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Does School Belonging Matter? Exploring the Relationship Between School

Belonging and Mental Wellbeing in Adolescence

by

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Abstract

School belonging is an important avenue for exploration due to its associations with positive outcomes across behaviour, academics, and mental health. Whilst there is a growing body of literature on the relationship being school belonging and mental wellbeing domains, this is largely limited to cross-sectional research. Considering a broader definition of mental wellbeing which is inclusive of mental health and subjective wellbeing such as life satisfaction, self-esteem, and positive and negative affect, a systematic review was conducted to explore the longitudinal relationship between school belonging and mental wellbeing. 18 articles, using self-report measures, were included within the review and give evidence for the relationship between school belonging and mental health, self-esteem, and life satisfaction. The results suggest that high school belonging is predictive of fewer mental health difficulties and higher life satisfaction later in life, but that low self-esteem has an impact on school belonging. The review highlights school belonging as an import factor in children and young people's wellbeing and strengths and limitations of the review are discussed with regard to future directions and practical strategies for educational staff.

The empirical paper (chapter three) aims to explore school belonging and mental wellbeing outcomes for looked after children, who have not yet been included in this field of research. Vulnerable populations, such as looked after children, can experience higher rates of mental health difficulties and more difficulty with peer relationships. Having demonstrated that school belonging can have long term effects on mental health, this study aimed to investigate differences between looked after and non-looked after young people, the associations between school belonging and related outcomes across groups, and factors which help young people feel they belong at school. Quantitative analysis of data from an anonymous online survey completed by looked after young people and matched participants revealed that school belonging was related to mental wellbeing outcomes for all participants. While school belonging and mental health scores did not differ between groups, looked after people reported lower peer support and higher rates of bullying

victimisation. Based on within group correlations, three relationships were examined using

moderation analysis which showed that the relationship between bullying and school belonging was

moderated by care status. Based on qualitative data, young people across groups highlighted

friends, teachers, school atmosphere, and personal characteristics as important for their school

belonging. The research was limited by sample size however results suggest that a focus on mental

wellbeing and school belonging remains important, and this is discussed in relation to current

educational practice and supporting school belonging within education settings.

Keywords: belonging, connectedness, wellbeing, mental health, education

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Research Thesis: **Declaration of Authorship**

Print name: Abigail Rose Cohman

Title of thesis: Does school belonging matter? Exploring the Relationships Between school Belonging and Mental Wellbeing

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University;
- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- Where I have consulted the published work of others, this is always clearly attributed;
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- I have acknowledged all main sources of help;
- Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- None of this work has been published before submission

Signature: Abi Cohman   Date: 06.06.2022

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Definitions and Abbreviations

BCI – bootstrapped confidence intervals

CASP – Critical Appraisal Skills Programme

CI – confidence intervals

d – Cohen's effect size, classified as *small* (*d* = 0.2), *medium* (*d* = 0.5), and *large* (*d* ≥ 0.8)
(Sullivan & Feinn, 2012)

eta^2 – Effect size calculation classified as small (0.01), medium (0.06), and large (0.14)
(Lakens, 2013)

LA – Looked after

LGBTQ+ – Lesbian , Gay, Bisexual, Transgender and Queer plus other identities

Mental Health – relating specifically to psychopathology or mental illness

Mental Wellbeing – term encompassing mental health and subjective wellbeing (life
satisfaction, positive and negative affect, self-esteem)

N – Total number of cases

NLA – Not looked after

PANAS – Positive and Negative Affect Schedule

PRISMA – Preferred Reporting Items for Systematic Reviews and Meta-Analyses

PSSM – Psychological Sense of School Membership Scale

r – correlation coefficient (effect size), classified as *small* (*r* between 0 and ±0.3), medium (*r*
between ±0.3 and ±0.7), and large (*r* between ±0.7 and ±1) (Ratner, 2009)

School Belonging – term encompassing attachment, connection/connectedness, community,

membership, bonding, engagement, and identification

SD – Standard Deviation

SDQ – Strengths and Difficulties Questionnaire

SES – Socio-Economic Status

TEPs – Trainee Educational Psychologists

USA – United States of America

Chapter 1 – Does School Belonging Matter? Exploring the Relationship Between School Belonging and Mental Wellbeing in Adolescence

Aims and Rationale

The overarching aim of my thesis was to explore the importance of school belonging for looked after children by thinking about whether school belonging is linked to long term outcomes and whether it is associated with mental wellbeing for looked after children. My systematic literature review aimed to answer the question 'Is school belonging important when considering mental health outcomes?', 'Does school belonging have a long term impact?' and therefore, 'Does it offer a potential avenue for supporting young people?'. Following on, my research project aimed to focus on whether school belonging is any different for young people living in care, and whether it relates to mental wellbeing, friendships, and bullying.

Prior to training I worked for a year in a learning outreach role where my interest in this area grew. During this time, I supported looked after children in alternative provisions, through school transitions, with sessions at home or in McDonald's for those who could not attend school, and in mainstream lessons or through Emotional Literacy Support Assistant work. The role was varied and the young people I worked with were brilliant, however, although there were some success stories of school transitions or positive educational outcomes, this was rare. One young person I worked with found it difficult to go beyond the school reception as they felt they had limited friendships within their school and it made them too anxious, one young person was sent to a pupil referral unit for pretending to throw a spider at another pupil, despite being bullied daily, and one young person spent half of the school year out of education because he had nowhere stable to live.

One day I went into a primary school to support a young person who had been excluded for a few days because of his behaviour. A new decoration was hanging across the classroom, made up of cut out people representing every child in the class, decorated by them. Whilst the young person I

was working with may not have been aware that they were the only member of their class not

included, it really struck me. It made me think about how something seemingly so small could make

such a big difference in the life of someone who has recently moved away from their family and

might need a place to belong. Following a placement breakdown, school saying that they could no

longer support him, and time spent living in holiday homes due to no consistent place to live, the

young person ended up in a middle school in the hope that this would allow him to stay there for the

next three years of his education. His peer group was larger and teachers and classrooms changed

each lesson, making it difficult for him to find his feet and build strong relationships. He ended up

working each day in the library, rather than in the classroom, and spending break in a private

courtyard with a member of staff. He was not allowed to attend school trips or go to lunch time

clubs. While schools do the best they can to find something that works for young people, and to give

them an education, my whole experience within this role made me reflect on how important it

might be to feel that you belong at school, especially when your home life is disrupted. This has led

to my passion for researching school belonging and in particular, for young people who are looked

after.

During my training to become an Educational Psychologist I started to explore the research

base for school belonging and looked after children. School belonging and its related terms are now

quite prominent within research, with researchers investigating how it relates to a range of

outcomes including academic motivation and engagement (Neel & Fuligni, 2013; Singh et al., 2010),

psychological functioning and mental health (Arslan et al., 2020; Pittman & Richmond, 2007), and

behaviour (Demanet & Van Houtte, 2012; Korpershoek et al., 2020). Researchers have also started

to look at school belonging for specific groups such as adolescents from different ethnic groups

(Gummadam et al., 2016), refugees (Due et al., 2016; Kia-Keating & Ellis, 2007), and those with

special educational needs (McMahon et al., 2008; Prince & Hadwin, 2013). As the research field has

grown the focus has also turned to how we can foster school belonging for young people (Allen et

al., 2016, 2021; Tillery et al., 2013). Systematic reviews and metanalyses have been conducted which

are helping to synthesise knowledge in this field. The focus of these syntheses have been on

adolescents' experiences of school belonging, what it is important for schools to know, and how

school belonging relates to other factors contemporaneously (Allen et al., 2018; Craggs & Kelly,

2018; Korpershoek et al., 2020; Marraccini & Brier, 2017). Currently, less evidence is available

exploring the longitudinal relationships between school belonging and other factors. Therefore, I

decided that a synthesis of the research base on longitudinal relationships between school belonging

and mental wellbeing would be useful to start to answer the questions set out as the aims of my

research: 'Is school belonging important when considering mental health outcomes?', 'Does school

belonging have a long term impact?' and therefore, 'Does it offer a potential avenue for supporting

young people?'.

Following on from this, my research focussed on asking young people about their school

belonging and mental wellbeing. Whilst research exists that incorporates the voices of looked after

children (e.g., Adoption & Fostering journal), school belonging has not been explored for them.

Looking into the research base for looked after children it is clear that many looked after young

people experience exclusion from school. In some countries within the UK (Scotland) looked after

children make up 13% of school exclusions despite only 1% of the school population being looked

after (Maclean & Gunion, 2003). In addition, looked after young people can feel a sense of exclusion

even if this is not through a formal process, this can come from times without a school place or being

required to learn outside of the classroom (Brodie, 2000). Looked after children do not always feel

that they 'fit in' at school and can find it difficult to establish an identity there (Sanders & Munford,

2016). They can worry about being isolated or being seen as different from peers, and are aware of

the potential that they may be judged by peers or teachers (Emond, 2014; Sanders & Munford,

2016). Whilst there is no research specific to school belonging, looked after children have shared

that they want to experience a sense of 'normality' at school (Emond, 2014), and to feel included

through a supportive and caring key staff member (Maclean & Gunion, 2003) and through building

and maintaining peer relationships (Coulling, 2000). Looked after young people can feel a sense of

connectedness in experiencing likeness to their peers, being part of groups, and having

opportunities to meet young people with similar experiences (Emond, 2014; Snow et al., 2013). This

limited research base fits with my personal experiences and suggests that school belonging could be

an important aspect to consider for young people in care, driving my research project forward.

Research paradigm

With a myriad of terms associated with ontology and epistemology it can become difficult to

understand the field and place yourself within it. Therefore, I have focussed on understanding my

position in accessible terms so that I can better understand how it influences my research. I have

found the works of Fryer (2020) and Moon and Blackman (2014) particularly helpful. Trying to

simplify terms, Fryer (2020) describes ontology as what is out there that exists in the world.

Epistemology on the other hand is the study of knowledge, thinking about how we can produce

knowledge about the world, and questioning how reliable our knowledge is (Fryer, 2020). When

considering ontology, a spectrum exists between realism and relativism (Moon & Blackman, 2014).

Within the realism category sits *structural relativism* which suggests reality exists and is explained by

theory (Moon & Blackman, 2014). Towards relativism there is *bounded relativism*, assuming that

there are mental constructions of reality that sit within boundaries such as cultural, moral, and

cognitive (Moon & Blackman, 2014). I find myself between these two positions based on the object

in question. For example, I think that the world exists a certain way, and that the way things

influence each other can be understood by scientific theory (structural realism). With some aspects, I

find myself moving more towards bounded relativism, such as in understanding social constructs and

emotions.

Epistemology is linked with ontology but is concerned with how we acquire knowledge

(Moon & Blackman, 2014). Epistemologies range from objectivism to subjectivism. Objectivism

assumes that we can observe the world and produce knowledge from those observations, whilst

subjectivism assumes that meaning and knowledge are a product of how we construe something

and our own theories (Fryer, 2020). Through work on personal construct psychology (Kelly, 1955) throughout the course I have learnt more about construing and come to think that the way someone construes the world is their truth, their reality, and in that sense, it is not wrong. Although it may not always seem scientifically founded or to make sense to another person, the way one construes the world is based on their experiences and theories they themselves have tested, accounting for the results of those tests and changing their template of the world based on it (Kelly, 1955).

Considering my ontology and epistemology I have placed myself within a critical realist perspective. A critical realist perspective recognises that individual voice and narrative exist, but alongside this exist causation, barriers, and relationships between constructs that we can strive to understand (Fryer, 2020). Fryer (2020) highlights a retroductive nature of the critical realist perspective which means that researchers aim to look at the information available, understand relationships, and look for the best possible explanation. Experimentation and searches for causation can help us to understand what we are seeing in the world and can give us an idea of tendencies and associations so that we can build on an individuals' narrative (Fryer, 2020). This perspective allows us to continue to question our knowledge and understanding. This perspective also recognises that individuals function within a social context, which influences our behaviour, identity, actions, and knowledge (Fryer, 2020).

My approach and perspective has influenced my research in a number of ways. My research seeks to find associations between factors which I believe to exist in the world, however I have taken caution in defining these constructs and recognise that we may not capture everything within measures and questions. Whilst both of my papers focus on quantitative methods and survey responses, I have chosen to include self-report measures across both papers to try and capture the experiences of individuals. Within my empirical project I have incorporated a qualitative question on what helps young people to feel they belong at school, as it was important to me to include young people's voices within my work and ensure that important factors could be found, outside of a

created and validated measure. My research project also focusses largely on school belonging and how young people feel within a social context which is prominent in their lives, in this respect I feel I fit within a critical realist perspective, trying to understand the experiences of individuals, whilst acknowledging the social context. Finally, I have tried to remain open minded throughout my research and I am aware of the complex and interrelating factors which exist in the lives of children and young people. Whilst I was not able to look at all possible confounding and predictive variables within my research, I understand that the associations and findings from my research fit with a broader context and that knowledge produced from my papers is only a small contribution to a wider knowledge base.

