator's Manual, NSW Health Department 2001)

K10 Test

These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been .

1. During the last 30 days, about how often did you feel tired out for no good reason?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

2. During the last 30 days, about how often did you feel nervous?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

4. During the last 30 days, about how often did you feel hopeless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

5. During the last 30 days, about how often did you feel restless or fidgety?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

6. During the last 30 days, about how often did you feel so restless you could not sit still?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

7. During the last 30 days, about how often did you feel depressed?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

8. During the last 30 days, about how often did you feel that everything was an effort?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

10. During the last 30 days, about how often did you feel worthless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

Scoring

FOR DOCTOR'S EYES ONLY

This is a questionnaire for patients to complete. It is a measure of psychological distress. The numbers attached to the patients 10 responses are added up and the total score is the score on the Kessler Psychological Distress Scale (K10). Scores will range from 10 to 50. People seen in primary care who

* score under 20 are likely to be well
* score 20-24 are likely to have a mild mental disorder
* score 25-29 are likely to have moderate mental disorder
* score 30 and over are likely to have a severe mental disorder

13% of the adult population will score 20 and over and about 1 in 4 patients seen in primary care will score 20 and over. This is a screening instrument and practitioners should make a clinical judgement as to whether a person needs treatment.
Scores usually decline with effective treatment. Patients whose scores remain above 24 after treatment should be reviewed and specialist referral considered.

References:
Kessler, R.C., Andrews, G., Colpe, .et al (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. **Psychological Medicine, 32**, 959-956.

Andrews, G., Slade, T (2001). Interpreting scores on the Kessler Psychological Distress Scale (k10). **Australian and New Zealand Journal of Public Health, 25,** 494-497.

Appendix J. Multidimensional Scale of Perceived Social Support

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
Circle the "2" if you **Strongly Disagree**
Circle the "3" if you **Mildly Disagree**
Circle the "4" if you are **Neutral**
Circle the "5" if you **Mildly Agree**
Circle the "6" if you **Strongly Agree**
Circle the "7" if you **Very Strongly Agree**

		Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Scale Reference:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment* 1988;52:30-41.

Scoring Information:

To calculate mean scores:

Significant Other Subscale: Sum across items 1, 2, 5, & 10, then divide by 4.

Family Subscale: Sum across items 3, 4, 8, & 11, then divide by 4.

Friends Subscale: Sum across items 6, 7, 9, & 12, then divide by 4.

Total Scale: Sum across all 12 items, then divide by 12.

Appendix K. Means, Standard Deviations, One-way and Multi-way ANOVA results

	Physical Bullying Primary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	26.26 (7.74)	21.99 (7.13)	20.66 (7.16)	26.37	.000	.70	.50	.002
PTSD-type symptoms	11.79 (4.39)	9.00 (3.53)	8.28 (3.14)	34.69	.000	3.62	.027	.010
MSPSS Friends	19.99 (5.71)	21.09 (5.74)	21.89 (5.35)	5.11	.006	.21	.811	.001
MSPSS Family	18.84 (6.67)	20.92 (6.30)	21.78 (5.79)	8.87	.000	.21	.817	.001
MSPSS Significant Other	20.36 (6.83)	21.12 (6.73)	21.77 (6.33)	2.11	.122	.08	.921	.000

	Verbal Bullying Primary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	24.51 (7.89)	22.02 (7.33)	19.08 (6.47)	43.17	.000	5.32	.005	.015
PTSD-type symptoms	10.27 (4.38)	8.69 (3.26)	7.65 (2.57)	26.56	.000	3.25	.039	.009
MSPSS Friends	20.64 (5.76)	21.63 (5.36)	21.95 (5.47)	3.51	.030	.41	.665	.001
MSPSS Family	19.95 (6.47)	20.94 (6.09)	22.68 (5.45)	14.44	.000	2.78	.063	.008
MSPSS Significant Other	21.26 (6.59)	21.52 (6.54)	21.65 (6.33)	.21	.814	.16	.854	.000

