

The Effects of Childhood Bullying on Adult Attachment Styles and Social Self-Esteem

Éabha McClean

X20367693

Dr. Robert Fox

BA (Hons) Psychology

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Name: Éabha McClean

Student Number: X20367693

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Abstract

Aims: The present study sought to examine the impact of childhood bullying experiences on attachment style and social self-esteem levels in adulthood, whilst controlling for age and gender differences. This study investigated both anxious and avoidant attachment styles and both witnessing bullying and bullying victimisation. **Method:** The sample of 170 participants were recruited through convenience sampling and completed a questionnaire consisting of demographic questions, a modified version of the Retrospective Bullying Experiences Questionnaire (RBEQ), Revised Adult Attachment Scale – Close Relationships version (RAAS) and Revised Janis-Fields Self-Esteem Scale – Self-esteem Subscale (JFSES).

Results: Three standard multiple regression analyses were conducted. The findings revealed that childhood bullying victimisation significantly predicted both anxious and avoidant attachment, and reduced social self-esteem levels. Significant gender differences were found for anxious attachment, with females exhibiting higher levels of attachment anxiety. Age was negatively correlated with each dependent variable, indicating younger adults had higher levels of anxious and avoidant attachment and lower levels of social self-esteem. Across the dependent variables, bullying victimisation was the strongest predictor and witnessing bullying did not have an effect. **Conclusion:** The findings of this research provide a greater insight into the negative implications of childhood bullying victimisation on adult interpersonal functioning. Implications and directions for future research are discussed.

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Literature Review

Introduction

Childhood bullying has commonly been considered just a normal part of growing up. However, the long-term effects persistent bullying can have on a child's development are substantial. Bullying is a broad term that is most commonly defined as a repeated occurrence of power imbalance in which the bully intends to harm the victim in some manner (Farrington, 1993; Olweus, 1993). Bullying can be experienced in various forms ranging from physical to emotional bullying to the recent rise of cyberbullying. Research on the lasting effects of bullying is a growing field, primarily focusing on creating a greater understanding of the negative consequences for a child's psychological well-being.

Studies investigating the implications of childhood bullying victimisation have shown its significant effect on a child's self-esteem, mental health, academic ability and social skills making it a significant developmental risk factor (Craig, 1998; Scott & Dale, 2016; Beran et al., 2008). Children who are bullied have an increased likelihood of developing both physical and mental health problems such as eating disorders, depression, anxiety, sleep problems and self-harming behaviours (Gini & Pozzoli, 2009; Wolke et al., 2014; Scott & Dale, 2016). Significant research has also been conducted on the implications of childhood bullying on adolescence and bullying has shown to lead to higher rates of loneliness, depression, anxiety and lack of peer relationships (Masillo et al., 2019; Matthews et al., 2020).

Whilst the established research in the field has provided valuable insights into the implications of bullying, little research has been conducted on whether the negative effects can last into adulthood. This review will discuss and evaluate the existing research on the negative implications of childhood bullying victimisation and how these effects may last into adulthood. There will be a focus on the research surrounding the possible implications of childhood bullying for social self-esteem and attachment styles in adulthood.

The negative effects of childhood bullying

Bullying is typically defined as a context dependent, developmental behaviour which is rooted in the desire to assert power over others (Pepler et al., 2006; Volk et al., 2012). This power imbalance can lead children to feel like they are flawed and incapable of functioning in social settings, which can lead to poor self-perception and increased levels of social anxiety and hopelessness (Storch et al., 2004). Early researchers in childhood bullying focused primarily on the short-term effects of childhood bullying. Many studies found a correlation between childhood bullying and mental health disorders such as anxiety and depression in adolescence (Troy & Sroufe, 1987; Salmon et al., 1998). There is little dispute in the research and more recent studies back up this increase in psychological issues, with a correlation to sleeping issues, loneliness and low self-esteem also being prevalent (Hertz et al., 2015; Baams et al., 2021; Matthews et al., 2020; Guerra et al., 2011).

This plethora of negative experiences resulting from childhood bullying can continue to be present throughout a person's life. Research has shown that consistent childhood bullying may have a more significant negative impact on adult mental health than childhood maltreatment, in relation to anxiety, depression and self-harm (Lereya et al., 2015). The present study also aims to address these gaps by examining long-term effects of bullying on interpersonal functioning.

The significant negative outcomes that have been identified are particularly concerning due to the high prevalence of bullying. Whilst there has been much dispute and inconsistency in research on the prevalence of childhood bullying, researchers are united in the fact that bullying is one of the most common forms of adverse childhood experiences and it needs to be addressed. A thorough review of the research surrounding bullying prevalence examined 80 studies investigating the prevalence on both traditional bullying and

cyberbullying. This review found that in general, traditional bullying was twice as common as cyberbullying with the mean prevalence of traditional bullying victimisation being 36% while the mean prevalence of cyberbullying was 17% (Modecki et al., 2014). However, this review did have limitations due to it only reviewing studies that examined both traditional and cyberbullying, affecting the generalisability of the study. Additionally, studies have shown that the prevalence of cyberbullying is rapidly growing due to the increasing popularity of social media and increased mobile phone usage (Ofcom, 2023; Yuen Fook et al., 2021; Shin & Choi, 2021). Therefore, results may have significantly changed since this review, indicating a need for further longitudinal research and reviews to be conducted. The findings in research on childhood bullying emphasise the need for further research in the area along with successful widespread preventative and mediating interventions to diminish the prevalence of long-lasting effects.

Low self-esteem as a consequence of bullying victimisation

Research has found low self-esteem is one of the most prevalent outcomes of childhood bullying victimisation. The biggest correlation found between low self-esteem and bullying appears to be in both adolescents who are being bullied and adults who were bullied during their childhood. Many of these studies suggested that females typically had lower levels of self-esteem after victimisation in comparison with males (Mungala, & Nabuzoka, 2020; Brito & Oliveira, 2013). However, this research has been contradicted by studies showing there is no gender difference in self-esteem issues among bullied youth. (Gattario et al., 2019; Ledley et al., 2006). Furthermore, a study by Wolke & Sapouna (2008) further emphasised the self-esteem issues that can be experienced by adult men as a result of childhood bullying. This study investigated male bodybuilders muscle dysmorphia and psychological issues in relation to childhood bullying they have experienced. The result found a strong correlation between bullying victimisation and increased levels of mental

health issues and muscle dysmorphia, along with lower levels of self-esteem. Whilst more longitudinal research would be beneficial in this area in order to eliminate the limitation of recall biases, this study along with the above studies mentioned gives a valuable insight into how childhood bullying can affect self-esteem levels across genders and age groups.

In contrast to these findings, a 1997 study by Tritt and Duncan investigated the relationship between childhood bullying and loneliness and self-esteem issues in young adults and found a correlation between bullying and loneliness but no direct correlation between bullying and self-esteem. However, there was a correlation between bullying victimisation and low self-esteem for participants who had both high rates of loneliness and low self-esteem. Although this study may be outdated, it raises questions as to whether low social self-esteem, rather than low appearance-based self-esteem are increasing difficulties with interpersonal functioning and increasing rates of loneliness among bullying victims. More modern studies have supported the hypothesis that childhood bullying may increase loneliness later in life (Matthews et al., 2020; Hart et al., 2019).