Ethical considerations

Appropriate consent for young people who live in care was my main ethical consideration. During the ethics process I was aware that this would be an area of difficulty as young people are looked after by the local authority but consent is often still needed from a parent or guardian. This made the process of gaining consent quite complex and I believe this led to additional difficulty recruiting participants for my study, as a lot of responsibility was placed on the Virtual School gatekeepers who were asked to ensure consent was in place. In an attempt to reduce the demand on Virtual School gatekeepers I created participant information sheets, social media adverts, and attended one virtual group with looked after children, in order to advertise the study to them. Following this they could get in touch with their Virtual School gatekeeper should they want to take part in the study. Unfortunately, this approach did not lead to much additional interest. Some Virtual Schools also shared that young people had been subjected to many surveys over the course of the last two years, especially considering that the pandemic meant that opportunities for participation were being sent out virtually within newsletters and emails. Some Virtual School gatekeepers shared that they thought young people would be reluctant to take part in another survey.

While some people might label this community 'hard to reach', within my practice I have recently been considering whether anyone should be labelled 'hard to reach', or whether we are not reaching them in a way that suits them. Whilst I would have liked more young people to be involved in my study, I feel that perhaps my research was not able to reach them in an appropriate way. If I were to carry out research in this field again, I would carefully consider how my research is carried out and engage young people more during the planning process.

Finally, the study asked young people questions about some potentially difficult topics including bullying, self-esteem, friendships, and mental health. As the survey was anonymous, I attempted to provide safeguards for any adverse effects by suggesting possible positive, mood boosting activities to do following the completion of the survey, I also discussed with gatekeepers giving young people time and space to talk following the survey if possible. Whilst I hope that these safeguards were enough, it is hard to know how much support young people were offered or whether any of them experienced difficult emotions from taking part.

Chapter 2 – The longitudinal relationship between school belonging and mental wellbeing

in young people

2.1 Introduction

Adolescence is an important time, with structural brain changes linked with development of executive functioning skills, emotion integration and regulation, risk taking behaviour, and responses to stress (Spear, 2000; Sturman & Moghaddam, 2011; Yurgelun-Todd, 2007). Social relationships become increasingly important as adolescents move to become more independent, and changes occur within peer and adult relationships (Goodenow, 1993b; Spear, 2000). Adolescence is also a critical period for supporting mental health (UNICEF, 2021) as difficulties during this time of life can have long term impacts on development, educational attainment, general achievement and opportunities in life (Davey & McGorry, 2019; European Joint Action on Mental Health and Wellbeing, 2013–2016; WHO, 2021).

Within mental wellbeing measurements and definitions, two main strands have emerged: these include a hedonic approach encompassing subjective wellbeing measures of life satisfaction and happiness, measured through positive and negative affect (Keyes, 2006; Larsen, 2009; Rojas, 2007; Veenhoven, 2012), and a eudaimonic approach relating more to psychological wellbeing and positive functioning, for example by measuring self-actualisation, vitality, and mental health in relation to set criteria (Ryan & Deci, 2000). Self-esteem has also been included within overall wellbeing measures (Diener et al., 2009), showing a strong association with wellbeing (Rosenberg et al., 1995) and relating positively to other adaptive outcomes (Neff, 2011). In an attempt to define wellbeing, Dodge et al. (2012) discuss the complexity of the construct and suggest that wellbeing is a balance between the resources a person has and the challenges they face, a definition similar to that of resilience (Ungar, 2008).

In recent years supporting the mental wellbeing of young people has become a priority within organisations and legislation, with suggestions that the mental health of young people should be given the same importance as their physical health (Department of Health and Social Care and Department for Education, 2017; NSPCC, 2021). Understanding and noticing when young people are suffering from poor mental health is a fundamental part of broader child protection (Rose, 2016) and the UK government has overseen an increased focus on earlier intervention and prevention in recent years (Department of Health and Social Care and Department for Education, 2017). Young people across the world are experiencing mental health difficulties, with 14% of young people aged 10-19 reported to have a mental health disorder by the World Health Organisation (2021) and meta-analytical research suggesting around 31% of young people experience at least three symptoms of 'common mental disorders' (Silva et al., 2020). In addition, over half of all mental health conditions present before age 14 (Department of Health and Social Care and Department for Education, 2017) and suicide is among the top causes of death within the 15-19 age range (UNICEF, 2021).

The mental health difficulties faced by adolescents around the world highlights the need for mental wellbeing promotion, with educational settings being key in providing support, promoting good mental health, and intervening early for young people at risk (Department of Health and Social Care and Department for Education, 2017; European Joint Action on Mental Health and Wellbeing, 2013–2016; Rose, 2021). Schools are well placed to work alongside other services in prevention and intervention, with interventions and strategies over time having more of an impact than stand-alone strategies (Wells et al., 2003). Recent initiatives have focussed on setting up mental health support practitioners who can work alongside schools and provide training for staff to ensure they understand mental health needs (Department of Health and Social Care and Department for Education, 2017). Alongside this schools are encouraged to develop a whole-school approach to mental health support to promote resilience, and to educate young people about wellbeing and social and emotional health (Department for Education, 2021b; Department of Health and Social Care and Department for Education, 2017).

School belonging plays an important role in the lives of young people, it impacts on academic achievement, motivation, attendance, and wellbeing (Allen et al., 2021). Across adolescence and into university years, school belonging is negatively associated with anxiety and depression (Daley, 2019; Newman et al., 2007; Pikulski et al., 2020). Higher school belonging can lead to lesser emotional distress (Resnick et al.,1997), lower negative affect and increased positive affect (Vera et al., 2021), and higher life satisfaction (Özkan & Evren, 2020).

Belonging is defined as an innate drive to form relationships with a consistent set of people, and to maintain those relationships over time (Baumeister & Leary, 1995). The key aspects of relationships which are important for belonging are that they are positive, with reciprocal care for one-another's welfare, that they are stable, and occur frequently (Baumeister & Leary, 2017). Belonging is a complex need but one that is fundamental, with effects on cognitions, emotions, behaviour, and life outcomes (Gere & MacDonald, 2010).

Since the term school belonging was first developed (Goodenow, 1993a; Libbey, 2004) there has been a lack of consistency within the measurement and definition of terms related to this field of research (Libbey, 2007). The following terms have been regularly used in association with school belonging; attachment, connection/connectedness, community, membership, bonding, engagement, and identification (Allen et al., 2021; Diaz, 2005; Libbey, 2004; Özkan & Evren, 2020; St-Amand et al., 2017). The most commonly used definition is currently "the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment" (Goodenow & Grady, 1993, p. 60-61). Other explanations of the construct have consistently included positive staff-student relationships alongside feelings of positive emotion and safety, peer support and connection, and interest and engagement in learning (Centers for Disease Control and Prevention, 2009; St-Amand et al., 2017; Whitlock, 2006; Wingspread, 2004). For the purposes of this research, related terms will hereafter be encompassed within the term 'school belonging'.

School belonging can be a protective factor for young people, supporting them to be healthy and to succeed, and impacting a range of positive outcomes (Centers for Disease Control and Prevention, 2009; Wingspread, 2004). School belonging has been shown to positively impact academic attainment, peer cooperation, and school adjustment, and is negatively associated with "problem behaviour" and risky health behaviours (Goodenow, 1993b; Libbey, 2007; Newman et al., 2007; Peña-López, 2019; Phan, 2013; Simons-Morton et al., 1999). Meta-analytic research has started to synthesise the field, which is largely made up of cross-sectional research. Craggs and Kelly (2018) used meta-synthesis to focus on what school belonging means for young people, building on the work of Kelly et al. (2016) who synthesised factors which impact on school belonging. The understanding of how school belonging relates to suicide ideation, behaviour, academic achievement, and school engagement both contemporaneously and over time has also been examined through metanalyses (Korpershoek et al., 2020; Marraccini & Brier, 2018). However, there is still a lack of synthesis of how school belonging might impact mental wellbeing domains over time.

Aims of Review

Considering the importance of the school setting in impacting mental wellbeing, the association between mental wellbeing and school belonging offers a potential avenue for exploration in terms of how schools can further support young people. This has set the context for the current review, which aims to better understand the long-term relationships between school belonging and mental wellbeing in order to establish whether increasing school belonging could offer a potential avenue for intervention to positively impact the mental wellbeing of young people, or vice versa. The current literature review aims to address the question, what are the longitudinal relationships between school belonging and mental wellbeing domains for children and young people?

2.2 Method

Data sources and search strategy

The systematic literature review was registered on the Open Science Framework and can be found at the following web page, https://osf.io/34m52.

To answer the current research question a systematic literature search was conducted using three online databases; PsycINFO, Web of Science and ProQuest for dissertations and theses. Specific search terms were used to identify studies and PRISMA guidelines were used to guide the systematic review (Moher et al., 2009). Search terms were developed by the author in November 2021 based on previous research and included related terms for school belonging and for wellbeing. The following search was used:

"School belonging" OR "school connectedness" OR "belonging to school" OR "school attachment" OR "sense of community" OR "school bond*" OR "school identification" OR "school membership" OR "school connection" OR "school engagement" OR "school acceptance"

AND

Wellbeing OR "Well-being" OR "well being" OR happy* OR happiness OR "life satisfaction" OR "quality of life" OR "satisfaction with life" OR flourish* OR resilienc* OR "mental health" OR "self esteem" OR "positive affect" OR "self-esteem"

When searching ProQuest, the Dissertations and Theses search tool was used. This search was limited to terms contained within the title and abstract due to the return of over 21,000 results during full text searches using ProQuest. There were no limits placed on the publication date, language, or source at this stage of the search.

Inclusion and exclusion

Inclusion and exclusion criteria were developed to avoid potential bias whilst screening studies. Following the removal of duplicates the author conducted initial screening using the online platform Rayyan (Ouzzani et al., 2016) to scan titles and abstracts. All articles were screened by the author using the criteria in Table 1. Two voluntary research assistants (VRAs) screened articles for the review using the same criteria with Rayyan. Seven hundred and fifteen studies (18%) were screened by the author and at least one additional person, with a 98.66% agreement rate. Following discussion, four studies which were flagged by VRAs were included in whole text screening.

Table 1 *Inclusion and Exclusion Criteria*

Include	Exclude
Original research including dissertations and theses	Reviews of existing research and meta-analyses
Quantitative or mixed methods	Qualitative only
Any year	N/A
Longitudinal design	Data from one timepoint, cross-sectional only
Self-report	Parent or teacher report
Includes a self-report measure of school belonging (or school community, connectedness, bonding, attachment, membership) as one of the main variables examined	No measure of school belonging School 'engagement' or 'climate'
Includes a self-report measure of wellbeing (happiness, life satisfaction, mental health [depression, anxiety], satisfaction with life,	No measure of mental health or wellbeing Mental health outcomes related to behaviour such as self-harm, drug or alcohol use, violence, sexual behaviour

quality of life, positive or negative affect, self-esteem) as a main variable	Studies which only examine suicide ideation and no other mental health measures
Children and young people up to age 18 at the beginning of the study, and within a school or college setting	Population of adults, those not in education, clinically diagnosed young people
Relationship analysed over time	School belonging or wellbeing measures only examined as a mediator/moderator/buffer to another relationship Comparing schools, countries etc. across groups rather than looking at the relationship between variables Interventions to increase either measure
	Measured in times of crisis e.g., natural disaster, pandemic etc.

Only quantitative or mixed methods research was included within the search to evaluate the relationship between school belonging and wellbeing measures through self-report. Participants were required to be attending school and of school age at the beginning of the study. The included articles were longitudinal but were not restricted by the length of study. Included articles were required to directly analyse the relationship between a school belonging measure and a wellbeing measure over time, and therefore studies which involved interventions, took both measures at the same time point, or explored this relationship only as a mediator/moderator to another aim, were excluded. During scanning of the articles returned by the initial search, it was apparent that some articles were conducted during specific times of crisis, such as natural disasters or the COVID-19 pandemic. These articles were excluded due to the unique circumstances explored within them that were not the focus of the current research question. School engagement was added to the exclusion criteria following initial scanning, as the use of the term school engagement related to too broad a

measure and was found to include behavioural, emotional, and cognitive aspects (Gao et al., 2020;

Karababa, 2020; Stiles & Gudiño, 2018).

Study selection

Initial searches produced a total of 5,932 articles from three online databases and an

additional two articles were found during manual reference list searching. Once duplicates were

removed using Rayyan, 3,926 articles remained. The titles and abstracts of these articles were

screened using the inclusion and exclusion criteria. This led to the inclusion of 39 articles for full-text

screening with 34 being identified for inclusion by the author and a further five articles being

included following secondary screening.