	Indirect Bullying Primary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	23.98 (7.71)	21.43 (7.1)	18.22 (5.98)	62.85	.000	3.61	.027	.010
PTSD-type symptoms	9.87 (3.89)	8.3 (3.12)	7.3 (2.51)	34.31	.000	4.23	.015	.012
MSPSS Friends	21.07 (5.5)	21.84 (5.26)	21.85 (5.7)	2.19	.112	1.34	.262	.004
MSPSS Family	20.54 (6.23)	21.51 (5.96)	22.2 (5.74)	6.25	.002	2.02	.134	.006
MSPSS Significant Other	21.7 (6.36)	21.47 (6.51)	21.31 (6.6)	.29	.750	3.95	.020	.011

	Physical Bullying Secondary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	25.74 (8.77)	22.02 (6.95)	20.88 (7.34)	16.58	.000	.39	.677	.001
PTSD-type symptoms	11.51 (4.71)	9.32 (3.38)	8.29 (3.19)	31.47	.000	2.27	.104	.006
MSPSS Friends	20.10 (5.73)	20.99 (5.8)	21.83 (5.37)	4.49	.011	.09	.910	.000
MSPSS Family	18.38 (6.44)	20.5 (6.16)	21.87 (5.85)	13.97	.000	.891	.411	.002
MSPSS Significant Other	18.9 (7.72)	21.08 (6.12)	21.89 (6.34)	7.96	.000	4.73	.009	.013

	Verbal Bullying Secondary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	24.39 (7.88)	22.07 (7.34)	19.19 (6.74)	40.44	.000	.644	.526	.002
PTSD-type symptoms	10.38 (4.17)	8.38 (3.12)	7.74 (2.72)	37.06	.000	2.37	.095	.006
MSPSS Friends	20.73 (5.6)	21.44 (5.6)	22.16 (5.26)	5.02	.007	.05	.950	.000
MSPSS Family	19.54 (6.48)	21.35 (6.04)	22.48 (5.45)	17.79	.000	1.16	.314	.003
MSPSS Significant Other	21.06 (6.61)	21.31 (6.52)	21.96 (6.33)	1.65	.192	.5	.610	.001

	Indirect Bullying Secondary			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes to both* Mean (SD)	*Yes to one* Mean (SD)	*No to both* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	24.2 (7.91)	21.42 (6.8)	18.65 (6.51)	55.13	.000	3.25	.039	.009
PTSD-type symptoms	9.86 (4.02)	8.2 (2.89)	7.57 (2.6)	31.76	.000	3.59	.028	.010
MSPSS Friends	20.83 (5.67)	21.69 (5.32)	22.2 (5.35)	5.68	.004	.798	.451	.002
MSPSS Family	19.99 (6.5)	21.8 (5.49)	22.45 (5.64)	16.08	.000	3.45	.032	.009
MSPSS Significant Other	21.13 (6.72)	21.98 (6.01)	21.55 (6.54)	1.27	.280	1.66	.191	.005

	Been bullied since leaving school			**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*No* Mean (SD)	*Yes – by family* Mean (SD)	*Yes- by others* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	20.62 (7.07)	29.00 (8.2)	25.89 (8.17)	41.34	.000	12.43	.000	.033
PTSD-type symptoms	8.28 (3.06)	12.05 (3.61)	11.27 (4.46)	51.151	.000	17.81	.000	.047
MSPSS Friends	21.95 (5.64)	18.42 (6.43)	19.45 (6.34)	15.11	.000	8.19	.000	.022
MSPSS Family	21.96 (5.64)	12.13 (6.00)	19.01 (6.60)	44.95	.000	22.38	.000	.058
MSPSS Significant Other	21.86 (6.22)	17.72 (8.14)	19.87 (7.35)	9.23	.000	4.63	.010	.013