Whilst many studies investigated the link between appearance-related self-esteem, there are few studies discussing the impact of childhood bullying on social self-esteem. Social self-esteem encompasses an individual's confidence in navigating social settings and impacts their opinion on how they are perceived by peers (Valkenburg et al., 2006). Low social self-esteem levels can lead to social anxiety, loneliness, low levels of social self-worth (Gruenewald et al., 2004). Therefore, high levels of social self-esteem can be key for adequate interpersonal functioning and in developing secure relationships (Bain & Bell, 2004). A study by Ledley et al. (2006) investigated the relationship between being teased in childhood and adult interpersonal functioning. This study is one of the only studies to date to focus on the social aspect of self-esteem in relation to bullying, although others have examined the increase of social anxiety among bullied youths and found a significant

relationship (Boulton, 2013; Blood & Blood, 2016). A medium effect size between childhood teasing and decreased social self-esteem levels was found. Interestingly, this study also found no correlation between childhood teasing and the number of peer relationships present in their lives. However participants were not asked questions about the quality of these relationships, which may have significantly impacted the results. A further limitation of this study is that all participants were in college and from two specific universities in America. Therefore, this study is not generalisable to the general population and studies investigating a different population may yield different results. In order to address this limitation, the current study aimed to recruit a wider population. Further research in this area is important to gain an understanding on how relationships and interpersonal functioning in adulthood can be affected by adverse experiences in childhood.

The role of attachment theory in bullying research

Attachment is a key element in development from the second a child is born and all throughout their life. The concept of attachment can be defined as any relationship that is ongoing and involves an emotional bond (Fitton, 2013). Attachment theory has been widely studied and has been highly influential in developmental psychology. The main theory of attachment is Bowlby's Attachment Theory which states that infants are biologically predisposed to form an attachment to their mother and that this leads to different child attachment styles (Bowlby, 1969). Bowlby's research has been highly influential in the understanding of childhood attachment and has paved the way for a large amount of research to be completed in this area. However, Bowlby's theory does not explore the impact of peer relationships on a child's developing attachment styles and the implications of these relationships later in life. The current study is based on adult attachment styles and their correlation with childhood bullying and social self-esteem. Brennan et al. (1998) is one of the most notable researchers in adult attachment styles and developed the adult attachment type

(ATT) questionnaire. The findings of Brennan's research proposed there are two primary dimensions to adult attachment, consisting of attachment-related anxiety and attachment related avoidance. Attachment anxiety involves low self-esteem, fear of abandonment and rejection and co-dependent tendencies. People with an avoidant attachment are typically dismissive of others, struggle with trusting people and avoid emotional or physical intimacy (Shaffer & Kipp, 2013). This led to Brennan proposing four types of adult attachment which are similar but not identical to Bowlby's childhood attachment types. The four models of adult attachment are secure, anxious-preoccupied, dismissive-avoidant and fearful-avoidant. Brennan's adult attachment model has inspired extensive research on adult attachment styles and their implications on adult relationships. However, little of this research has focused on the possible effect of childhood bullying in shaping adult attachment styles. The previously discussed study by Ledley et al. examined adult attachment as a form of interpersonal functioning which may be affected by childhood bullying. A strength to this study is the use of the Revised Adult Attachment Scale, a well-established attachment scale with good internal consistency (Collins, 1996). The results of this study showed a small correlation between bullying victimisation and issues with romantic attachment style in the areas of trust, feelings of closeness and fear of abandonment. The small effect size may be explained by the fact that this study only measured feelings in romantic relationships. In order to address this limitation, this research measured feelings in close relationships rather than specifically romantic relationships. A secure attachment is extremely important for the formation of successful meaningful relationships and can significantly improve relationship satisfaction, self-esteem and life satisfaction. (Chopik et al., 2022; Shen et al., 2021; Zagefka et al., 2021). On account of this knowledge, it is crucial that individuals are supported in developing secure attachment styles and characteristics.

Overview of the Findings and the Current Study

To summarise, the literature on childhood bullying shows its substantial negative effects on a child's development and how these effects can last into adulthood. According to prior research, childhood bullying victimisation can have significant impacts in all aspects of child development with research showing health implications, interpersonal functioning issues, and a decrease in psychological well-being, particularly with anxiety, depression and self-esteem. However, there is a gap in the literature surrounding the long term effects of bullying on adult attachment and social self-esteem. Adult attachment styles are typically shaped during childhood, and can therefore be effected by adverse experiences such as bullying victimisation. An insecure attachment style can lead to low self-worth, mistrust of others and feelings of inadequacy and anxiety. Therefore, developing a secure attachment style plays an important role in future interpersonal functioning. Furthermore, social self-esteem is also a key aspect in developing secure relationships and increasing self-efficacy.

These findings show the importance of continued research into long term effects of childhood bullying. The current research hopes to provide a greater insight into the outcomes of childhood bullying and encourage further studies in this area. Additionally, this insight into bullying outcomes may encourage strategies aimed at promoting secure attachment and social self-esteem to be included in bullying intervention programmes. Early intervention strategies may mitigate future negative interpersonal outcomes of childhood bullying. This insight may also be useful to counsellors of both child and adult victims of bullying.

The current study aims to address the gap in the current literature by examining the implications of childhood bullying on both adult attachment styles and social self-esteem. The aim of the study is to gain a greater understanding of how social self-esteem and adult attachment are impacted and how this may shape individuals' relationship quality, relationship security and social interaction skills. In addition, this study will examine the

impact of gender and age on these variables.. Specifically, the research questions will be the following:

1. Is there a significant relationship between childhood bullying experiences and anxious attachment levels, when controlling for age and gender ?
2. Is there a significant relationship between childhood bullying experiences and avoidant attachment levels, when controlling for age and gender ?
3. Is there a significant relationship between childhood bullying experiences and social self-esteem levels, controlling for age and gender ?

Based on prior research, it is hypothesized that there will be a significant relationship between recall of childhood bullying and both anxious and avoidant attachment in adulthood. It is further hypothesised that there will be a significant relationship between childhood bullying experiences and social self-esteem levels in adulthood. It is also predicted that gender and age will have a significant relationship with the criterion variables.

Methods

Participants

The research sample for the current study consisted of 170 participants (Females: $n=116$; Males: $n=54$). A regression analysis was conducted in this study in order to determine the sample size required for a statistically powerful analysis. The analysis was conducted using G*Power: Statistical Power Analysis, Version 3.1 (Faul et al., 2009), and it was estimated that based on 4 predictor variables, a minimum of 95 participants were required based on a standard linear multiple regression analysis. The study utilised a non-probability convenience sampling method to recruit participants, and recruitment took place on social media. A poster was created containing a link to the study, inclusion criteria and details on the nature of the study (see Appendix I). This poster was distributed through the researcher's social media accounts, which included Instagram, Facebook, Twitter, LinkedIn and Reddit. The age range of participants was 18-75, with a mean age of 29.84 (SD=13.25). There were no specific age groups for the study; however, in line with ethical considerations, participants were required to be over the age of 18. There was no compensation for participating in the study, and all participants were required to give informed consent before completing the questionnaire.