A PRISMA flow diagram can be seen in Figure 1. This shows the selection and screening

process (Moher et al., 2009). During full text screening 20 articles were excluded with 19 articles

remaining for inclusion within the review.

Data extraction

Relevant information from the included articles is summarised in Appendix A. The data

extracted included authors' names, study title and year, type of article, country, timescale of the

study, design, method of analysis, sample details (e.g., sample size, ethnic and gender

demographics), belonging measure used, wellbeing measure used, and a summary of the main

findings.

Quality assessment

All studies included in the review, following full text screening, underwent quality

assessment using an adapted version the Critical Appraisal Skills Programme (CASP, 2018) checklist

for cohort studies. Following individual quality assessment using the adapted CASP 12-question

checklist, a quality assurance table was created to summarise results and highlight important areas

for consideration across studies, this can be seen in Appendix B. The quality assurance table is used

to evaluate where there may be sources of bias or areas of low quality, rather than to score each

study. Scoring of studies was not deemed appropriate as quality was not being used to

include/exclude articles within the current review, and scores do not always give a good overview of

study quality and areas for consideration (Siddaway et al., 2019).

Figure 1 *PRISMA flow diagram*
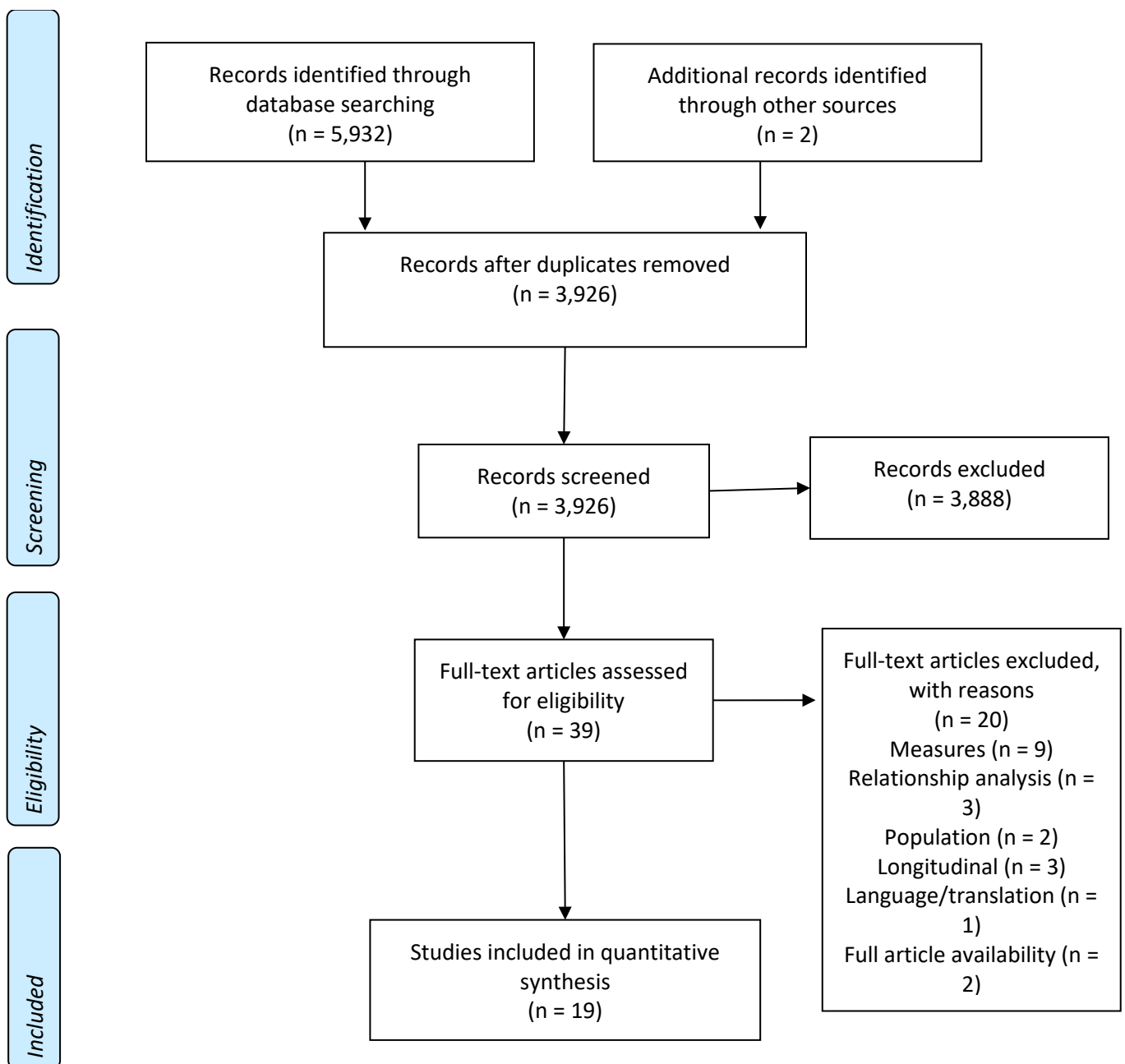
2.3 Results

Study characteristics

Articles were published between the years of 1996 and 2021, with eight published in the last five years (from 2017 to 2022). Whilst articles published by Nyberg et al. (2019) and Hernández, et al. (2017) are both included within the literature review, they use data from the same longitudinal research and sample. Therefore, within details below on study characteristics only 18 studies are discussed, with research papers by Nyberg et al. (2019) and Hernández et al. (2017) considered together.

The majority of studies were conducted in the USA (7) followed by Australia (5). Other studies were carried out in Italy (1), New Zealand (1), Canada (1), Turkey (1), The UK (1), and Sweden (1). In total 37,489 young people participated across the included samples with a range of sample sizes from 104 to 11,183. Ten of the included studies recruited under 1,000 participants, six recruited between 1,000 and 4,000, Patalay & Fitzsimons (2018) used data from 9,553 participants, and Markowitz (2017) recruited 11,183 young people. Many of the large sample sizes were gained from using data gathered as part of a larger study, such as national longitudinal studies. Overall, young people were recruited from a range of settings such as a technical college, catholic schools, urban high schools, secondary schools, and elementary schools.

There were a range of ethnicities included in the research, with some studies focussing on a specific population, for example African American young people (McMahon et al., 2004) or young people of Mexican origin (Hernández et al., 2017). Specific demographics for ethnicity are reported in nine of the 18 studies and included Black/African American, Multi-ethnic/Multiracial, White, Puerto Rican, Caribbean, Mexican, Asian/Asian American, Latino/Hispanic, Native Hawaiian, Pacific Islander, Alaskan Native, Australian, European New Zealander, Maori, and other.

Most of the included studies report 40%-60% male and female participant distribution, with one study having 3.5% of participants not reporting their gender (Perry & Lavins-Merillat, 2018) and another having 1% of participants reporting a gender identity other than male or female (Moffa et al., 2016). Seven of the included studies reported a percentage for only one gender (male or female) which leaves it unclear as to whether any participants chose not to report their gender or were reported as a gender other than male/female (Arango et al., 2018; Bond et al., 2007; Hernández et al., 2017; Lester et al., 2013; McMahon et al., 2004; Washburn, 2009).

The age range of participants was 10-19 at the first time point included within the research, with most studies focusing on high school/secondary age students. Studies varied in length, from approximately six months, up to 27-year follow up. As the studies varied in length, the age range of those at follow up varied greatly with some participants aging only six months (Arango et al., 2018; Arslan et al., 2020; Perry & Lavins-Merillat, 2018) and some involved in the study until they are 32 or 43 years old (Gunnarsdottir, 2021; Markowitz, 2017).

All studies considered the relationship over time between school belonging or a related term and a measure of wellbeing, however around 30 different measurement tools were used across studies, with some studies measuring more than one aspect of wellbeing. Three studies contained a measure of general wellbeing, six a measure of self-esteem, four a measure of life-satisfaction, two a measure of affect, and twelve a measure of depression and anxiety, often alongside the use of other scales. Scales used and information on their reliability and validity can be seen in Appendix C. Ten of the included studies used at least one measure which is lacking evidence for validity and reliability.

Many of the studies aimed to explore specific research questions unrelated to the current literature review and only analysis and results relevant to the current review have been included here.

Quality assessment

All studies presented clear research aims however within one study the rationale and the specific aims, related to the population they have recruited, were less clear (Lester et al., 2013). All studies included at least some detail of how and where their population was recruited and how measures were administrated. Additional variables which were considered during analysis vary between studies, with gender considered or controlled for with eleven studies and other researchers analysing by school year, ethnicity, and between schools. During analysis 11 studies accounted for scores on dependent variables at time one/baseline. Fourteen studies included information on attrition rates which range from 5% to 73%, and seven studies included additional detail on the analysis of those who dropped out. Across three studies, those who dropped out had significantly lower school connectedness ($p<.001$), lower levels of future orientation or life satisfaction ($p<.01$), or higher levels of depression ($p<.001$) (Bond et al., 2007; Jose et al., 2012; Shochet et al., 2006).

Information on statistical power is only explicit within one article (Moffa et al., 2016). A standardised measure of effect size was included within eleven of the articles, with five studies including Beta coefficients which give an indication of the size of the relationship.

Synthesis of findings

In order to synthesise the findings, articles have been categorised by the aspect of wellbeing which was investigated. A breakdown of the measures and timescales can be seen in Table 2.

Table 2 *Included Article Mental Wellbeing Domains and Timescales*

	< 1 year	1-2 years	2-3 years	3+ years (13-27 years)
General Wellbeing	Prati & Cicognani (2021)	Gushue (1996)	Jose, Ryan, & Pryor (2012)	
Self-esteem	Perry & Lavins-Merillat (2018)	O'Brien (2015)	Washburn (2009)	

		Gushue (1996)	Hernández, Robins, Widaman, & Conger (2017)	
Depression and anxiety	Arslan, Allen, & Ryan (2020)	Moffa, Dowdy, & Furlong (2016)	Washburn (2009)	Markowitz (2017)
	Arango et al. (2018)	Lester, Waters, & Cross (2013)	Bond et al. (2007) Patalay & Fitzsimons (2018)	Gunnarsdóttir, Hensing, & Hammarström (2021)
		Shochet, Dadds, Ham, & Montague (2006)		Nyberg et al. (2019)
		McMahon, Singh, Garner, & Benhorin (2004)		
		Mcgraw, Moore, Fuller, & Bates (2008)		
Life satisfaction	Arslan, Allen, & Ryan (2020)		Patalay & Fitzsimons (2018)	

General wellbeing

Three studies explored the relationship between a measure of school belonging and general wellbeing. Whilst all three studies identified a significant relationship between variables at one-year intervals, evidence for the direction of the relationship is inconsistent.

Prati and Cicognani (2021) conducted their research over the course of one school year, taking measures at the beginning and end of the year and therefore exploring the relatively short-term association between factors. Whilst the sample was the least diverse of all the included studies, with a 92% male population from one technical college in Italy and no detail on other demographics of participants, they found that school belonging significantly predicted later wellbeing ($R^2 = .06$) with a small effect size ($r = .26$); this remained even when age, gender, and time one wellbeing were included in the analysis model ($\beta = 0.24, 95\% \ CI = 0.02, 0.45$).

Research by Gushue (1996) also used data from a relatively short timeframe of around a year, exploring the relationship between school belonging and wellbeing for younger siblings (age 10-14) and older siblings (age 12-16). As part of a larger study, the data used are from years three and four of the original study and include an index of wellbeing and a separate measure of happiness which consisted of one item. Unlike Prati and Cicognani (2021) the longitudinal results by Gushue (1996) demonstrated no significant prediction of school belonging on happiness or subjective wellbeing, with the only significant relationship suggesting higher school belonging predicted lower school loneliness one year later. However, they did find that higher subjective wellbeing at time one significantly predicted higher school belonging one year later ($r = .202, p < .05$). Similar to Prati and Cicognani (2021), the sample was somewhat limited in relation to the application of the results to the wider population, as within Gushue's (1996) study only sibling dyads, who had both parents living at home, were invited to take part.

Whilst the third study by Jose et al. (2006) agrees somewhat with these findings, they found a bidirectional relationship between the two variables, suggesting they have a significant impact on each other over time. The sample size for this study is much larger, recruited from schools with different socio-economic backgrounds, and generally representative of the population of New Zealand. Using a combination of scales previously used in similar research, Jose et al. (2006) found that the bidirectional relationship between school belonging and mental wellbeing was consistent across two one-year timeframes. School connectedness significantly predicted mental wellbeing from year one to year two ($\beta = .06, p < .05$) and year two to year three ($\beta = .08, p < .01$). Wellbeing also significantly predicted school belonging paths from year one to year two ($\beta = .19, p < .001$) and year two to year three ($\beta = .13, p < .001$). Although socio-economic status (SES), gender, and age were considered within the research by Jose et al. (2006), it is unclear whether variables were controlled for at time one, and this could have impacted on the significance found within their analysis model.