	Bullied at University		**One-way ANOVA results**		**Multi-way ANOVA results**		
Source	*Yes* Mean (SD)	*No* Mean (SD)	*F*	*p*	*F*	*p*	η_p^2
Kessler Psychological Distress Scale	25.69 (8.47)	22.05 (7.42)	22.29	.000	2.31	.129	.003
PTSD-type symptoms	10.77 (4.4)	8.49 (3.25)	42.35	.000	3.29	.07	.005
MSPSS Friends	20.25 (6.21)	21.4 (5.5)	4.06	.044	.05	.82	.000
MSPSS Family	19.72 (6.39)	21.06 (6.13)	4.56	.033	.42	.516	.001
MSPSS Significant Other	20.36 (7.12)	21.39 (6.53)	2.30	.130	.03	.864	.000

Appendix L. Cross-tabulations

Crosstabulation of responses to physical bullying at primary school and physical bullying at secondary school

			Physical bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Physical bullying both types Primary	Yes to both	Count	39	22	19	80
		% of column total	47.6%	12.2%	2.5%	7.9%
	Yes to one	Count	21	81	143	245
		% of column total	25.6%	44.8%	19.0%	24.1%
	No to both	Count	22	78	590	690
		% of column total	26.8%	43.1%	78.5%	68.0%
Total		Count	82	181	752	1015
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square= 284.52, *df*=4, *p*<0.001

Crosstabulation of responses to physical bullying at primary school and verbal bullying at secondary school

			Verbal bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Physical bullying both types Primary	Yes to both	Count	54	21	5	80
		% of column total	22.1%	5.7%	1.3%	8.0%
	Yes to one	Count	71	100	70	241
		% of column total	29.1%	27.3%	17.8%	24.0%
	No to both	Count	119	245	318	682
		% of column total	48.8%	66.9%	80.9%	68.0%
Total		Count	244	366	393	1003
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=119.29, *df*=4, *p*<0.001

Crosstabulation of physical bullying at primary school and indirect bullying at secondary school

			Indirect bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Physical bullying both types Primary	Yes to both	Count	53	13	13	79
		% of column total	14.1%	5.0%	3.6%	8.0%
	Yes to one	Count	102	69	68	239
		% of column total	27.1%	26.6%	19.0%	24.1%
	No to both	Count	221	177	277	675
		% of column total	58.8%	68.3%	77.4%	68.0%
Total		Count	376	259	358	993
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square= 44.38, *df*=4, *p*<0.001

Crosstabulation of verbal bullying at primary school and verbal bullying at secondary school

			Verbal bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Verbal bullying both types Primary	Yes to both	Count	120	50	26	196
		% of column total	49.4%	13.6%	6.6%	19.5%
	Yes to one	Count	83	220	153	456
		% of column total	34.2%	59.9%	38.9%	45.5%
	No to both	Count	40	97	214	351
		% of column total	16.5%	26.4%	54.5%	35.0%
Total		Count	243	367	393	1003
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square= 252.43, *df*=4, *p*<0.001

Crosstabulation of verbal bullying at primary school and indirect bullying at secondary school

			Indirect bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Verbal bullying both types Primary	Yes to both	Count	113	42	38	193
		% of column total	30.0%	16.3%	10.6%	19.4%
	Yes to one	Count	185	129	138	452
		% of column total	49.1%	50.0%	38.5%	45.5%
	No to both	Count	79	87	182	348
		% of column total	21.0%	33.7%	50.8%	35.0%
Total		Count	377	258	358	993
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=90.17, *df*=4, *p*<0.001

Crosstabulation of verbal bullying at primary school and physical bullying at secondary school

			Physical bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Verbal bullying both types Primary	Yes to both	Count	44	43	110	197
		% of column total	53.7%	23.9%	14.6%	19.4%
	Yes to one	Count	29	87	345	461
		% of column total	35.4%	48.3%	45.8%	45.4%
	No to both	Count	9	50	298	357
		% of column total	11.0%	27.8%	39.6%	35.2%
Total		Count	82	180	753	1015
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=83.15, *df*=4, *p*<0.001

Crosstabulation of indirect bullying at primary school and indirect bullying at secondary school