Measures

The study consisted of an online Google Forms questionnaire which was comprised of demographic questions along with three scales. The demographic questions asked participants to state their age and the gender they identify as (male, female, other).

Childhood Bullying

The Retrospective Bullying Experiences Questionnaire (RBEQ) (Tłusciak-Deliowska, 2015) is a self-report questionnaire that was used to measure retrospective recollections of childhood bullying. This questionnaire assesses four different forms of bullying, including verbal bullying (i.e. name calling, teasing), physical bullying (i.e. Hitting, kicking),

psychological bullying (i.e. intimidating) and covert bullying (i.e. spreading rumours). 10 Likert Scale items ranging from 1 "Never" to 5 "very often" were asked to indicate how often participants experienced these behaviours and how often they witnessed them, respectively. This study slightly adapted the original RBEQ to fit the study's aims. The original measure assessed experiences of witnessing, perpetrating and being a victim of bullying; however, investigating perpetrators of bullying was beyond the scope of this research. In the original measure, participants were originally asked to score bullying behaviours during three different periods of school: Primary school, Middle school and High School. As this study was concerned with overall childhood bullying experiences, participants were only asked to rate these experiences once, with the phrasing being changed to "During my childhood, I experienced kids" and "during my childhood, I saw kids", followed by the Likert Scale items. Total scores were obtained by calculating the sum of the items, with higher scores indicating higher rates of bullying behaviours experienced or witnessed. This questionnaire also included two demographic bullying questions assessing the participant's general experience with peers (i.e. I was bullied, I was never involved in bullying) and the perceived severity of experienced bullying behaviours (i.e. It was only jokes, it was hard for me to deal with). This questionnaire is an adaptation of the previously established Retrospective Bullying Questionnaire (Schäfer et al., 2004). This adaptation has previously been used in other studies and its reliability and validity have been tested in different populations such as Iranian students (Noorazar et al., 2021). The Cronbach's alpha of this study ranged from 0,73 to 0.93 as they utilised all subscales, showing good internalised consistency. The Cronbach's alpha for this particular study shows good internal consistency with a Cronbach's alpha of .92 for both witnessing bullying and being a victim of bullying.

Adult Attachment

The Revised Adult Attachment Scale - Close Relationships version (RAAS) (Collins, 1996) is a revised version of the Adult Attachment Scale (Collins & Read, 1990) which is used to assess how participants feel in important close relationships in their life. This study used the close relationships version of the RAAS as it is not solely investigating romantic relationships. The questionnaire consists of 18 questions which are scored on a Likert Scale ranging from 1 "Not at all characteristic of me" to 5 "Very characteristic of me" with items 2, 7, 8, 13, 16, 17 and 18 being reverse scored. Sample items include "I find it relatively easy to get close to people" (Item 1), "I find it difficult to trust others completely" (Item 16) and "I often worry that people don't really love me" (Item 3). Items were divided into anxious attachment (Items 3, 4, 9, 10, 11, 15) and avoidant attachment (Items 1, 2, 5, 6, 7, 8, 12, 13, 14, 16, 17, 18). For the avoidant attachment subscale, all items were reverse scored. Each subscale was scored by calculating the sum of each item, with higher levels indicating higher levels of attachment insecurity. The RAAS is a highly established measure of adult attachment and it has shown to be a valid and reliable scale. Research investigating the validity of the RAAS close relationships version has shown a high level of internal consistency, with the Cronbach's alpha for each subscale ranging from 0.75 to 0.88 (Teixeira et al., 2019). For this study, the Cronbach's alpha was .91 for anxious attachment and .88 for avoidant attachment.

Social Self-Esteem

The Revised Janis-Fields Self-Esteem Scale – Self-esteem Subscale (JFSES) (Pliner, Chaiken, & Flett, 1990) is an adaptation of the Feelings of Inadequacy Scale (Janis & Field, 1956) which is comprised of subscales assessing academic self-esteem, self-related self-esteem and social self-esteem with the addition of six items measuring appearance based self-esteem. As this study is specifically concerned with the impact of bullying on social self-

esteem, only this subscale was used. The self-esteem subscale consists of 5 questions, such as “Do you often feel uncomfortable meeting new people?”. Participants indicate how often they relate to these items from 1 “Never (Almost)” to 5 “Very often”. Scores are obtained by calculating the sum of the five items, ranging from 5-25, with a higher score indicating lower levels of social self-esteem. The social self-esteem subscale has previously been used in research investigating the relationship between childhood teasing and later interpersonal functioning (Ledley et al., 2006). The Cronbach’s alpha of the subscale was .88 showing good internal reliability.

Design

The current study utilised a cross-sectional design with a quantitative approach. The study data was collected at a specific point in time using a questionnaire. The questionnaire consisted of demographic questions along with three separate scales. The demographic questions were assessed using descriptive analyses to gather information on the general demographic of the research. Pearson’s product-moment correlation analysis was conducted to assess the relationship between the predictor variables and between the predictor and criterion variables. Three multiple regression analyses were used to investigate the relationship between childhood bullying and each subscale of adult attachment as well as for social self-esteem. There were four predictor variables consisting of age, gender, witnessing bullying and bullying victimisation which were utilised in all three multiple regression analyses.. There were also three separate criterion variables of anxious attachment, avoidant attachment and social self-esteem. For all three hypotheses, a between participants design was used.

Procedures

Data was collected online using a Google forms survey. Before recruitment commenced, the survey was piloted to 3 people who fit the demographic in order to

determine the length of the study and to make sure there were no issues or questions that needed to be altered. The survey took approximately 6 minutes to complete and no issues were found. These participants data were excluded from analysis. The link to the questionnaire was then posted across Instagram, Facebook, LinkedIn, Twitter and Reddit along with a poster containing information on the study, the study length and the inclusion criteria. Anybody who was interested in taking part then clicked on this link. This brought them directly to the information sheet which gave them further information on the aims and nature of the study. In order to comply with ethical guidelines, participants filled out an informed consent form before completing the questionnaire

The participants then began the questionnaire. The first section of the questionnaire was the Retrospective Bullying Experiences Questionnaire (RBEQ) in which the participant had to answer Likert scale and multiple-choice design questions about the types of bullying they may have experienced as well as the frequency and severity of this bullying. The same questions were asked twice to screen for witnessing bullying and bullying victimisation. After completing this section, they then completed the RAAS which used Likert-scale questions to assess their current adult attachment style and their attitudes towards close relationships. Finally, the participants completed the social self-esteem subscale which asked Likert -scale questions about their confidence and skills in social settings.

Once the participant completed the questionnaire, they then saw a debrief sheet which will include helplines such as Aware in case any participants experienced psychological distress during the study. This sheet also informed the participants of their rights to confidentiality and they were provided with an email address which they could use to ask any questions they may have.

Ethical Considerations

The present study was approved by the National College of Ireland's ethics committee. The researcher abided by the NCI Ethical Guidelines and Procedures for Research involving Human Participants (2017). All data was collected in accordance with the NCI ethical guidelines and all participants provided informed consent. Participants were clearly informed of the risks and benefits of partaking in this study and there was no incentive given to take part. Participants were made aware that they could withdraw from the study at any point without repercussions. A debriefing form was also provided to all participants which included contact details of helplines for participants who may have suffered distress as a result of the study.