Overall, the results relating to general wellbeing are mixed, perhaps due to the range of self-report measures used, with the scales used within Gushue (1996) having unknown psychometric properties and Jose et al. (2006) combining chosen items from other measures, to create their own unvalidated measurement. The different sample sizes and confounders controlled for could also have impacted the results, creating difficulty coming to any conclusion on the direction of the relationship between belonging and general wellbeing. The mixed results may also, in part, be explained by looking at the definitions of wellbeing explored earlier in the review. Defining mental health and wellbeing is complex (Dodge et al., 2012) and therefore it is often broken down into more specific areas, such as depression/anxiety, life satisfaction, self-esteem, and affect. Therefore, looking at each of these outcomes individually may be more useful in helping us understand the relationship between belonging and wellbeing.

Self-esteem

The relationship between self-esteem and school belonging was explored within five studies, with all five finding a significant relationship between the variables (Gushue, 1996; Hernández, Robins, Widaman, & Conger, 2017; O'Brien, 2015; Perry & Lavins-Merillat, 2018; Washburn, 2009). There is most evidence to suggest that self-esteem has a significant, positive effect, on school belonging however within one study this relationship was only present for males. Although McMahon et al. (2004) and Jose et al. (2012) used measures of self-esteem within their research, self-esteem was not specifically analysed in relation to school belonging, therefore these studies have not been included within this section.

Perry and Lavins-Merillat (2018) focussed on directional relationships over a 6-month timespan and found no significant path between belonging at time one and self-esteem six months later, when baseline self-esteem was controlled for. They did, however, find a significant path between self-esteem at time one and belonging six months later, after controlling for baseline

school belonging ($t = 2.13, p < .05$; $denoted\ as\ \beta_2$), accounting for 42% of the variance.

Hernández et al. (2017) also found that self-esteem precited school belonging between year one

(age 10-11) and year two (age 12-13) ($\beta = .15, p < .01$), and year two and year three (age 14-15)

($\beta = .19, p < .01$), but only for male participants.

Results from Hernández et al. (2017) were somewhat consistent with Perry and Lavins-

Merillat (2018) however both studies analysed results by gender, and differences were only found by

Hernández et al. (2017). The differences in results could be indicative of a different relationship

occurring for different populations, with a sample of Mexican origin adolescents recruited by

Hernández et al. (2017) who had a mean age of 10.4, and a range of ethnicities included by Perry

and Lavins-Merillat (2018) with a mean age of 15.8. The longer time scale used by Hernández et al.

(2017) may have also allowed for better analysis of impact over time, despite the measures used

within the study showing low internal consistencies and unknown validity.

Whilst not providing any directional evidence, research by O'Brien (2015) further supports

the existence of a relationship between self-esteem and school belonging over a year by

demonstrating significant correlational relationships between time one school belonging and self-

esteem one year later ($r = .355, p < .05$), and time one self-esteem and school belonging one year

later ($r = .443, p < .05$). Analysis included consideration of school and gender and found no

significant effects, although school belonging did change over time differently for males and females.

Washburn (2009) found that over a two-year time period there were significant differences in young

people's self-esteem based on which school belonging cluster group they belonged to ($F =$

$14.75, p < .001$). Using cluster analysis, Washburn (2009) divided participants into groups, based on

their school belonging scores over the four timepoints in their study. This included the 'connected'

group (n = 22) who had the highest scores, the 'average' group (n = 47), with scores closest to the

mean, the 'low increasing' group (n = 25) who had low scores which increased towards the mean

over time, and the 'detached' group (n = 10) with low school belonging scores. Washburn (2009)

found that young people who were part of the 'connected' group had significantly higher self-

esteem than all three other groups, with unknown effect size. The grouping of participants by

Washburn (2009) provides somewhat less detailed information on the relationship between the two

variables as the belonging scale is not continuous. Participants were also grouped based on school

belonging scores across timepoints so although school belonging and self-esteem were related

within the study, the direction of the relationship is not explicit, and the longitudinal nature of the

relationship is somewhat unclear.

Finally, when considering their sample as a whole, Gushue (1996) found no significant

longitudinal relationship between school sense of community and self-esteem, in either direction.

Gushue (1996) and O'Brien (2015) used similar self-esteem measures and sample sizes however

Gushue (1996) recruited siblings dyads made up of older and younger siblings. Whilst no directional

relationships were found between school belonging and self-esteem for the overall sample, when

looking at the results by group Gushue (1996) reported a correlation between self-esteem at time

one and school belonging one year later, only for older siblings.

Overall, self-esteem and school belonging show a relationship, and the evidence would

suggest that whilst they may in part impact on one another, self-esteem has more of an effect on

future school belonging, rather than vice versa.

Depression and Anxiety

This is the most commonly studied wellbeing domain, with 13 studies focussing on depression,

anxiety, or internalising symptoms. This is also the only area where relationships have been studied

into adulthood, providing a much more in-depth idea of the existing relationship. Twelve of the

studies reported a significant relationship between school belonging and depression or anxiety. Six

of the included studies suggested that school belonging is related to later depression and anxiety,

with one addition study finding a bidirectional relationship that suggests that the relationship is

strongest from belonging to depression and anxiety, rather than vice versa. One further study suggested a bidirectional relationship. Evidence seems to suggest that school belonging is predictive of later mental health, however, three of the studies finding this effect also found that the amount of variance accounted for was small, or that other factors were far more predictive.

Two of the included studies took place over two timepoints six months apart (Arango et al., 2018; Arslan et al., 2020). The results are varied with Arango et al. (2018) finding a bi-directional relationship between school connectedness and depression even when variables were controlled for at baseline (Depression-Connectedness $r = -.30, p < .05$, Connectedness-Depression $r = -.29, p < .05$), and Arslan et al. (2020) finding that school belonging at time one predicted internalising behaviour six months later, only when time one mental health problems were not controlled for in the model ($\beta = -.04$). The results from Arslan et al. (2020) suggest that whilst belonging may be related to later mental health, baseline mental health is far more predictive. Whilst both studies have samples larger than 100 and have a similar time span, the difference in results may be explained by the use of different outcome measures, with Arango (2019) using a ten-item scale to look at internalising problems and Arslan et al. (2020) focussing on depression. The samples also differ as Arango et al. (2019) focussed on participants with heightened levels of bullying victimisation, which may have impacted on either variable or the relationship between them. The 6-month timespan also represents a relatively short period within longitudinal research and therefore studies of longer length may build a better picture of how these variables relate over time.

There are five studies which contribute to the understanding of the relationship between school belonging and depression and anxiety by analysing data over the period of around one year (or across two academic years). Two studies based in Australia found significant relationships between variables, however, they found that these relationships differed between males and females at some timepoints (Lester et al., 2013; Shochet et al., 2006). Lester et al. (2013) found different temporal pathways existed for males and females on depression but not anxiety and

therefore adapted their analysis to model relationships with depression separately for each gender.

Between the end and beginning of school years they found that, for females, a reciprocal

relationship existed between connectedness and depression, with increased connectedness

associated with decreased depression ($\beta = -.09$) and increased depression scores associated with

decreased connectedness ($\beta = -.10$). For males the relationship only existed in one direction with

increased depression significantly associated with decreased connectedness ($\beta = -.01$). The four

waves of their study spanned from the end of year seven (age 12-13) to the beginning of year nine,

and over all other timepoints there were significant reciprocal relationships between measures, for

both depression and anxiety, and for both males and females. Lester et al. (2013) suggests that the

paths were strongest from belonging to depression, and from belonging to anxiety, rather than vice

versa.

Shochet et al. (2006) found that school belonging at time one significantly predicted

depressive symptoms for both males ($R^2 = -2.07, p < .01$), and females ($R^2 = -1.94, p <$

.05), when the effect of school belonging at time one was controlled. They also found some

difference between genders as higher school belonging significantly predicted lower future anxiety

only for females ($R^2 = -1.81, p = .05$) and lower impairment of general functioning only for males

($R^2 = -0.88, p < .05$), with medium effect sizes ($r = -.29$, $r = -.41$ respectively). Unlike Lester et al.

(2013) there was no significant impact of mental health at time one on school belonging at time two.

Whilst power is not reported, these two studies are likely to have increased power due to their large

sample sizes, with Lester et al. (2013) having 3,123 participants respond to at least three of their

four timepoints, and Shochet et al. (2006) maintaining 1,740 participants after 14% attrition.

A third study conducted in Australia, over a year, investigated the relationship between

school belonging and anxiety, depression, and stress for final year students. McGraw et al. (2008)

found that school connectedness significantly predicted depression, anxiety, and stress, however the

relationship did not remain when time one negative affect, was considered. Whilst time one

measures were controlled for by Shochet et al. (2006) it is unclear if this was accounted for by Lester et al. (2013).

Two further studies conducted in the USA took place over roughly one year and results are mixed. Whilst McMahon et al. (2004) found that a high school sense of belonging led to fewer internalising symptoms (anxiety and depression) in the second year of their study, this was over a pre-test and post-test period, the timescale of which is unclear within the paper. This makes it difficult to determine whether these results should be considered alongside other longitudinal research. Within the paper by Moffa et al. (2016) school belonging at time one is added into a model with life satisfaction and psychological distress at time one and found to significantly predict internal distress at time two ($F\,(3, 1145) = 119.84, p < 0.001, R^2 = .24$). However, although adding belonging to the predictive model did predict internal distress, the explained variance in internal distress was not substantial (f^2 = .006). Whilst mental health screening at time one accounted for 27% of the variance in social-emotional wellbeing two years later, the addition of school belonging only increased the explained variance by 2%. For the outcome of internal distress, school belonging only increased the explained variance by 0.4% from 24%. Although these results are statistically significant, they suggest that earlier mental health screening and wellbeing measures are more predictive than a measure of school belonging. This is consistent with findings from Arslan et al. (2020) and McGraw et al. (2008) who saw no predictive effect of school belonging once other mental health variables were controlled for.

Over the slightly longer time period of two years there are two studies conducted using a different method of analysis than other studies included within this review (Bond et al., 2007; Washburn, 2009). Both Bond et al. (2007) and Washburn (2009) grouped their participants depending on their connectedness scores and analysed wellbeing outcomes across these groups. Bond et al. (2007) used the school connectedness scale (Arthur et al., 2002) to group 2,678 participants into four groups: high, moderate, low, and very low school connectedness. The school

connectedness scale demonstrated high internal consistency within the study (Cronbach's alpha

= .87) but generally lacks evidence of the psychometric properties. Bond et al. (2007) suggested that

year eight students (age 12-13) with very low school connectedness were more likely to report

depressive symptoms in year 10 (age 14-15), however the findings did not reach statistical

significance.

Using a similar method of analysis Washburn (2009) used a revised version of the

Psychological Sense of School Membership (PSSM) scale (Washburn & Kuriakose, 2001) to look at

school belonging. Whilst the PSSM has evidence of good psychometric properties, Washburn (2009)

ensured that the connection to school scale used within this study also had appropriate validity and

reliability by confirming good test-retest reliability over two weeks, good internal reliability over

time, and good construct validity with the PSSM. Alongside this Washburn (2009) included a range of

variables within their analysis such as ethnic/racial discrimination, gender, ethnicity, grade, and

controlled for scores at time one. The measures used and analysis give weight to their findings that

there were significant differences between the four groups ($F = 7.45, p = .001$), with the

connected group reporting significantly lower levels of depression than all three other groups taken

separately, even when controlling for adjustment outcomes at time one ($F(3,99) = 4.82, p < .01$).

A small to medium effect size is reported for the overall model ($eta^2 = .07$).

Over a slightly longer timespan that Bond et al. (2007) and Washburn (2009), Patalay &

Fitzsimons (2018) used data from the UK Millennium Cohort Study (MCS) (Centre for Longitudinal

Studies, n.d.) to look at predictors of depression from age 11 to age 14. Whilst they found a

significant relationship between school connectedness and depression at age 14 (r = -.14, p<0.001),

even when time one mental health was controlled for (r = -.12, p<0.001), the effect size was small. In

addition, it is unclear how school connectedness was measured using the data from the MCS, as

school connectedness was not a construct detailed in the original data set (Johnson et al., 2015), and

Patalay & Fitzsimons (2018) do not give information on which data or questionnaire items they have

used to calculate school connectedness. Therefore, these results should be viewed with caution, as the school connectedness measure is unclear and the validity and reliability of it is not established.

There are two studies included within the literature review that look at the longer-term outcomes with participants who have experienced different levels of adversity (Gunnarsdóttir et al., 2021; Markowitz, 2017). Markowitz (2017) and Gunnarsdóttir et al. (2021) both provide findings that school connection is related to later depression over a period of 13 and 27 years respectively. Markowitz (2017) drew on data from a larger study in the USA which included six items on school connection and 10 items measuring wellbeing/depression. Markowitz (2017) reported that an increase in school connection yields a significant decrease in depressive symptoms in late adolescence ($p < .01$) and that this result remains significant regardless of whether young people have experienced adversity.