			Indirect bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Indirect bullying both types Primary	Yes to both	Count	282	63	39	384
		% of column total	74.8%	24.3%	10.9%	38.6%
	Yes to one	Count	62	145	104	311
		% of column total	16.4%	56.0%	29.1%	31.3%
	No to both	Count	33	51	215	299
		% of column total	8.8%	19.7%	60.1%	30.1%
Total		Count	377	259	358	994
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=463.53, *df*=4, *p*<0.001

Crosstabulation of indirect bullying at primary school and verbal bullying at secondary school

			Verbal bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Indirect bullying both types Primary	Yes to both	Count	163	137	87	387
		% of column total	66.8%	37.3%	22.1%	38.5%
	Yes to one	Count	56	126	133	315
		% of column total	23.0%	34.3%	33.8%	31.4%
	No to both	Count	25	104	173	302
		% of column total	10.2%	28.3%	44.0%	30.1%
Total		Count	244	367	393	1004
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=143.11, *df*=4, *p*<0.001

Crosstabulation of indirect bullying at primary school and physical bullying at secondary school

			Physical bullying both types Secondary			
			Yes to both	Yes to one	No to both	Total
Indirect bullying both types Primary	Yes to both	Count	61	73	257	391
		% of column total	74.4%	40.3%	34.1%	38.5%
	Yes to one	Count	14	65	239	318
		% of column total	17.1%	35.9%	31.7%	31.3%
	No to both	Count	7	43	257	307
		% of column total	8.5%	23.8%	34.1%	30.2%
Total		Count	82	181	753	1016
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=56.99, *df*=4, *p*<0.001

Crosstabulation of physical bullying at primary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Physical bullying both types Primary	Yes to both	Count	43	9	25	77
		% of column total	5.2%	36.0%	21.0%	8.0%
	Yes to one	Count	192	7	33	232
		% of column total	23.3%	28.0%	27.7%	24.0%
	No to both	Count	589	9	61	659
		% of column total	71.5%	36.0%	51.3%	68.1%
Total		Count	824	25	119	968
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=69.12, *df*=4, *p*<0.001

Crosstabulation of physical bullying at primary school and bullying at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Physical bullying both types Primary	Yes to both	Count	18	57	75
		% of column total	15.8%	9.1%	10.1%
	Yes to one	Count	33	177	210
		% of column total	28.9%	28.2%	28.3%
	No to both	Count	63	393	456
		% of column total	55.3%	62.7%	61.5%
Total		Count	114	627	741
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=5.16, *df*=2, *p*=.76

Crosstabulation of verbal bullying at primary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Verbal bullying both types Primary	Yes to both	Count	138	6	44	188
		% of column total	16.7%	24.0%	37.3%	19.4%
	Yes to one	Count	368	17	56	441
		% of column total	44.6%	68.0%	47.5%	45.6%
	No to both	Count	319	2	18	339
		% of column total	38.7%	8.0%	15.3%	35.0%
Total		Count	825	25	118	968
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=47.28, *df*=4, *p*<0.001

Crosstabulation of verbal bullying at primary school and bullying at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Verbal bullying both types Primary	Yes to both	Count	36	147	183
		% of column total	31.6%	23.4%	24.7%
	Yes to one	Count	58	328	386
		% of column total	50.9%	52.3%	52.1%
	No to both	Count	20	152	172
		% of column total	17.5%	24.2%	23.2%
Total		Count	114	627	741
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=4.49, *df*=2, *p*=.106

Crosstabulation of indirect bullying at primary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Indirect bullying both types Primary	Yes to both	Count	284	13	72	369
		% of column total	34.4%	52.0%	60.5%	38.1%
	Yes to one	Count	267	7	33	307
		% of column total	32.4%	28.0%	27.7%	31.7%
	No to both	Count	274	5	14	293
		% of column total	33.2%	20.0%	11.8%	30.2%
Total		Count	825	25	119	969
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=37.41, *df*=4, *p*<0.001