Results

Descriptive Statistics

Descriptive statistics were performed for all categorical variables and are presented in Table 1. This included the categorical variables gender, general bullying experience and perceived severity of bullying behaviours. The sample consists of 170 participants (N=170). Within the sample there were significantly more female participants than males. Almost half of the participants reported being bullied/Additionally, a significant amount of participants reported witnessing bullying or both experiencing and perpetrating bullying. Among those who were bullied, the majority reported it was hard for them to deal with or they felt bad about it. Additionally, there are six continuous variables presented in Table 2, consisting of Age, Bullying Victimization, Witnessing Bullying, Avoidant Attachment, Anxious Attachment and Social Self-esteem.

Table 1

Descriptive statistics for categorical variables

Variable	Frequency	Valid %
Gender		
Male	54	31.8%
Female	116	68.2%

General Bullying Experiences

I was bullied	73	42.9%
I was never involved in bullying, and I never saw bullying	6	3.6%
I was never involved in bullying, but sometimes I saw bullying	36	21.2%
Sometimes I bullied, teased or made fun of someone	15	8.8%
Sometimes I teased my peers, but they also teased me	40	23.5%
Perceived Severity of Bullying Experiences		
I did not treat those behaviours seriously	32	18.8%
I felt bad about it	46	27.1%
I have not experienced any of the mentioned behaviours	9	5.3%
It was hard for me to deal with	52	30.6%
It was indifferent to me	12	7.1%
It was only jokes	15	8.8%
Other	4	2.3%

Table 2*Descriptive statistics for continuous variables*

Variable	<i>M</i> [95% CI]	<i>SD</i>	Range
Age	29.84 [27.85, 31.83]	13.25	18-75
Bullying Victimization	19.77 [18.46, 21.08]	8.71	0-40
Witnessing Bullying	13.51 [12.19, 14.83]	8.79	0-40

Avoidant Attachment	35.21 [33,80, 36.61]	9.28	12-59
Anxious Attachment	19.74 [18.76, 20.72]	6.48	6-30
Social Self-esteem	16.72 [15.91,17.53]	5.37	5-25

Notes: 'M'=Mean, CI=Confidence Interval, SD=Standard Deviation

Inferential Statistics

All three hypotheses were investigated using standard linear multiple regression. A Pearson's product-moment correlation was performed in order to examine the relationship between all the predictor variables (see Table 3). Three out of four variables were not significantly correlated with each other, with a range of $r=-.11$, $p = .159$ to $r=.06$, $p = .464$. These results indicated that assumptions of multicollinearity were not violated between the predictor variables.

Table 3

Pearson's correlation between all predictor variables (n=170)

Variable	1.	2.	3.	4.
1. Gender	1			
2. Age	.06	1		
3. Bullying Witness	-.08	-.11	1	
4. Bullying Victim	-.04	-.09	.74***	1

Note: Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$. Correlation is significant at the .05 level.

Hypothesis 1

Firstly, a multiple regression was conducted to investigate the impact of the independent variables of childhood bullying victimisation, witnessing childhood bullying, age and gender on the dependent variable of anxious attachment levels. Preliminary analyses were conducted to ensure the assumptions of normality, homoscedasticity and linearity were

not violated. All data was normally distributed and correlations between the predictor variables were examined using a Pearson's correlation analysis (see Table 3 above). Utilising Cohen's *d* cut off values, there was a weak to moderate significant correlation between all predictor variables and between the criterion and predictor variables, with a range of $r = -.27, p < .001$, $p < .001$ and $r = .41, p < .001$ (Cohen, 2013). All Tolerance and VIF values were acceptable, ranging from tolerance values of .45 and .99 and VIF ranging from 1.01 and 2.23. Multicollinearity is unlikely occur with a tolerance value of greater than .10 and a VIF lower than 10 and therefore was not an issue in this analysis (Pallant, 2020). All predictor variables were significantly correlated with anxious attachment ($p > .005$). Preliminary analysis indicated that the data was suitable to be examined using multiple regression.

As there were no a priori hypotheses made to determine the order of entry of the predictor variables, a direct method of multiple regression analysis was utilised. The four independent variables accounted for 27% variance ($F(4,165)=13.40, p < .001$). As shown in Table 4, all independent variables had a significant relationship, with the exception of witnessing bullying ($\beta = .01, p = .897$). These results indicate that higher levels of childhood bullying victimisation increase the likelihood of an anxious attachment style in adulthood. Additionally, females and younger populations are more likely to develop anxious attachment as a result of childhood bullying.

Table 4

Multiple regression table predicting Anxious Attachment

Variable	R^2	B	SE	β	t	P
Model	.27					<.001***
Gender		.52	.15	.23	3.40	<.001***
Age		-.12	.03	-.24	-3.62	<.001***
Bullying Witness		.01	.074	.013	.13	.897

Bullying Victim	.29	.073	.39	3.93	<.001***
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Note: Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$. 'B' = Unstandardised beta value,

'SE' = Standard Error, ' β ' = Standardized Beta.

Hypothesis 2

In order to investigate the impact of the previously mentioned independent variables on avoidant attachment levels, another multiple regression was performed. Preliminary analyses were conducted to ensure the assumptions of normality, homoscedasticity and linearity were not violated. Analysis of the scatterplot and tests of normality showed that all data was normally distributed and correlations between the predictor variables were examined using a Pearson's correlation analyses (see Table 3 above). As mentioned above, Tolerance and VIF values were in an acceptable range. Therefore, assumptions of multicollinearity were not violated. Apart from gender ($p = .084$), all predictor variables were significantly correlated with avoidant attachment ($p > .005$). Preliminary analyses indicated that the data could reliably be examined using a multiple regression analysis.

As with the first regression, no priori hypotheses were made to decide the entry order of the predictor variables and a direct method of multiple regression analysis was utilised. The four independent variables accounted for 23.5% variance ($F(4,165) = 12.69$, $p < .001$). As shown in Table 5, both age ($\beta = -.17$, $p = .012$) and bullying victimisation ($\beta = .51$, $p < .001$) had a significant relationship with avoidant attachment. Childhood bullying victimisation was the strongest predictor of avoidant attachment indicating that higher levels of childhood bullying victimisation increase the likelihood of an anxious attachment style in adulthood. Additionally, younger populations are more likely to develop avoidant attachment as a result of childhood bullying than older populations.

Table 5*Multiple regression table predicting Avoidant Attachment*

Variable	R^2	B	SE	β	t	p
Model	.24					<.001***
Gender		.21	.11	.13	1.87	.064
Age		-.12	.05	-.17	-2.53	.012*
Bullying Witness		-.12	.11	-.11	-1.12	.267
Bullying Victim		.53	.11	.51	4.98	<.001

Note: Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$. 'B' = Unstandardised beta value, 'SE' = Standard Error, ' β ' = Standardized Beta.