Consistent with the research by Markowitz (2017), Gunnarsdóttir et al. (2021) found that when depressive symptoms at age 16 were controlled for, poor school connectedness was associated with future depression symptoms ($\beta = 0.124, CI = 0.10, 0.15$) regardless of whether young people had experienced adversities. Whilst these two studies are consistent in the long term impact of school connectedness on mental health, the psychometric properties of the measures are somewhat unclear and Gunnarsdóttir et al. (2021) also reported problems with the statistical power of their study due to the sample size. Therefore, these results should be viewed with some caution.

Additionally, Nyberg et al. (2019) measured the belonging to mental health relationship, however, this was not the main aim of the study and therefore limited analysis took place in relation to these variables. The data were the same as that used by Gunnarsdóttir et al. (2021), who more adequately addresses the review research question. Nyberg et al. (2019) found that good school connectedness in adolescence was associated with lower depression and anxiety (modelled separately) with participants aged 43 (both anxiety and depression: $-0.147, p = .000$) when

controlling for sex and adjusting for baseline depressive symptoms. However, the effect size was small.

The results of Nyberg et al. (2019) and Gunnarsdóttir et al. (2021) suggest that school belonging is predictive of mental health, even when time one mental health is controlled for. This is consistant with research by Arango et al. (2018) and Patalay & Fitzsimons (2018), who found the relationship remained. However, this is inconsistent with findings from Arslan et al. (2020), McGraw et al. (2008) and Moffa et al. (2016) who found that mental health at time one was more predictive of time two mental health, than school belonging at time one. At the current time it is difficult to attribute cause for the mixed results, with studies finding that school belonging predicted mental health regardless of mental health at time one including populations from age 11 to 16 (across the studies), and those finding that mental health was more predictive including participants from age ranges 10 to 19 (across the studies). Whilst a variety of measurement tools and analyses were used across the studies, which may account for the mixed results, additional exploration would be beneficial to evaluate the impact of the age of participants, and the length of the study.

Overall, there appears to be some emerging evidence that suggests school belonging has an impact on depression and anxiety. Whilst school belonging does appear to significantly predict mental health variables, three studies suggest that other factors, such as baseline mental health and wellbeing measures, are more predictive of later mental health (Arslan et al., 2020; McGraw et al., 2008; Moffa et al., 2016). Over the long-term period three studies also consistently suggested that school belonging in adolescence has a long-term association with mental health, into adulthood (Gunnarsdóttir et al., 2021; Markowitz, 2017; Nyberg et al., 2019). Although two of these studies used the same data (Gunnarsdóttir et al., 2021; Nyberg et al., 2019), the analysis of results within all three studies gives evidence for the long-term effects.

Life satisfaction

Four studies explored life satisfaction within the measures used (Arslan et al., 2020; Jose et al., 2012; Moffa et al., 2016; Patalay & Fitzsimons, 2018), however, Jose et al. (2012) combined their measure of life satisfaction with other measures to provide a complete picture of wellbeing. Life satisfaction was also measured by Moffa et al. (2016) but was added to their predictive model for internal distress, rather than being measured as an outcome variable related to school belonging, and therefore will not be included here. Patalay & Fitzsimons (2018) is included under life satisfaction as they explored the correlation between school connectedness and 'mental wellbeing', with their measure of mental wellbeing comprising of six items assessing satisfaction with different domains of life, such as school, family, and life as a whole. They found that from age 11 to age 14, school connectedness significantly predicted satisfaction (r = .15, p<0.001) even when time one mental health was controlled for (r = .11, p<0.001). Finally, the only study that specifically looked at the relationship between school belonging and life satisfaction was Arslan et al. (2020) who found that, over 6 months, school belonging at time one predicted life satisfaction at time two ($\beta = .39, p < .001$).

2.4 Discussion

Summary and overview

The current paper is unique as it aims to summarise the research into longitudinal relationships between mental wellbeing and school belonging. Although research is fragmented due to the different outcome measures or constructs of wellbeing chosen, there is evidence that school belonging can impact mental health, not just contemporaneously.

Within the current review three studies aimed to explore how school belonging relates to general wellbeing (Jose et al., 2012; Gushue, 1996; Prati & Cicognani, 2021). Whilst evidence

suggests that there may be a bidirectional relationship between school belonging and general wellbeing, looking at specific domains of mental wellbeing has proved more helpful within the current review, in understanding how factors relate over time. The relationship between school belonging and depression and anxiety is the most researched and the evidence suggests that there is a significant relationship between school belonging and mental health outcomes. Higher school belonging was found to predict lower mental health difficulties longitudinally in eight of the included studies (Arango et al., 2018; Gunnarsdóttir et al., 2021; Lester et al., 2013; Markowitz, 2017; Moffa et al., 2016; Nyberg et al., 2019; Patalay & Fitzsimons, 2018; Shochet et al., 2016), with this relationship present from six months, up to 27 years later. School belonging also has an impact on life satisfaction over the course of six months, however, this relationship has only been evaluated over time in one study (Arslan et al., 2020). Finally, self-esteem is consistently related to school belonging over time, with higher self-esteem predictive of higher school belonging.

Belonging and mental health

With at least one in ten young people experiencing a mental health difficulty (Department of Health and Social Care and Department for Education, 2017) consideration of the research is needed to help inform possible avenues for intervention and promotion of positive mental wellbeing. Education settings have been highlighted as one key context which could be instrumental in providing early support to young people (Department for Education, 2021; Rose, 2021). School belonging has gained interests as a potential protective factor for a range of outcomes, including mental health. However, a large body of research has focussed on contemporaneous relationships between these two aspects and previous literature reviews have focussed on what might impact school belonging or mental health, independently of one another (e.g., Allen et al., 2018; Conley et al., 2015).

Mental wellbeing is often broken into two strands including subjective wellbeing, and mental health, measured through set criteria (Ryan & Deci, 2001). Within the current review

outcomes relating to anxiety, depression, and internalising symptoms will be discussed here under the term *mental health*. Within the current review 12 of the 13 included studies exploring mental health found a significant negative relationship between school belonging and mental health difficulty scores (Arango et al., 2018; Arslan et al., 2020; Gunnarsdóttir et al., 2021; Lester et al., 2013; Markowitz, 2017; Mcgraw et al., 2008; McMahon et al., 2004; Moffa et al., 2016; Nyberg et al., 2019; Shochet et al., 2006; Washburn, 2009), consistent with cross-sectional research in this field (Newman et al., 2007; Pikulski et al., 2020; Prince, 2010). Whilst two studies suggested a bidirectional relationship between the variables (Arango et al., 2018; Lester et al., 2013), more evidence was present to suggest that school belonging can have an impact on later mental health scores, with higher school belonging related to lower depression and anxiety. The measures used within the current review were self-report, however, these results are consistent with the relationship found between school belonging and parent-reported child-mental health (Vaz et al., 2014). Results from similar measures also give evidence for this relationship, with teacher support related to lower depression and anxiety over time (Elmelid et al., 2015), higher school belonging relating to lower conduct problems one year later (Loukas et al., 2010), and group identification at school significantly predicting fewer mental health difficulties 11 months later (Miller et al., 2018).

Whilst the current review narrowed the results to look at mental health and did not include self-harm or suicide ideation, a metanalyses by Marraccini and Brier (2017) demonstrated that school belonging is also related to suicide risk and behaviours. Within the current review higher school belonging was shown to relate to fewer mental health difficulties over time, but evidence beyond the scope of the current review also suggests that those who feel a higher sense of belonging are less likely to have suicidal thoughts or make a suicide attempt (Marraccini & Brier, 2017).

Although school belonging can have more of a predictive effect on mental health than some peer and family factors (Loukas et al., 2010; Miller et al., 2018), three of the studies within the

current review found that baseline mental health was a bigger predictor of later mental health, than was school belonging (Arslan, 2020; Mcgraw, 2008; McMahon et al., 2004). This was also suggested in research by Miller et al. (2018), who found that school belonging was the biggest predictor of mental health, only after baseline mental health. Despite this, school belonging may still be an important aspect to consider as it could provide a buffering effect for later mental health outcomes, especially for those at risk of negative outcomes. School belonging has shown a relationship to mental health outcomes over time for LGBTQ+ students, those who have experienced adverse experiences, and those experiencing bullying victimisation (Clements-Nolle & Waddington, 2019; Davis et al., 2019; Hatchel et al., 2018; Huynh & Gillen-O'Neel, 2016; Perales & Campbell, 2020). Whilst those in the LGBTQ+ community and those experiencing victimisation can report lower school belonging (Davis et al., 2019; Perales & Campbell, 2020), school belonging can buffer or mediate the effects of some risk factors, reducing the chances of depressive symptoms (Davis et al., 2019; Hatchel et al., 2018), psychological distress (Clements-Nolle & Waddington, 2019), and poor sleep quality (Huynh & Gillen-O'Neel, 2016).

Belonging and self-esteem

School belonging has been positively related to self-perceptions and self-concept (Korpershoek et al., 2020; Prince, 2010). Within the current synthesis a significant positive relationship was found between self-esteem and school belonging (O'Brien, 2015; Washburn, 2009). In contrast to the research on school belonging and mental health, self-esteem was found to have more of a predictive effect on school belonging than vice versa. Whilst this is consistent with similar research by Anderman (2002) who found that self-concept was the biggest personal factor which predicted sense of belonging, there were some differences across the studies which may relate to the age and gender of participants.

Perry and Lavins-Merrillat (2018) found that self-esteem predicted later school belonging for their population of 14–18-year-olds whereas Hernández et al., (2017), who studied participants aged

10-15-years-old, found this relationship but only for male participants, and Gushue (1996) only for

the older participants in their sample (age 12-16). There appear to be some differences between

females and males in relation to school belonging, with males showing lower school belonging at

younger ages but remaining stable over time, and females' school belonging starting higher, but

declining during the teenage years (Neel & Fuligni, 2013). Similar gender differences have been

found when looking at school belonging in relation to other factors, with Davis et al. (2019) finding

that school belonging acts as a buffer between bullying and depression, but only for females. Within

the current review, 10 of the 18 studies included gender within their analyses and six studies

considered the participants' age/school year. Within future research it may be important to establish

whether the relationship between mental wellbeing domains (e.g., self-esteem) and school

belonging is consistent across different genders, considering their ages.

Belonging and subjective wellbeing

Building on the results of contemporaneous research which shows a relationship between

school belonging and life satisfaction (Abubakar et al., 2016), Arslan et al. (2020) found that school

belonging predicted life satisfaction six months later. Whilst this provides initial evidence for the

impact of school belonging on life satisfaction over time, the research in this area is limited to one

study. Similar to research on the potential impact of school belonging on depression and anxiety, it

has been suggested that the relationship between school belonging and life satisfaction may not be

linear, but that school belonging may buffer risk factors, such as the effect of victimisation on life

satisfaction (Chen et al., 2021).

Negative affect was also included within the search criteria, having been related to mental

wellbeing (Larsen, 2009), however, no longitudinal studies were returned which met the inclusion

criteria for the synthesis. Research in this field suggests that school belonging is related to positive

and negative affect within school, both contemporaneously and over time (Anderman, 1999) and

that the relationship between belonging and affect may be bidirectional (Tian et al., 2016).

Subdomains of parent, teacher, and peer relatedness have all been related to positive and negative affect, however, teacher relatedness, a key part of school belonging, has shown the biggest association (King, 2015).

Strengths and limitations

The current review provides an overview of the longitudinal relationship between school belonging and aspects of wellbeing. A strength of the review is that it provides an overview of the longitudinal research analysing the relationship between school belonging and outcomes related to mental wellbeing, which has not previously been summarised. The researcher has also aimed to take a broad definition of mental wellbeing which includes measures of mental health and subjective wellbeing, in order to capture the relationship between school belonging and different domains of wellbeing. This adds to the field as previous reviews have focussed only on narrow outcomes related to mental health, such as suicidal thoughts and behaviour (Marraccini & Brier, 2017). Whilst this is inclusive of different constructs and measures, this has led to difficulty comparing results across studies due to the amount of variation in measurement tools. In addition, some research was excluded due to terms which did not fit closely enough with belonging, such as school identification, which has been found to predict future mental health, but not as strongly as time one mental health, or gender (Miller et al., 2018). Articles referencing 'school climate' were also excluded as this term was considered too broad, encompassing physical school environment, interactions between people, perceptions of school, feelings of safety and trust, and academic performance (La Salle et al., 2021; Marshal, 2004).