Crosstabulation of indirect bullying at primary school and bullying at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Indirect bullying both types Primary	Yes to both	Count	67	283	350
		% of column total	58.8%	45.1%	47.2%
	Yes to one	Count	34	211	245
		% of column total	29.8%	33.6%	33.0%
	No to both	Count	13	134	147
		% of column total	11.4%	21.3%	19.8%
Total		Count	114	628	742
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=9.07, *df*=2, *p*=.011

Crosstabulation of verbal bullying at secondary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Verbal bullying both types Secondary	Yes to both	Count	173	12	56	241
		% of column total	21.0%	48.0%	47.1%	24.9%
	Yes to one	Count	292	5	47	344
		% of column total	35.4%	20.0%	39.5%	35.5%
	No to both	Count	360	8	16	384
		% of column total	43.6%	32.0%	13.4%	39.6%
Total		Count	825	25	119	969
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=60.51, *df*=4, *p*<0.001

Crosstabulation of verbal bullying at secondary school and bullying at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Verbal bullying both types Secondary	Yes to both	Count	48	185	233
		% of column total	42.1%	29.5%	31.4%
	Yes to one	Count	45	273	318
		% of column total	39.5%	43.5%	42.9%
	No to both	Count	21	170	191
		% of column total	18.4%	27.1%	25.7%
Total		Count	114	628	742
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=8.08, *df*=2, *p*=.018

Crosstabulation of indirect bullying at secondary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Indirect bullying both types Secondary	Yes to both	Count	277	16	70	363
		% of column total	33.6%	64.0%	58.8%	37.5%
	Yes to one	Count	221	4	30	255
		% of column total	26.8%	16.0%	25.2%	26.3%
	No to both	Count	327	5	19	351
		% of column total	39.6%	20.0%	16.0%	36.2%
Total		Count	825	25	119	969
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=41.61, *df*=4, $p<0.001$

Crosstabulation of indirect bullying at secondary school and bullied at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Indirect bullying both types Secondary	Yes to both	Count	70	282	352
		% of column total	61.4%	44.9%	47.4%
	Yes to one	Count	27	188	215
		% of column total	23.7%	29.9%	29.0%
	No to both	Count	17	158	175
		% of column total	14.9%	25.2%	23.6%
Total		Count	114	628	742
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=11.13, *df*=2, *p*=.004

Crosstabulation of physical bullying at secondary school and bullying since leaving school

			Have you been bullied since leaving school?			
			I haven't been bullied since leaving school	I have been bullied by my family	I have been bullied by others	Total
Physical bullying both types Secondary	Yes to both	Count	45	8	26	79
		% of column total	5.5%	32.0%	21.8%	8.2%
	Yes to one	Count	135	4	29	168
		% of column total	16.4%	16.0%	24.4%	17.3%
	No to both	Count	645	13	64	722
		% of column total	78.2%	52.0%	53.8%	74.5%
Total		Count	825	25	119	969
		% of column total	100.0%	100.0%	100.0%	100.0%

Pearson chi-square=66.11, *df*=4, *p*<0.001

Crosstabulation of physical bullying at secondary school and bullying at university

			Have you ever experienced bullying at your university?		
			Yes	No	Total
Physical bullying both types Secondary	Yes to both	Count	19	58	77
		% of column total	16.7%	9.2%	10.4%
	Yes to one	Count	31	125	156
		% of column total	27.2%	19.9%	21.0%
	No to both	Count	64	445	509
		% of column total	56.1%	70.9%	68.6%
Total		Count	114	628	742
		% of column total	100.0%	100.0%	100.0%

Pearson chi-square=10.62, *df*=2, *p*=.005

Appendix M. Reflective Statement

Background

I remember having a lot of ideas when I was in the early stages of planning my research. It was refreshing to have the freedom to think broadly about my interests and how I could conduct a research project that would motivate me, but also help others. I considered several different areas before settling on what has now become my empirical study. What I found was that all of my ideas were somehow underpinned by attachment theory.