Hypothesis 3

A final multiple regression analysis was used to investigate the impact of childhood bullying victimisation, witnessing childhood bullying, age and gender on social self-esteem levels. Preliminary analyses were conducted to ensure the assumptions of normality, homoscedasticity and linearity were not violated. All data was normally distributed and correlations between the predictor variables were examined using a Pearson's correlation analyses (see Table 3). All predictor variables were significantly correlated with the dependent variable self-esteem ($p > .005$) except for gender ($p = .479$). Tolerance and VIF values were assessed for multicollinearity and all values were in an acceptable range and therefore the data was suitable to reliably undertake a multiple regression analysis to examine the data.

There were no a priori hypotheses made to determine the order of entry of the predictor variables and a direct method of multiple regression analysis was utilised. The four independent variables accounted for 18% variance in social self-esteem levels ($F(4,165) = 8.86, p < .001$). As shown in Table 6, both age ($\beta = -.17, p < .001$) and bullying victimisation ($\beta = .53, p < .001$) had a significant relationship with social self-esteem. These

results indicate that higher levels of childhood bullying victimisation increase the likelihood of low levels of social self-esteem in adulthood. Additionally, there was a weaker relationship between younger participants and lower levels of social self-esteem.

Table 6

Standard multiple regression table predicting Social Self Esteem

Variable	R^2	B	SE	β	t	p
Model	.18					<.001***
Gender		.27	.82	.02	.33	.739
Age		-.10	.03	-.26	-3.62	<.001***
Bullying Witness		-.09	.07	-.150	-1.42	.157
Bullying Victim		.25	.06	.41	3.91	<.001***

Note: Statistical significance: * $p < .05$; ** $p < .01$; *** $p < .001$. 'B' = Unstandardised beta value, 'SE' = Standard Error, ' β ' = Standardized Beta.

Discussion

Childhood bullying is a widespread concern with substantial short and long term adverse effects. This global issue inspired the current study, which sought to investigate the effects of childhood bullying experiences on an adult's attachment style and social self-esteem. Additionally, this study looked at age and gender differences for each variable. In order to gain a greater understanding of the dimensions of attachment that can be impacted by childhood bullying, this study investigated anxious and avoidant attachment styles separately. Additionally, the dimensions of bullying were divided into witnessing and being a victim of childhood bullying in order to examine which experience can have a more significant effect on interpersonal functioning in adulthood. After extensive research on previous findings, three hypotheses were proposed.

Firstly, it was hypothesised that childhood bullying would significantly impact anxious attachment levels in adulthood. Additionally, the impact of gender and age on this relationship was examined. Using multiple regression analysis, childhood bullying was found to have a significant positive relationship with anxious attachment levels. These findings indicate that those who were experienced bullying had higher levels of anxious attachment. This is consistent with previous research that has shown that those who were teased as a child had higher levels of anxious attachment in adulthood (Ledley et al., 2006). Additionally, both age and gender had a significant correlation with anxious attention. Age had a significant, negative relationship with anxious attachment levels, indicating younger populations had higher levels of anxious attachment. This finding is also consistent with previous research which has shown that as a person gets older, their attachment style becomes more secure (Zhang & Labouvie-Vief, 2004). Finally, it was also found that females had significantly higher levels of anxious attachment than males, which is consistent with attachment research (Del Giudice, 2018). Therefore, the hypothesis was accepted.

The second hypothesis was concerned with the relationship between childhood bullying experiences and avoidant attachment in adulthood. This hypothesis also controlled for age and gender effects. A multiple regression analysis found a significant, positive correlation between avoidant attachment and childhood bullying, with higher levels of avoidant attachment correlating with higher rates of bullying. Previous research backs up these conclusions with childhood teasing being related to later issues with interpersonal functioning such as avoidant attachment (Ledley et al., 2006). Age also had a significant negative correlation however there was no gender effect. The lack of gender differences contradicts some previous research stating that females are more prone to anxious attachment whereas males are more prone to avoidant attachment (Del Giudice, 2018). This hypothesis was partially accepted as bullying and age, but not gender correlated with avoidant attachment.

The final hypothesis aimed to investigate whether there was a relationship between childhood bullying and social self-esteem in adulthood. There is a lack of research in this specific area however one study investigated the relationship between childhood bullying and low self-esteem in adolescence and found a significant relationship (Mungala, & Nabuzoka, 2020). The previously mentioned study by Ledley et al. (2006) also examined social self-esteem and found lower levels of social self-esteem correlated with being teased during childhood. Additionally, research has investigated the relationship between bullying and both general self-esteem and social anxiety and found that those who were victims of bullying had lower self-esteem score and higher levels of social anxiety (Blood & Blood, 2016). The results of this study support prior findings with being a victim of bullying being significantly related to lower levels of social self-esteem. Both gender and age were also significant predictors of social self-esteem with younger adults and females reporting lower levels of social self-esteem. Findings in this area are inconsistent with some research showing

no gender differences in social self-esteem and others research showing females having significantly lower levels of social self-esteem than females than males (Gentile et al., 2009; Ireland, 2002). As there was a significant correlation found, the third hypothesis was accepted.

An interesting finding of this study is that across all three regression analyses, witnessing bullying did not have a significant effect. However, being a victim of bullying was the strongest predictor of anxious attachment, avoidant attachment and social self-esteem. There is a lack of previous research directly investigating the long term impact of witnessing bullying during childhood on adult attachment styles or social self-esteem. There is also very limited research investigating any long term impacts of witnessing bullying behaviours, identifying a significant gap in the literature. A study investigating the long term effects of perpetrating, witnessing and being a victim of bullying on emotion regulation showed that both witnessing and being a victim of bullying had significant negative relationship on emotion regulation (Camodeca & Nava, 2020). There has also been research conducted on the short term effects of witnessing bullying in childhood. A study investigating the relationship between witnessing bullying and depression and anxiety in middle school students found that witnessing bullying increased anxiety and depressive symptoms in females and depressive symptoms in males, even when controlling for being the target of bullying (Midgett & Doumas, 2019). Another study found that both being a victim of bullying and witnessing bullying increased the risk of suicide in Chinese adolescents (Duan et al., 2020). These findings highlight that witnessing bullying can have serious negative implications on an individual's emotional well-being. Although there was no long-term effects of witnessing bullying found in this study, longitudinal research in this area would be beneficial to investigate whether short term effects can continue into adulthood. Future

research investigating the long term effects of witnessing bullying could also benefit from examining a wider range of populations and psychological outcomes.

Implications for future research

Overall, the findings of this study pay a valuable contribution to prior research, finding that childhood bullying victimisation is a risk factor for anxious attachment, avoidant attachment and low social self-esteem in adulthood. These findings add to previous research which has found a relationship between childhood bullying and mental health issues such as anxiety, depression, disordered eating and shame in adulthood (Dantchev et al., 2019; Beduna and Perrone-McGovern, 2019; Gattario et al., 2020). This research also adds to research that found bullying can lead children to feel like they are flawed and incapable of functioning in social settings, which can lead to poor self-perception and increased levels of social anxiety and hopelessness (Storch & Masia-Warner, 2004). The current study shows that this low social self-esteem can last into adulthood.