In terms of the populations included within the review, the articles are from seven different countries and represent a broad range of ethnicities from those localities. The children and young people are also recruited from a range of different school settings. For example, one study recruited only catholic school students, and one focussed on single sex schools. This should be considered in terms of comparability with other research populations and how the results are applied more

broadly. Despite the representation of different countries and cultures within the included articles these are largely limited to western locations and there is a lack of representation of some cultural and ethnic groups. During the screening process, a piece of research from China was excluded as it was carried out when schooling had been disrupted due to an earthquake less than two years prior to the study (Liu et al., 2021). Within the study 17.1% of adolescents had a relative who had died or was hurt, and one school had been completely rebuilt, therefore, the circumstance in which the research took place was considered to be a time of crisis or unsettlement. This exclusion led to a lack of representation of Chinese students within the review. This paper also would have added to the understanding of how belonging and wellbeing change depending on the circumstances; however, this was not the focus of the current review. This exclusion criterion also led to the exclusion of research around the current context that young people face, which is the COVID-19 pandemic (Perkins et al., 2021). Whilst not covered within this review, it is important to acknowledge that school belonging and wellbeing will both be impacted by broader factors, including the current climate and circumstances.

Within the research there are a range of other factors considered such as early adversity, bullying, socio-economic status, gender etc. however there was a lack of consistency in which measures were included and controlled for. Several of the studies explored belonging and wellbeing alongside other measures which have not been included within this review. Studies which contained belonging as a mediator or moderator were also excluded which means that this review does not place belonging and wellbeing in the context of other factors.

Finally, as no control trials or experiments are included within the review the results are limited to the observable relationships. Results were also limited to quantitative studies and whilst very few qualitative studies were returned by the search, this would have provided additional in-depth information and the perspectives of young people.

Implications for future research

Following this review additional research would be beneficial to bolster the findings and to address the limitations discussed above. As mentioned previously, the bulk of the research exploring this relationship looks at outcomes of mental health such as depression and anxiety, whereas the theoretical basis for mental wellbeing suggests it is made up of a variety of areas. Therefore, research would be beneficial in the areas that have been explored less, to clarify which relationships exist and give a better overall picture of which domains of wellbeing might be related to school belonging. This should include research into positive and negative affect which is considered an aspect of wellbeing however no research included in the current review looked directly at this.

In addition, the research mainly focusses on the short term 1–2-year relationship between variables however a long-term relationship has been shown to exist into adulthood. Additional research over a longer timeframe would help to build a better picture of how these variables relate in the long term.

An area that would particularly benefit from exploration is how belonging and wellbeing fit within the context of other variables, including over time. For example, Nyberg et al. (2019) found that professional activity and civic status in later life mediated the relationship between school belonging and mental health, but that the direct effect was stronger, giving evidence for the importance of school belonging. School belonging has been found to mediate the effect of peer victimisation/bullying on mental health, and to buffer adversities such as childhood maltreatment (Goldstine-Cole, 2020; Hatchel et al., 2018; Seon & Smith-Adcock, 2021) however it may not be protective of all factors and was not found to mediate the relationship between racial discrimination and mental health (Pang, 2015). Understanding belonging within the broader context will be important for understanding when and how it can buffer against negative outcomes and which other variables are important in the overall development and mental wellbeing of young people.

Implications for professional practice

The research included within the review is mostly observation and provides insight into the relationship, rather than providing evidence for specific interventions or how one factor might be used to buffer the other in a practical sense. However, the evidence does highlight the long-term relationship between these factors, confirming the importance of focussing on both school belonging and mental wellbeing within adolescents. School is an important setting for mental wellbeing promotion and not just a place where young people go to learn, but also where they go to build connections and where they need to feel they belong (Baumeister & Leary, 2017). An effortful focus on how young people feel they belong at school could be particularly important as disparities in school belonging are becoming more evident and the risk and protective factors for school belonging, such as SES and school achievement, have increased over time (Högberg et al., 2021). The current evidence base for supporting school belonging is limited however strategies and resources are developing, such as within a recent book on boosting school belonging (Allen & Kern, 2020). The following strategies have also been put forward as potential ways to support and develop school belonging for students.

Self-esteem – Considering the evidence that self-esteem is related to belonging and can have a significant impact on young people's sense of belonging (Allen et al., 2018; Gushue, 1996; Perry & Lavins-Merillat, 2018) focussing on self-esteem offers a potential avenue for intervention. Many schools implement support for emotional literacy and the promotion of self-esteem is considered part of this support (Sharp, 2001) with Borba (1989) suggesting five building blocks to self-esteem: affiliation, competence, mission, self-hood, and security.

Gratitude diaries – In an intervention where children wrote two to three things they are thankful for at school each day, school belonging was shown to significantly increase in the intervention group (Diebel et al., 2016). This may provide a possible avenue for support for groups or classes of young people, without being time or resource consuming for schools.

Social belonging intervention - Walton and Brady (2020) developed a social belonging intervention which is delivered in a one-hour session and targeted at students from diverse backgrounds who may find it more difficult to feel a sense of belonging at school. The intervention involves older students from diverse backgrounds writing guided stories which are shared with the younger students to reassure them that worries about fitting in are normal and will pass with time. The young people can read real life stories and are encouraged to share how their experience so far fit with the stories and how they see their experiences playing out in the future. They might also be involved in writing letters for a younger student to embed the learning and ideas from the intervention. The intervention shows potential for targeting specific groups of students who may be at risk of low school belonging and was shown to raise students' grades, increase their confidence in their chances of success, and increase their sense of belonging, wellbeing, and health (Walton & Brady, 2020).

Mentoring – In a weekly intervention described by King et al., 2002, young people met with adult mentors twice a week for one and a half hours a time. The mentors built relationships with students through icebreakers, worked through self-esteem enhancing activities, and offered support with academic work for a short period each session. A journal was kept and passed between different students who were part of the intervention, containing mentor and student answers to questions such as 'what are you most proud of having done?'. Each week an achievable goal was set for the student, for example, giving someone a compliment, or asking a question in class. Whilst trained mentors were used for the intervention, school staff are commonly delivering mental health and pastoral support within school (Department for Education, 2018) and therefore could be well placed to deliver this type of intervention to specific pupils who need it. The intervention was shown to improve self-esteem and peer, family, and school connectedness (King et al., 2002).

Whole school approaches - With the importance of the school setting recognised in guidance and the drive for whole-school approaches to mental health (DfE, 2021) school belonging could be

considered as an important strand of a whole-school approach. Schools should focus on helping young people to develop relationships with peers and teachers as well as supporting them to feel understood and accepted, and safe within the school environment (Allen et al., 2018; Craggs & Kelly, 2018). Rowe et al. (2007) suggest three key aspects of increasing school belonging which include partnership, participation, and valuing diversity. Within the classroom this involves student centred learning activities, encouraging decision making, negotiation, experiential learning, and collaborative activities. In the broader school context this involves including families and the community within school life and policy development, group activities for the whole school, and the offer of extra-curricular activities and tailored social spaces (Rowe et al., 2007). Extracurricular opportunities have been highlighted as key in building school belonging (Allen et al., 2018; Craggs & Kelly, 2018; McNeely et al., 2002) and consideration of activities which might suit the needs of different young people may help them to feel a sense of belonging.

Conclusion

Research from this systematic review suggests that a relationship exists over time between school belonging and aspects of mental health, from 6 months to longer term impacts which last into adulthood. In particular, school belonging has a long-term impact on mental health including depression and anxiety, and evidence is emerging to suggest that it may impact life satisfaction. In contrast, self-esteem has a positive impact on school belonging and should therefore considered as a potential avenue for intervention alongside whole school approaches and possible interventions targeting specific groups. Overall, the research highlights the importance of attending to school belonging and mental wellbeing in adolescents and the important context of school.

Chapter 3 – The association between school belonging and wellbeing in looked after

adolescents

3.1 Introduction

From the early work of Adler (1930s-1970s) and through the development of theories on attachment and human needs (Bowlby, 1969; Maslow, 1965), the role of relationships has been highlighted as crucial for motivation, development, and positive outcomes. Adler's 'social feeling' relates to an evolutionary drive to work with others in a collaborative way and to contribute socially. Adler proposed that people strive to feel part of the community and to feel a sense of belonging (Ferguson, 1989). Further works by Bowlby and Maslow around the mid-20th century cemented the idea of relationships as a fundamental human need throughout our lives. Bowlby's work brought to light our need to form and maintain close bonds with others from birth, in particular our primary caregiver. Bowlby (1969) presented the idea that our early relationships impact our feelings of security and how we interact with the world around us and form new relationships, not just in the current moment, but later in our lives. Whilst Bowlby's work focussed largely on the mother as the key attachment figure, his work has been expanded with the understanding that children can form close bonds with more than one caregiver, and that new bonds can form with caregivers later in childhood (e.g., foster carers) who are provide good quality and consistent care (Holmes, 2014). A drive to fulfil social needs is also present within Maslow's work, which highlights social connection as a fundamental need after our basic physiological and safety needs have been met and maintained (Maslow, 1943). For children this drive is to connect with adults and caregivers through questioning or attention seeking, however, during adolescence this moves more towards building relationships and becoming more sociable with peers, looking for accepting peer groups to affiliate with (Poston, 2009). A final example of the importance of relationships comes from self-determination theory which includes competence, relatedness, and autonomy as key for motivation and success (Ryan & Deci, 2000). Highlighting the importance of our interactions with our environment, this theory

suggests that the three areas leading to self-determination will have impacts on adaptive outcomes including functioning, growth, personal development, and wellbeing (Ryan & Deci, 2000; Vallerand et al., 2008).

School Belonging

From these earlier theories highlighting the importance of relationships Baumeister and Leary (1995) proposed their belonging hypothesis, which states that humans have an inherent drive to form and maintain positive relationships with others. Belonging is considered one of our fundamental needs, driving our behaviour and impacting on our cognitions and emotions, with negative consequences if the need is not met (Baumeister & Leary, 1995). Whilst belonging is thought to exist across all contexts, a specific construct of 'school belonging' has been formed due to the importance of the school context for supporting young people to feel connected, especially throughout adolescence (Blum, 2005). Whilst the term 'school belonging' will be used throughout this research paper it is important to acknolwedge that there are a myriad of measurement tools and defnitions which exist to define the construct (Libbey, 2007). Related terms include school attachment, bonding, connectedness, engagement, identification, membership, and climate (Allen, 2019; Libbey, 2004; St-Amand et al., 2017), however there is little consistency between researchers. Goodenow and Grady (1993) provide the most frequently used definition for school belonging, "the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment" (p. 60-61). This relates to two aspects of the school context which have been included consistently in attempts to define belonging. The first is personal relationships with teacher and peers, feeling 'known' as an individual, supported, accepted, and respected for who you are (Allen, 2019; Libbey, 2004). The second aspect relates to feelings of engagement and acceptance in the wider school community, including feeling engaged with academics and school experiences, feeling safe and supported with any need, and having student voice (Allen & Kern, 2019; Allen et al., 2021; Libbey, 2004). School belonging is considered a subjective feeling and not

something that can be observed within the classroom environment (Goodenow, 1993b), however this does not diminish its potential importance.

Importance of School Belonging

Adolescence is a time when young people experience emotional and cognitive changes, increased self-awareness, reduced supervision from adults and a drive for more autonomy, and increased complexity and possible intimacy of peer relationships (Engels et al., 2022; Goodenow, 1993b; Yurgelun-Todd, 2007). It is important to explore factors which support the development of adolescents and which are associated with positive outcomes. School belonging has been considered one such factor (Centers for Disease Control and Prevention, 2009). Feelings of belonging towards school support young people to succeed across a range of academic and health outcomes and reduce the likelihood of uncharacteristic behaviour and negative outcomes resulting from low belonging (Allen et al., 2021; Blum, 2005; Centers for Disease Control and Prevention, 2009). School belonging has been associated with outcomes across mathematics and literacy and promotes academic engagement more generally (Goodenow, 1993b; Peña-López, 2019; Phan, 2013). It is also negatively correlated with behaviour which is considered problematic, including over time (Loukas et al., 2010; Simons-Morton, 1999).

Belonging could be particularly important for supporting the mental wellbeing outcomes of adolescence. Wellbeing can encompass physical health, internal resources, social relationships, and economic markers (Mental Health Foundation, 2015) however, it is often measured through subjective wellbeing and mental health instruments. As depicted in Figure 2 measuring mental wellbeing can include subjective wellbeing measures of life satisfaction, self-esteem, and positive and negative affect (Diener et al., 2009; Keyes, 2006; Larsen, 2009; Rojas, 2007; Veenhoven, 2012), and measures of mental health in relation to psychopathology, often guided by set criteria (Ryan & Deci, 2000).