I have felt disappointed that people with attachment difficulties may only reach help as an adult or older adult, if at all. Schools, social services, wider family, community, etc. may all play important roles in identifying situations which may be affecting a child's wellbeing. Or they may not. And when they don't, children go unprotected and may never receive adequate input to try to cancel out some of the effects of their upbringing. This is what underpinned my interest in the reparative experiences that may be offered to children within their school environment.

Those with insecure or disorganised attachments are more likely to be bullied, than those with secure attachments. In some ways, it seems that these individuals are set up for failure from day one. However, a lot of other factors may be important in determining how a young person or adult deals with difficulties, such as resilience, support, coping styles, personality traits, hope etc. Furthermore, throughout child- and adulthood there is the potential for corrective experiences, probably in the form of someone who becomes a substitute attachment figure. This became the basis for my empirical study, as I was interested in the impact of bullying experiences upon those who are finding their feet as adults in this world, what may act as protective buffers for them, and how this would compare to research on the impact of bullying upon children.

Systematic Literature Review

Upon first reading about nurture groups, I felt pleased that such an intervention had been developed. I was enthusiastic about finding studies, but found the searching process tedious, as I was determined to be systematic and this does not come naturally to me!

The papers I ended up with were generally not of high quality, though I recognised that there were limits to quality, as, for example, it would be unethical to conduct a randomised controlled trial in this area. However, I found it disappointing not to be able to make more robust conclusions. Also, I do consider myself to be somewhat biased as I want nurture groups to be effective in improving children's wellbeing. Despite this, I tried to be balanced in my approach towards my synthesis and write-up.

I was disappointed that researchers had not also tended to include the child and parent/carer versions of the SDQ, as I considered that relying on teacher report alone may not be a complete reflection of the effects of the nurture group on a child's wellbeing. I wondered about what difference this would make to the findings, and also how the child would experience being involved in the process. I also wondered how

much children in these groups are told about why they are in a nurture group as opposed to in their mainstream class all the time, and what kind of impact this might have upon their view of themselves and others.

I was surprised that only two studies evaluated secondary school nurture groups, one of which did not separate secondary school and primary school findings. However, I felt encouraged by Cooke et al.'s (2008) strong rationale for adapted nurture groups within secondary schools. I hope that this review instigates further research into secondary school nurture groups, and for secondary school headteachers to seriously consider introducing nurture groups into their schools.

Upon exploring the political context to interventions that are recommended within schools, I felt concerned that the coalition government coming into power had seemingly meant a total dismissal of previous guidance and policies, and the introduction of completely new versions. So much work must have gone into existing policies and guidance, and time spent by teachers and other professionals in becoming familiar with these, and it seemed wasteful to start again rather than build on what had gone before. I thought about this more generally in terms of how people can feel bogged down by all of the government documents that are out there, and feel a lack of motivation in becoming familiar with these, precisely because they think it will soon be scrapped and therefore they think it would be pointless. I wondered if this may then have a negative impact on the individuals for whom the guidance is actually intended to help.

I hope that my systematic literature review is read by nurture group teachers, class teachers, head-teachers, social workers, etc. who have the power to make a difference to the emotional wellbeing of children with attachment difficulties. I am hoping to submit to Emotional and Behavioural Difficulties for this reason, as members of the Social, Emotional and Behavioural Difficulties Association (SEBDA) automatically receive a subscription for this journal.

Empirical Study

I decided on a quantitative design as this seemed more appropriate to the research area I was interested in. I also decided to use an online questionnaire as I knew that this would mean being able to access more participants in a shorter space of time than I would be able to do if I was physically interviewing participants myself.

I looked around for a survey website that would be able to display consent and debrief pages, as well as more logic options, and found questionpro.com to be the best option. I found the process of compiling and uploading the questionnaire relatively straightforward, and was impressed by the virtual help I could access on questionpro.com when I got stuck.

When the survey went live, I found it incredibly gratifying to see that people had been interested enough to click onto the survey and to take the time to complete it. It was rewarding to be able to share this excitement with my supervisor.

I was able to download the responses onto an Excel worksheet and could then paste them straight onto SPSS. I felt like I was cheating, but I felt relieved that I wouldn't have to worry about mistakes that might be made in manually entering so much data.