Due to the high global prevalence of bullying behaviours, the findings of this study have several important practical implications. This research may be valuable to give schools, policy makers and anti-bullying organisations a greater understanding of the long term consequences of bullying. Research on the long term consequences of bullying victimisation highlights the need for successful early intervention strategies to prevent the occurrence of bullying and therefore mitigate the negative effects. In addition, the findings of this study suggest that bullying intervention programmes or counselling following victimisation should implement aspects to improve social self-esteem and attachment security.

For attachment, this could involve attachment security priming, promoting secure peer relationships and ensuring victims have a supportive figure in their lives. In children, a secure parent-child relationship can be a protective factor for adverse experiences such as bullying. A parent should display empathy and sensitivity to the emotional responses of a child being

bullied (Moretti & Obsuth, 2009). Furthermore, attachment-based family therapy may be useful for both child and adult victims of bullying (Diamond et al., 2002). In order to improve self-esteem levels in adults or children who have been bullied, cognitive behavioural therapy or mindfulness-based interventions may be useful (Boettcher et al., 2013). Future research should further explore strategies aimed at improving future outcomes for victims of childhood bullying.

Strengths and Limitations

One of the strengths of the current study is that it attempts to expand upon prior research in a novel way. To the researchers knowledge, no prior research has investigated the long term effects of childhood bullying experiences on both attachment styles and social self-esteem, while accounting for gender and age. As there was significant relationships found between childhood bullying victimisation and the three criterion variables, it provided a notable contribution to the research surrounding the outcomes of bullying. Another strength to this study is its use of previously established reliable measures that show good internal consistency. All three of the questionnaire have been utilised in similar research and have demonstrated high validity and reliability. In addition, utilising the close relationships version of the RAAS improves the generalisability of the study, by not restricting the criteria to only romantic relationships. Additionally, individually examining anxious attachment and avoidant attachment allowed for a more thorough analysis on whether there were only certain aspects of attachment that are affected by childhood bullying.

However, it is also important to address the limitations of this study. Firstly, the use of a solely retrospective measure of bullying experiences allows for the possibility of recall bias as participants may have inaccurate recall of childhood events. Additionally, this study used a cross-sectional design which increases external reliability but no causality can be inferred. Future studies would benefit from using a longitudinal approach to establish causation and

eliminate the opportunity for recall bias. A longitudinal approach would also aid in gaining an understanding on the frequency and severity of bullying behaviours and how bullying behaviours may adapt over time. On a related note, this study did not individually assess the types of bullying the participants endured. Whilst the RBEQ assesses for four different forms of bullying, these cannot be examined individually. Therefore, it is impossible to draw conclusions on the forms of bullying which may have the greatest impact on adult interpersonal functioning. In addition, the RBEQ does not involve items assessing cyberbullying. Future research should consider examining the bullying styles such as verbal, emotional and physical separately, along with cyberbullying to gain a greater insight into the long term effects of the subtypes of bullying. Nevertheless, a strength of the RBEQ is its ability to assess witnessing bullying and bullying victimisation separately which allows for a more thorough and reliable analysis. However, future research may benefit from also accounting for participants who have both witnessed others being bullied and been a victim of bullying.

Finally, although the sample size was above what was necessary for a powerful analysis, a greater sample size would generate higher generalisability. The use of convenience sampling also creates sampling bias as the sample is not chosen through random selection and are unlikely to represent the entire population as they were all recruited through the researchers social media. However, the diversity in the age range (18-75) can improve the generalisation of the findings. Future research would benefit from recruiting a higher number of participants in order to improve generalisability. Cross-cultural research may also be beneficial to examine cultural differences in the long term consequences of bullying.

Conclusion

Bullying is a complex global health, social and educational issue which can have significant lasting effects. The findings of the present study highlight the negative outcomes of childhood bullying victimisation on adult attachment styles and social self-esteem. Additionally, this research found that females and younger adults have significantly higher levels of attachment anxiety. Furthermore, younger populations have significantly lower levels of social self-esteem and higher avoidant attachment. This research is a novel addition to existing literature surrounding the future outcomes of victims of childhood bullying. However, a need for future longitudinal research on the long term implications of bullying was also identified. The findings of this study give a valuable insight into early predictors of adult attachment and interpersonal functioning. Additionally, they signify the importance of successful early interventions being implemented to reduce the high prevalence rates of bullying and reduce the negative long term outcomes that have been identified. Bullying is rooted in the desire to assert power over others and consequently diminish their self-worth. However, a greater understanding of the outcomes of bullying may aid victims in receiving support and reclaiming the power and self-worth that was taken from them.

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Appendices

Appendix A

Participant Information Leaflet

You are being invited to take part in a research study. Before deciding whether you wish to take part, please take the time to read this document, which explains why the research is being done and what it would involve for you. If you have any questions about the information provided, please do not hesitate to contact me using the details at the end of this sheet.

What is this study about?

I am a final year psychology student in the National College of Ireland. As part of our degree we must carry out an independent research project. My study aims to investigate whether a childhood bullying experience has any effect on an adults attachment in relationships or their social self-esteem. I will measure whether it has an effect on an adults attachment style and if it effects an adults confidence in social situations separately in order to see if one or both may have an effect. The study aims to gain a greater insight into the long term consequences of childhood bullying. I am investigating this as it will hopefully give adults, psychologists, teachers, parents and caregivers greater knowledge into how bullying may effect a child later in life.

My project will be supervised by a lecturer in the NCI psychology department, Dr. Robert Fox.

What will taking part in the study involve?

If you decide to take part in this research, you will be asked to complete an online questionnaire. There will be three separate sections to the questionnaire and all questions will be multiple choice. The first section will ask questions about any childhood bullying you may have experienced and how severe and frequent the bullying was. The second section will ask questions about your personal relationships and how you feel about these relationships. The final section will ask questions relating to your self-esteem and social skills in social situations. It will take approximately 20 minutes to complete this questionnaire.

Who can take part?

You can take part in this study if you are over the age of 18.

Do I have to take part?

You are under no obligation to participate in this study. Participation is voluntary and any participant may refuse to participate or withdraw from the study by clicking out of the browser at any point without any consequence. Participants are encouraged to answer every question however they may refuse to answer any question if they feel

distressed or uncomfortable. Please note that once you have submitted your questionnaire, it will not be possible to withdraw your data from the study, because the questionnaire is anonymous and individual responses cannot be identified. Please be aware that this questionnaire includes items asking about being bullied during your childhood and your feelings towards your adult relationships. There is a small risk that these questions may cause some individuals upset or distress. If you feel that these questions may cause you to experience an undue level of distress, you should not take part in the study.

What are the possible risks and benefits of taking part?

There are no direct benefits to you for taking part in this research. However, the information gathered will contribute to research that helps us to understand the long term consequences of childhood bullying. It will also help us understand more about factors that contribute to attachment styles and self-esteem.

Understanding the long term consequences of childhood bullying may help better preventative or mediating interventions to be considered which may help people better cope with any negative experiences that childhood bullying may cause.

There is a small risk that some of the questions contained within this survey may cause minor distress for some participants. If you experience this, you are free to discontinue participation and exit the questionnaire. Contact information for relevant support services are also provided at the end of the questionnaire and I encourage you to use them if you experience any distress.