Figure 2 *Defining and Measuring Mental Wellbeing*
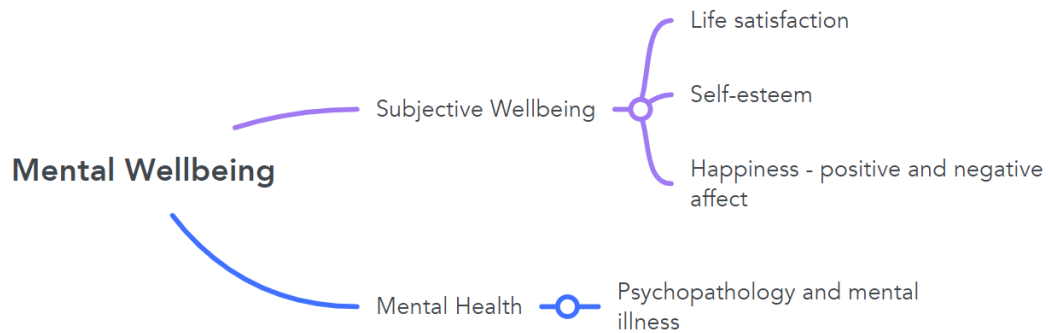
Mental wellbeing is an area of concern for young people as around 14% of young people worldwide experience a mental health difficulty between the ages of 10 and 19 (World Health Organization, 2021) and suicide is one of the top causes of death for young people aged 15-19 (UNICEF, 2021). These difficulties not only impact during adolescence but have long term impacts into adulthood if not adequately addressed (European Joint Action on Mental Health and Wellbeing, 2013–2016; UNICEF, 2021; World Health Organization, 2021). School is considered an important setting for the promotion of good mental wellbeing and school belonging a key factor in reducing or adding to the risk of mental health difficulties (Allen & Kern, 2019). Higher school belonging is associated with increased positive affect, higher life satisfaction, higher self-esteem, and fewer symptoms of depression and anxiety (Arslan et al., 2020; Daley, 2019; McMahon et al., 2004; O'Brien, 2015; Shochet et al., 2006; Vera et al., 2021; Vaz et al., 2014; Washburn, 2009).

Bullying vicitimation is an additional risk factor for mental health difficulties, with those who are victims of bullying reporting more diffciultyon measures of psychological functioning, lower mental wellbeing and self-esteem, and higher scores of anxiety and depression (Chang et al., 2013; Ringdal et al., 2020; Rothon et al., 2011; Skrzypiec et al., 2012). Bullying victimisation and school belonging have shown a negative relationship, with school belonging accounting for variation in victimisation, belonging acting as a potential buffer against negative outcomes associated with bullying, and school belonging being impacted by types of bullying (Goldweber et al., 2013; Li et al., 2020; O'Brennan & Furlong, 2010).

Despite the importance of a sense of belonging and feeling known and valued by one's

school setting (Goodenow & Grady, 1993) the number of young people reporting they feel they

belong at school is as low as 38% in some European countries (Peña-López, 2019), demonstrating

that there is a sizeable amount of young people who may need support in this area.

Whilst belonging is important across different demographic groups (Wingspread, 2004) it

may be especially important for vulnerable pupils and those from disadvantaged backgrounds (Peña-

López, 2019; Sanders & Munford, 2016). Schools can play an important role in the experiences of

vulnerable young people, who can often report that they do not feel they 'fit in' or that they feel

different from other students (Sanders & Munford, 2016). Sanders and Munford (2016) found that

young people with difficult home lives did not always feel understood by people at school and could

feel alienated, therefore losing motivation and feeling depressed and disengaged. School is

considered the second most important setting, after home (Allen & Kern, 2019) and can therefore

provide a secure base and sense of belonging to support resilience in vulnerable young people who

are experiencing difficulties at home (Gilligan, 2000). Relating back to the work of Bowlby and the

need for safe relationships and a secure base, Gilligan (2000) acknowledges that although it may not

be the most ideal situation, school can provide opportunities to build key relationships when early,

strong attachments have not been formed at home. School can provide a place of structure and

security, provide supportive relationships and networks, and provide opportunities for success

(Gilligan, 2000).

Looked after children

Whilst research has shown long term associations between school belonging and mental

health outcomes for young people who have experienced early adversity (Gunnarsdóttir et al., 2021;

Markowitz, 2017), looked after children, as a particularly vulnerable group, are not represented

within the contemporaneous or long-term research on school belonging. Research by Gunnarsdóttir

et al. (2021) and Markowitz (2017) focussed on young people in Sweden and the USA who have

experienced adversities such as parental loss, unemployment or illness, or exposure to substance

misuse, maltreatment, or violence. Whilst the sample sizes were large, looked after children were

not specifically included and the impact of school belonging was measured using shortened

measures, with depression as the only wellbeing outcome included. Considering the potential

importance of the school setting for vulnerable young people, a sense of belonging at school for

looked after children is an important avenue for exploration.

Children and young people up to the age of 18 are defined as 'looked after' if they have been

in the care of the local authority for more than 24 hours, or if they are subject to a care or placement

order (Children Act, 1989). In 2021 there were 80,850 looked after children in the UK including 2780

adopted and 4070 unaccompanied asylum-seeking children (Department for Education, 2021a)

Whilst this represents a 1% increase from the previous year, the numbers of looked after children in

the UK have been increasing year on year since 2010 (NSPCC, 2019). These young people are

considered a particularly vulnerable group with 56% having a special educational need compared to

15% of all children, most commonly relating to social, emotional, and mental health needs

(Department for Education [DfE], 2021b). Looked after young people mostly report that they enjoy

school (Social exclusion unit, 2003), however they are likely to experience additional barriers to their

education including regular school moves, time without a school placement, and an increased

number of fixed term exclusions (Maclean & Gunion, 2003; Social exclusion unit, 2003).

Although being in care is a risk factor for negative long term outcomes (Jones et al., 2011),

this may not be predictive of itself and young people are likely to have experienced other influential

risk factors such as previous poor school attendance, family breakdown, maltreatment, or low socio-

economic status before coming into care (Berridge, 2007; Maclean & Gunion, 2003). These factors

contribute to lower academic achievement for young people across all ages (Department for

Education, 2021b; Department for Education and Skills, 2005; Social Exclusion Unit, 2003) and long-

term risks of negative outcomes such as rough-sleeping, teenage pregnancy, and fewer

opportunities for education and employment (Rubin et al, 2007; Social Exclusion Unit, 2003).

Although there is diversity within the population there are also concerns for higher mental

health difficulties for looked after children, with risk factors before coming into care contributing to

the likelihood of around half meeting the criteria for a psychiatric disorder (Ford et al., 2007; Luke et

al., 2018). In addition, early neglect and maltreatment which young people may have experienced

can have long-term effects on mental wellbeing (McCrory & Viding, 2015). Placement stability and

type of placement have been shown to impact on the possibility of negative outcomes, with

placement moves likely to cause increased stress and to impact on young people's self-perception

(O'Sullivan & Westerman, 2007), and foster care placements seeing lower rates of adverse outcomes

compared to residential settings (Meltzer et al., 2003). Although foster placements show more

promising outcomes than residential settings, carers and teachers report that young people recently

placed in foster care experience significantly more aggressive behaviours and externalising problems

than the general population of young people (Fernandez, 2008). Looked after children can also

experience increased diffciulties with friendships and peer relationships, which are associated with

negative behaviour and increased mental health problems (Anderton, 2009).

McCrory and Viding (2015) highlight the importance of preventative approaches for young

people who have experienced adversity, focussing on intervening before mental health difficulties

present rather than responding to difficulties that arise. As school belonging is related to positive

outcomes across domains and school support can be protective of negative mental health outcomes

for vulnerable young people (Yule et al., 2019), school belonging may provide one such avenue for

promotion of positive mental wellbeing.

The Current Study

Belonging is a fundamental need and feelings of belonging at school can have positive outcomes across a range of variables including academic, behavioural, and mental health. As a population with a high number of risk factors, looked after children are a vulnerable population who could benefit from preventative efforts to support positive outcomes and resilience. Research into this population has largely focussed on the home care setting as supportive of positive outcomes and wellbeing (Luke et al., 2018) with close bonds, a sense of belonging at home, and stability in placement as key factors for positive outcomes (Briggs, 2018; Department of Health and Social Care and Department for Education, 2017; Jones et al., 2011). However Gilligan (1997) highlights the importance of focussing on the broader context of young people's lives including school experiences, friendships, and hobbies. School is an important place for looked after children, with young people feeling isolated or unhappy at school experiencing consequences within their placement and within academic and social outcomes (Jackson & Höjer, 2013).

The importance of school belonging has not yet been researched for the specific population that is looked after children, however, related research suggests it may be an important avenue for exploration. The current study aims to fill this gap within the research field and explore school belonging and related mental wellbeing outcomes for looked after children. Within the current study the inclusion of friendships and bullying will allow for more detailed analysis of how the experiences of looked after children differ from those who have not experienced care, and how school belonging, bullying, and peer support, relate to mental wellbeing outcomes.

Hypotheses

Based on previous research the following hypotheses were formed:

Hypothesis 1: Looked after young people will report lower school belonging than non-looked after young people.

Hypothesis 2: Looked after young people will report lower scores on positive indicators of wellbeing (life satisfaction, self-esteem, positive affect, friendship quality) and higher scores on negative indicators of wellbeing (bullying experiences, negative affect, mental health problems).

Hypothesis 3: Across both groups school belonging will be positively associated with positive indicators of wellbeing and negatively with negative indicators of wellbeing.

Hypothesis 4: Care status will moderate the relationship between school belonging and wellbeing.

Hypothesis 5: Bullying vicitimation will be associated with lower school belonging for both groups.

Hypothesis 6: Peers, student-teacher relationships, and general school atmosphere will help young people to feel a sense of school belonging (qualitative data).

3.2 Method

Participants

Following recruitment through three virtual schools, one secondary school, and a post-16 setting, 64 participants aged 10-19 ($M = 14.58, SD = 2.14$) took part in the study. Participants included 18 young people who live in care and 46 young people who have not experienced care, recruited to allow for matched analysis. The final sample included 17 young people who reported living in care and who had provided the appropriate consent. A matched sample of 17 young people who had not experienced care were included in the final sample, matched as closely as possible, first on age, followed by gender and ethnic group. The final sample consisted of 34 young people aged 11-17 ($M = 14.12, SD = 2.01$), of which, 21 identified as male (61.8%), 10 as female (29.4%), and three from the sample of looked after young people identified as non-binary or another gender

identification (8.8%). Further information on sample characteristics can be found in Table 3.

Throughout analysis participants will be referred to as 'LA', consisting of young people who are

looked after, and 'NLA', consisting of the matched sample.

Table 3 *Sample characteristics*

	Total		LA		NLA	
	N	%	N	%	N	%
Male	21	61.8%	11	32.4%	10	29.4%
Female	10	29.4%	3	8.8%	7	20.6%
Non-binary or Other	3	8.8%	3	8.8%	-	-
Prefer not to say	-	-	-	-	-	-
White English	23	67.7%	11	32.4%	12	35.3%
White Irish	-	-	-	-	-	-
White Gypsy or Irish Traveller	1	2.9%	1	2.9%	-	-
White or Black Caribbean	2		1	2.9%	1	2.9%
White and Asian	1	2.9%	-	-	1	2.9%
Other Mixed or Multiple ethnicity	2	5.8%	1	2.9%	1	2.9%
Indian	1	2.9%	1	2.9%	-	-
Pakistan	-	-	-	-	-	-
Bangladesh	1	2.9%	-	-	1	2.9%
Caribbean	1	2.9%	1	2.9%	-	-
Other Black, African, or Caribbean	1	2.9%	-	-	1	2.9%
Prefer not to say	1	2.9%	1	2.9%	-	-

Procedure

Research was carried out using an online survey on the platform Qualtrics (2022) which

gathered information on participants' age, gender, ethnicity, and who they lived with. In order to

engage participants in the planning stages of the study, the researcher attended one virtual meeting

with looked after children, arranged by a Virtual School Engagement Officer. Within the meeting

young people had the opportunity to share their opinions on the research aims and the type of

questions they would like to be asked. Following feedback from the session, questions about placement, looked after status, and early experiences including adversity or maltreatment were not included.

The survey included a series of quantitative measures and one qualitative question, 'Please list up to three things which help you feel like you belong at school'. Following ethical approval from The University of Southampton ethics committee, Virtual School head teachers were contacted to act as gatekeepers and provided with information on how to gain consent for young people. Study adverts were provided to the Virtual Schools for use on social media and within newsletters and other communications. The researcher attended one virtual youth group run by a Virtual School, to inform young people about the study and how to get involved. Due to the anonymity of the research the researcher had no further direct contact with young people interested in taking part and information about how to take part in the online survey was shared by the Virtual School gatekeeper. Participants who chose to take part liaised with staff at the virtual school, who obtained consent from the relevant adult (e.g., parents or legal guardians). Consent and assent were confirmed at the beginning of the survey. Following an initial wave of recruitment of looked after children, secondary school and post-16 settings were contacted. School gatekeepers recruited participants through opt-out consent forms and information sheets sent home for young people and their parents. Opt-out consent was deemed appropriate for participants recruited from school settings due to the limited risk inherent in taking part in the study, and a requirement for young people to provide assent at the start of the online survey. Online questionnaires were distributed by school staff and confirmation of consent was given at the start of the survey. Participants over the age of 16 were able to provide consent for themselves. Participants could complete the survey in any setting. All participants were sent a £10 voucher if they chose to leave an email address on a separate survey link.