I did experience the data analysis as challenging, as I felt I had lost all knowledge of SPSS and statistics from my undergraduate training. However, the more I did the more I felt comfortable using SPSS, and I also made efforts to familiarise myself with some of the basic statistical knowledge that I had forgotten from undergraduate teaching. Just as I started to grasp one piece of statistics knowledge, I would become aware of something else that I needed to know. I found it a bit overwhelming at times, and found myself having to make lots of notes so that I wouldn't forget what different concepts and tests were. I now feel that I know a lot more about statistics than I did before, though I am aware there is much more that I don't know! Eric Gardiner, the departmental statistician, was very helpful as he did try not to overwhelm me with too many statistics at once, and was responsive to my many queries.

I found writing up the methodology and discussion sections equally challenging. I felt bogged down in the vast amount of data I had. I took it step by step and eventually began to understand what I had got. Supervision was especially helpful in keeping me level-headed and patient by taking one thing at a time.

When I wrote up my results, I felt unsure about the significance of my findings. I had a large sample size, which was something to be pleased about, but it meant that findings could be statistically significant when actually only very small differences existed. This led me to feel hesitant about whether my findings actually showed important differences, especially because the effect sizes were small. Another problem I experienced was the apparent controversy around partial eta squared, and a paper cautioning the use of this instead of eta. Other authors provided a rationale for preferring partial eta squared, but I still felt confused about whether the guidance for eta really applied to partial eta squared.

Another reflection I had was that I had maybe started out with too many research questions, perhaps contributing to my feelings of being overwhelmed at times. However, I felt pleased to have such a rich amount of data which I could answer those questions with, and I considered each of the questions to be important and interesting.

I was surprised to find that those who were physically bullied at primary and/or secondary school appeared less likely to be bullied since leaving school, as compared to those who hadn't experienced any physical bullying at school. I postulated that perhaps those who were physically bullied may learn to fight or behave aggressively to prevent being bullied by others in the future. I was interested to find that stable bullying was linked to poorer mental health and lower perceived social support, but not lower perceived support from a significant other. It seemed hopeful that those with long-term bullying experiences, had nevertheless been able to find a supportive partner.

I was particularly surprised to discover that bullying experiences since leaving school were significantly linked to all outcomes, but that bullying experiences specifically at University were not. I found this confusing, particularly as a similar proportion indicated they had been bullied in response to each question. I wondered about the potential for other, possibly less avoidable, bullying experiences taking place outside of

University, and the impact of these. It seemed that bullying within the family was particularly important, and I wondered if those who had experienced bullying within the family had done so for a long time.

Although I found conducting this study interesting, I think I would have preferred to conduct further research into attachment styles and bullying, though I remember choosing not to do this because Schäfer et al. (2004) had looked at this in conjunction with other variables. However, in hindsight, I could still have furthered Schäfer et al.'s research through assessing attachment style along with other variables.

Deciding not to do this has therefore not made it possible to make clear links to attachment, though the impact of bullying within the family seemed relevant to attachment theory, and it could be postulated that those with low perceived social support may have insecure attachments, and therefore may be more vulnerable to bullying experiences.

I feel pleased that the study has highlighted the importance of addressing bullying as early on as possible, due to the long-term emotional impact of school bullying, especially multiple bullying experiences. I was also encouraged to read about the KiVA anti-bullying programme, due to its focus not just on bullies and victims, but also bystanders, encouraging each child to take responsibility for preventing and effectively tackling bullying situations. I hope that the present study helps head-teachers to seriously consider the inclusion of such a programme into their schools.

I decided to submit to the British Journal of Developmental Psychology, due to the focus on providing a lifespan perspective of bullying through recruiting emerging adults. Also, the majority of participants were from England, hence the choice of a British journal.

Overall, at times I have found this project challenging and overwhelming, but more often I have been motivated by my desire to reach an audience who can use my research to help others. I have really valued and enjoyed the opportunity to conduct this project.