Will taking part be confidential and what will happen to my data?

The questionnaire is anonymous, it is not possible to identify a participant based on their responses to the questionnaire. All data collected for the study will be treated in the strictest confidence. Only the researcher and academic supervisor will have access to the data collected. Responses to the questionnaire will be fully anonymised and stored securely in a password protected/encrypted file on the researcher's computer. Data will be retained and managed in accordance with the NCI data retention policy. Note that anonymised data may be archived on an online data repository, and may be used for secondary data analysis.

What will happen to the results of the study?

The results of this study will be presented in my final dissertation, which will be submitted to National College of Ireland. The results of the project may be presented at conferences and/or submitted to an academic journal for publication.

Who should you contact for further information?

If you have any questions or issues regarding this questionnaire or would like additional information regarding the utilisation of data, please contact :

Éabha McClean

Researcher

X20367693@student.ncirl.ie

Dr. Robert Fox

Project Supervisor

Robert.fox@ncirl.ie

Appendix B

Participant Consent Form

In agreeing to participate in this research I understand the following:

- The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data.
- If I have any concerns about participation, I understand that I may refuse to participate or withdraw at any stage by exiting my browser.
- I understand that once my participation has ended, that I cannot withdraw my data as it will be fully anonymised.
- I have been informed as to the general nature of the study and agree voluntarily to participate.
- All data from the study will be treated confidentially. The data from all participants will be compiled, analysed, and submitted in a report to the Psychology Department in the School of Business.
- I understand that my data will be retained and managed in accordance with the NCI data retention policy, and that my anonymised data may be archived on an online data repository and may be used for secondary data analysis. No participants data will be identifiable at any point.
- At the conclusion of my participation, any questions or concerns I have will be fully addressed.

By ticking this box, you are confirming that you have read and agree with the above information and are providing informed consent to participate in this study

I consent to the above statements

Appendix C

Demographic Questionnaire

Demographic Questionnaire

Description (optional)

What gender do you identify as ?

Male

Female

Other/Prefer not to say

Add option or [Add "Other"](#)

Multiple choice

Required

What age are you (in years) ? *

Short-answer text

Appendix D

Bullying Questionnaire**Retrospective Bullying Experiences Questionnaire**

Description (optional)



Select one statement that best describes your general experiences with peers in your childhood *

- I was never involved in bullying and I never saw bullying
- I was never involved in bullying but sometimes I saw bullying
- Sometimes I bullied, teased or made fun of someone
- I was bullied
- Sometimes I teased my peers but they also sometimes teased me

During my childhood, I saw peers: *

	Very often	Often	Sometimes	Rarely	Never
Pushing Oth...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hitting Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Calling Names	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intimidating ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stealing som...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Destroying s...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreading ru...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kicking others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spitting at ot...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teasing with...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

...

During my childhood, I experienced kids: *

	Very often	Often	Sometimes	Rarely	Never
Pushing Me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hitting Me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calling me n...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intimidating ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stealing my ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Destroying ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreading ru...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kicking me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spitting at me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teasing me ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How do you perceive the severity of the behaviours you experienced ? *

- I have not experienced any of the above mentioned behaviours
- It was only jokes
- I did not treat those behaviours seriously
- It was indifferent to me
- I felt bad about it
- It was hard for me to deal with it
- Other...

Appendix E

Attachment Questionnaire

Revised Adult Attachment Scale



The following questions concern how you *generally* feel in *important close relationships in your life*. Think about your relationships with people who have been especially important to you, such as family members, romantic partners, and close friends. Respond to each statement in terms of how you *generally* feel in these relationships.

Please choose the answer you feel is the most accurate:

1-Strongly Disagree

2-Disagree

3-Neither agree or disagree

4- Agree

5-Strongly Agree

I find it relatively easy to get close to people *

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I find it difficult to allow myself to depend on others *

I find it difficult to allow myself to depend on others. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I often worry that other people don't really love me. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I find that others are reluctant to get as close as I would like. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I am comfortable depending on others. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I **don't** worry about people getting too close to me. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

⋮

I find that people are never there when you need them. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I often wonder whether other people really care about me. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I am comfortable developing close relationships with others. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I am uncomfortable when anyone gets too emotionally close to me *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

⋮
I know that people will be there when I need them. *

	1	2	3	4	5	
--	---	---	---	---	---	--



I am somewhat uncomfortable being close to others. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I often worry that other people won't want to stay with me. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

When I show my feelings for others, I'm afraid they will not feel the same about me. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I often wonder whether other people really care about me. *

Do you ever feel afraid or anxious when you are going into a room by yourself where other people have already gathered and are talking? *

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Often

When in a group of people, how often do you have trouble thinking of the right things to talk about? *

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Often

1. How often are you troubled with shyness? *

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Often

Appendix G

Debriefing Form

Thank you for partaking in this research study.

This study aims to investigate the effects of childhood bullying on adult attachment style and social self-esteem.

This study will analyse different types of childhood bullying and the severity and duration of this bullying. It will also analyse adult attachment style and social self-esteem.

All participants will remain de-identified and no personal information will be shared. All data will be kept confidential and stored securely until this research is published. Individual scores will also not be exposed. If you have any further questions, please email: x20367693@student.ncirl.ie

If you experienced any psychological distress from this study, please feel free to use the below resources:

Aware Mental Health Support Line:

[Support Line - Depression Support - Aware](#)

Turn2Me psychological support:

www.turn2me.ie

Irish Association for Counselling and Psychotherapy

www.iacp.ie

Text Helpline

[50808 - Text About It \(text50808.ie\)](http://50808-TextAboutIt(text50808.ie))

Appendix H

Proof of data analysis

Gender	Age	General_Peer_Experience	Pushing_O	Hitting_O	Calling_Names_O	Intimidating_O	Stealing_O	Destroying_O	Rumours_O
0	50	I was never involved in bullying but sometimes I saw bullying	2	1	3	2	1	1	1
0	21	I was never involved in bullying but sometimes I saw bullying	1	1	3	2	2	2	2
1	40	Sometimes I teased my peers but they also sometimes teased me	0	0	2	2	0	0	2
1	69	I was never involved in bullying but sometimes I saw bullying	2	2	2	1	0	0	0
0	22	I was bullied	0	0	0	0	0	0	0
1	50	Sometimes I teased my peers but they also sometimes teased me	2	1	2	1	0	0	2
1	39	Sometimes I teased my peers but they also sometimes teased me	1	1	3	3	1	1	3
1	53	I was never involved in bullying and I never saw bullying at school	1	1	1	1	1	1	1
0	19	Sometimes I teased my peers but they also sometimes teased me	2	1	3	1	0	0	2
1	50	I was bullied	2	2	3	3	2	2	4
0	33	Sometimes I bullied, teased or made fun of someone	2	0	1	1	0	0	0
0	21	Sometimes I teased my peers but they also sometimes teased me	1	1	1	2	0	1	2
1	42	I was bullied	3	2	2	4	4	2	4
1	59	I was never involved in bullying and I never saw bullying	1	1	2	2	0	0	2
1	43	I was never involved in bullying but sometimes I saw bullying at school	1	1	3	1	1	1	2
1	39	I was bullied	3	2	4	3	2	2	3
0	41	I was never involved in bullying but sometimes I saw bullying	4	2	4	3	1	1	3
1	42	I was never involved in bullying but sometimes I saw bullying	1	1	1	1	0	1	2
0	32	Sometimes I teased my peers but they also sometimes teased me	4	4	4	4	4	4	4
1	21	Sometimes I bullied, teased or made fun of someone	2	1	3	4	2	1	4
1	20	I was bullied	1	1	2	2	0	0	3
1	59	I was never involved in bullying but sometimes I saw bullying	1	1	2	1	0	0	2
0	27	I was bullied	2	3	4	2	3	1	3
1	59	I was never involved in bullying and I never saw bullying	0	0	0	0	0	0	0
0	33	Sometimes I teased my peers but they also sometimes teased me	3	2	4	2	1	1	3

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.507	4	13.377	15.398	<.001 ^b
	Residual	143.343	165	.869		
	Total	196.850	169			

- a. Dependent Variable: Anxiety_Subscale
- b. Predictors: (Constant), Total_Experienced, What gender do you identify as ?, What age are you (in years) ?, Total_Witness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	2.845	.276		10.301	<.001	2.300	3.390						
	What gender do you identify as ?	.523	.154	.226	3.391	<.001	.219	.828	.196	.255	.225	.991	1.009	
	What age are you (in years) ?	-.020	.005	-.242	-3.615	<.001	-.030	-.009	-.265	-.271	-.240	.986	1.015	
	Total_Witness	.002	.012	.013	.130	.897	-.023	.026	.309	.010	.009	.448	2.233	
	Total_Experienced	.048	.012	.388	3.928	<.001	.024	.072	.410	.292	.261	.451	2.215	

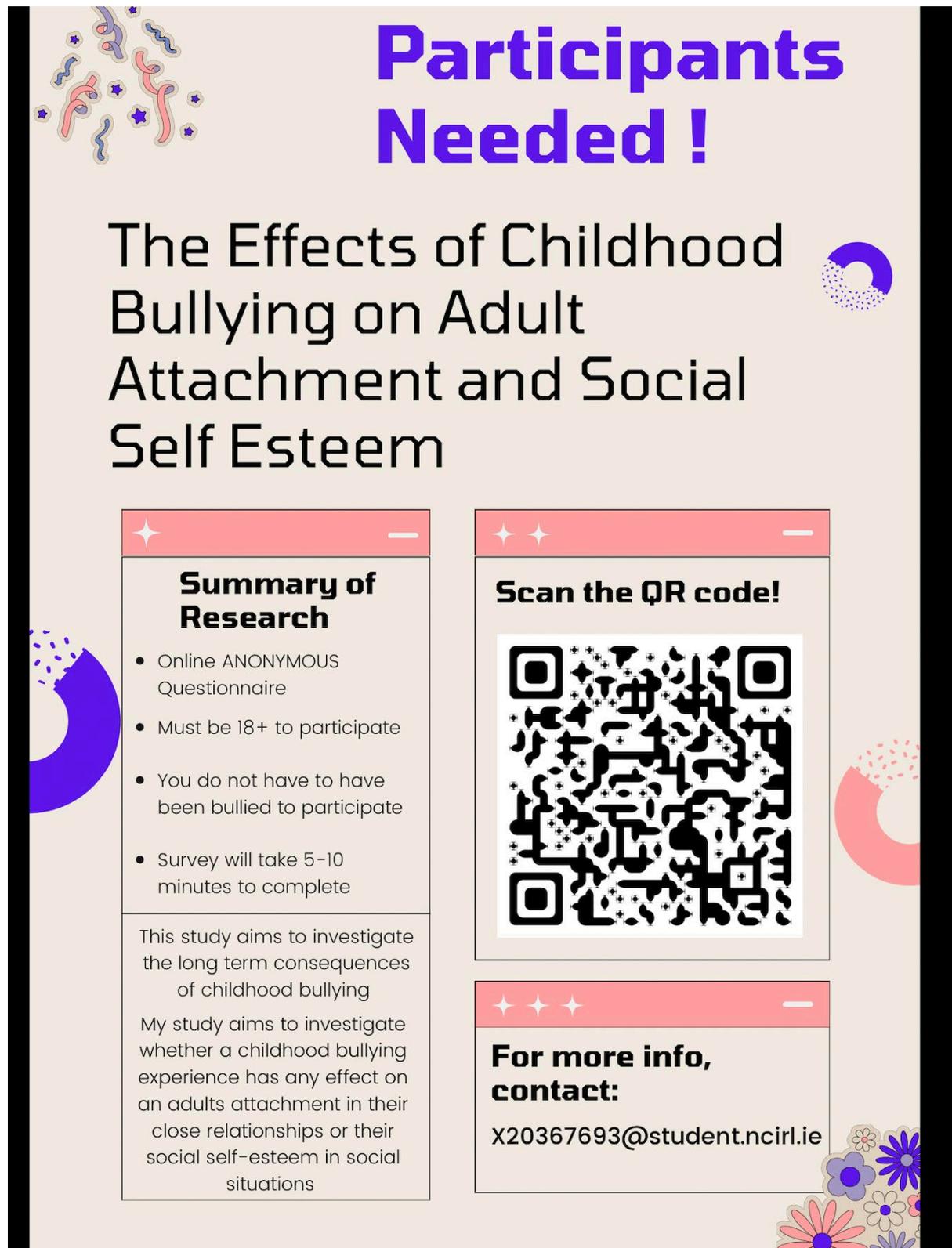
a. Dependent Variable: Anxiety_Subscale

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	What gender do you identify as ?	What age are you (in years) ?	Total_Witness	Total_Experienced	
1	1	4.279	1.000	.00	.01	.01	.00	.01	
	2	.381	3.352	.00	.37	.03	.03	.12	
	3	.226	4.351	.01	.49	.36	.00	.05	
	4	.075	7.577	.27	.05	.39	.21	.52	
	5	.040	10.316	.71	.07	.21	.75	.30	

Appendix I

Recruitment poster



Participants Needed !

The Effects of Childhood Bullying on Adult Attachment and Social Self Esteem

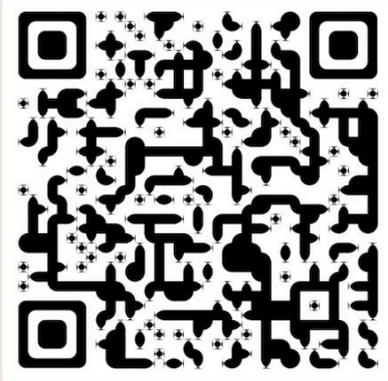
Summary of Research

- Online ANONYMOUS Questionnaire
- Must be 18+ to participate
- You do not have to have been bullied to participate
- Survey will take 5-10 minutes to complete

This study aims to investigate the long term consequences of childhood bullying

My study aims to investigate whether a childhood bullying experience has any effect on an adults attachment in their close relationships or their social self-esteem in social situations

Scan the QR code!



For more info, contact:

X20367693@student.ncirl.ie