Measures

School belonging

To assess school belonging, the Psychological Sense of School Membership scale was used (PSSM; Goodenow, 1993a). It consists of 18 items measuring school belonging. Items including 'people at this school are friendly to me' and 'I can really be myself at school' are rated on a 5-point scale from 1 – not at all true, to 5 – completely true, with five negatively worded items. The PSSM has shown good construct validity and internal consistency (Goodenow, 1993b). Cronbach's alpha within the current study was .91.

Mental health

To assess mental health, the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) was used. It is a 25-item measure which is made up of five subscales: emotional symptoms, peer problems, conduct problems, hyperactivity, and prosocial activities. The overall score for the SDQ is calculated using 20 items, with the prosocial subscale scored separately using the remaining five items. All items are rated on a 3-point scale from *Not true* to *Certainly true*. Scores can also be calculated for externalising behaviour by combining the conduct and hyperactivity subscale, and for internalising problems by combining the emotional and peer subscales. Within the current study the child self-report version of the SDQ was used as a measure of psychological functioning and wellbeing. Previous studies have reported internal reliability scores between .74 and .85, and acceptable convergent validity (Shochet et al., 2006; Van Roy et al. 2008). The current study found a Cronbach's alpha for the total SDQ of .68. Cronbach's alpha for the externalising subscale was .72 and was .69 for the prosocial subscale. Cronbach's alpha for the internalising subscale was low at .57 and could not be raised above .7 with the deletion of individual items. Although contained within results tables, the internalising subscale will not be taken into account when considering relationships between variables.

Self-Esteem

Self- esteem was assessed with the Rosenberg (1965) self-esteem scale which includes 10 items answered using a 4-point Likert scale which runs from *strongly agree* to *strongly disagree*. For the current study item scores for five items such as 'I feel that I have a number of good qualities' and 'I take a positive attitude towards myself' were reverse scored during analysis so that a higher score was indicative of higher self-esteem. In previous research the Rosenberg self-esteem scale has shown good convergent validity, adequate discriminant validity (Sinclair et al., 2010), and high internal reliability (Cronbach's alpha .85-.91; Washburn, 2009; Perry & Lavins-Merillat, 2018) with a Cronbach's alpha of .92 for the current study.

Peer Relationships

The Patient-Reported Outcomes Measurement Information System (PROMIS) peer relationships short form (DeWalt et al., 2013) was used to assess peer relationship quality. It is an eight item self-report measure where young people indicate the extent they have felt that each statement has applied to them over the last seven days. Responses are given on a five-point Likert scale which ranges from 1 – *Never*, to 5 - *Almost Always*. Items include statements such as 'In the past 7 days… I was able to count on my friends' and '…Other kids wanted to be with me'. Cronbach's alpha for the current study was .89.

Positive and Negative Affect

The Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988) is a 20 items measure made up of two subscales for positive and negative affect, each measured by 10 items. On a 5-point Likert scale from 'very slightly or not at all' to 'Extremely' respondents mark how they generally feel in response to words such as 'Interested', 'Upset', and 'Proud'. The two scales have demonstrated good convergent and concurrent validity and high internal consistency (.84-.90) and

test-retest reliability (.79-.81) (Watson et al., 1988). The Cronbach's alpha for the current study

was .85 for positive affect and .84 for negative affect.

Satisfaction With Life

The Satisfaction with Life Scale (Diener et al., 1985) consists of five items rated on a 7-point

scale from strongly agree to strongly disagree. The scale has been adapted for children to include

five items with similar language, rated on a 5- point scale from 'disagree a lot' to 'agree a lot'

(Gadermann et al., 2012). Examples of the adapted wording include changing the statement 'in most

ways my life is close to my ideal' to 'in most ways my life is close to the way I would want it to be',

and changing 'I am satisfied with my life' to 'I am happy with my life'. Whilst the original scale has

demonstrated good validity and reliability (Diener et al., 1985) the adapted version has also shown

to have good psychometric properties including high internal consistency (.86) and convergent and

discriminant validity (Gadermann et al., 2012). Cronbach's alpha for the current study was .72.

Bullying victimisation

The Olweus (1996) questionnaire was used to assess bullying victimisation. It is made up of

two parts which ask young people to report on their experiences of being bullied, and their bullying

of others. The measure includes 39 items exploring the frequency, longevity, location, and type of

bullying, and the response from adults, and has shown good reliability across the two subscales

(Cronbach's alpha .85-.87) (Gaete et al., 2021). For the current study 13 items were used to explore

participants' experiences of being bullied. This included ten subscale items exploring the frequency

of each type of bullying, for example 'I was threatened or forced to do things I didn't want to do'. In

addition, three items measured frequency and longevity of bullying, and who it was carried out by,

for example 'How often have you been bullied at school in the past couple of months?'. This

question on frequency of bullying, and the ten subscale items on type of bullying were rated on a 5-

point scale with the following options: *it hasn't happened to me in the past couple of months, only once or twice, 2 or 3 times a month, about once a week, and several times a week*. The question 'By how many students have you usually been bullied?' was rated on a 6-point scale from *I haven't been bullied in the past couple of months* to *by several different students or groups of students.* 'How long has the bullying lasted?' was rated on a 6-point scale from *I haven't been bullied…* to *it has gone on for several years*. Cronbach's alpha for the 10-item scale included within the current study was .83.

Statistical Procedure

SPSS statistics 26 was used for analysis of data. Shapiro-Wilk normality testing highlighted that total scale scores for at least one of the groups on the prosocial subscale, externalising subscale, PROMIS, and bullying did not meet assumptions for normality. Three of these scales also demonstrated high skew or kurtosis for at least one of the subgroups. Following the identification of outliers in the externalising and PROMIS subgroups these were adjusted using Windsorizing. Following this, normality assumptions were still not met.

To test hypotheses 1 and 2, t-or Mann-Whitney U tests were conducted depending on whether or not assumptions for normality were met.

To test hypothesis 3, Spearman's correlations were used to analyse the associations between school belonging and wellbeing indicators, across all participants and each subgroup.

Based on the results from group comparisons and correlational analyses, potential moderators were selected to test hypothesis 4. Moderation analyses with bootstrapped confidence intervals (5000 bootstraps) were carried out using SPSS PROCESS (Hayes, 2022).

Means and standard deviations for each gender group can be seen in Table 4. Comparison of group means between males and females revealed no significant differences between groups on any measure. Groups were matched as closely as possible on gender, however, due to the available

sample not all participants could be matched. Three LA participants reported their gender as non-binary or a gender other than male or female and within the NLA group only male and female genders were reported. Due to the small sample comparison between non-binary/other participants and male/female participants was not carried out. Group means indicated that those who reported their gender as non-binary or other had lower mean scores on school belonging and peer relations, and higher mean scores on the SDQ and bullying.

Table 4 *Means and Standard Deviations by Gender*

	Male		Female		Other	
	Mean	SD	Mean	SD	Mean	SD
Belonging	68.143	13.078	61.5	12.002	55.333	15.503
Prosocial	7.421	2.090	6.800	1.549	7.333	2.309
SDQ	12.895	4.642	14.3	4.296	16.667	8.021
Internalising	5.158	2.774	6.8	2.53	9	4
Externalising	7.737	3.724	7.5	2.838	7.667	4.041
LS	17.143	3.877	17.4	4.502	18.333	3.215
PosAff	32.842	6.526	29.3	8.858	25.333	7.095
NegAff	18.579	5.541	22.7	9.65	18.333	6.423
PROMIS	30.529	4.977	31.1	5.043	23.333	3.215
SE	28.94	5.367	25.8	6.795	23.67	10.263
Bullying	3.235	4.309	5.7	7.79	10	4.359

Note. LS = Life satisfaction, PosAff = Positive affect, NegAff = Negative affect.

3.3 Results

Descriptive statistics and overall intercorrelations

Means, medians, and standard deviations for each measure, split by group, can be seen in Table 5. Due to incomplete responses from two LA young people only the measures of school belonging and life satisfaction were completed by all participants. Where a measure was not complete, scores from the matched participants were removed on the same measure. The total number of responses included for each measure can be seen in Table 5. Scores on school belonging

and life satisfaction from those who left the survey fell within one standard deviation of the mean

for LA young people.

Table 5 *Means, Medians, and Standard Deviations by Group*

	Group	N	Median	Mean	SD
Belonging	LA	17	63	63.82	12.29
	NLA	17	67	66.29	14.45
Prosocial	LA	16	8.5	7.63	2.13
	NLA	16	7	6.81	1.64
Internalising	LA	16	6	6.13	3.69
	NLA	16	5.5	5.94	2.17
Total SDQ	LA	16	14.5	13.44	5.59
	NLA	16	13.5	13.94	4.12
Externalising	LA	16	7	7.31	2.50
	NLA	16	6	8.00	4.15
Life satisfaction	LA	17	16	16.12	4.50
	NLA	17	18	18.53	2.90
Positive affect	LA	16	32	30.19	7.54
	NLA	16	30	31.88	7.69
Negative affect	LA	16	18	18.81	6.02
	NLA	16	20	20.88	8.22
PROMIS	LA	15	28	27.73	4.62
	NLA	15	32	32.80	5.23
Self-esteem	LA	15	22	27.74	7.60
	NLA	15	24	27.00	5.22
Bullying	LA	15	5	7.00	7.12
	NLA	15	2	2.47	3.25

Hypothesis 1: Looked after young people will report lower school belonging than non-looked after young people.

As assumptions of normality were met, an independent samples t-test was carried out to examine differences between groups on school belonging. No significant difference was found between LA and NLA young people on school belonging scores, $t(32) = -.537, p = .595$.

Hypothesis 2: Looked after young people will report lower scores on positive indicators of wellbeing (life satisfaction, self-esteem, positive affect, friendship quality) and higher scores on negative indicators of wellbeing (bullying experiences, negative affect, mental health problems).

No significant difference was found between LA and NLA young people for the prosocial subscale, externalising subscale, or bullying. Mann-Whitney U analysis, included in Table 6, indicated that scores on peer relationships were higher for NLA (*Mdn* = 32) than LA (*Mdn* = 28), $U = 175.5, p = .008$, with a medium to large effect size ($r = .479$).

Table 6 *Mann Whitney U Analysis of Group Differences*

	Mann-Whitney U	Standard error	Standardized test statistic	p-value	Effect size (r)
Prosocial	95.500	26.200	-1.240	.224	-.219
Externalising	126.500	26.313	-.057	.956	-.01
Peer	175.5	23.999	2.625	.008	.479
Bullying	82.500	23.695	-1.266	.217	-.231

An independent samples t-test was carried out on measures which met assumptions for normality. No significant differences were found between group scores on any of the remaining measures, as seen in Table 7. It should be pointed out that, while not significant, the group difference for life satisfaction showed a medium effect size of -.637 (NLA: $M = 18.53, SD = 2.9$; LA: $M = 16.12, SD = 4.5$).

Table 7 *T-test Analysis of Group Differences*

	t	df	p-value	Cohen's d
Belonging	-.537	32	.595	-.184
SDQ	-.288	30	.775	.062
Internalising	.175	30	.862	-.102
Life satisfaction	-1.859	32	.072	-.637
Positive affect	-.627	30	.536	-.222
Negative affect	-.809	30	.425	-.286
Self-esteem	-.308	28	.760	-.112

In analysing the number of participants in each group who meet the cut off scores for the SDQ, showing slightly raised (15-17), high (18-19), or very high scores (20-40; EHCAP, 2014), Chi-

squared analysis demonstrated no significant differences between groups, $X^2(1,32) = 0.476, p >$

.05. Four young people in the NLA group were categorised as having slightly raised scores, and two

had high or very high scores. Within the LA group, six young people had slightly raised scores, and

two had very high scores.

Hypothesis 3: Across both groups school belonging will be positively associated with positive

indicators of wellbeing and negatively with negative indicators of wellbeing.

Bivariate (Spearman's) correlations for the whole sample can be seen in Table 8 and

demonstrate that belonging significantly correlates with the SDQ, SDQ prosocial subscale, positive

and negative affect, self-esteem, and bullying in the expected direction. While not reaching

significance, school belonging correlated to life satisfaction and peer relationships with a medium

effect size.

Table 8 *Whole Sample Spearman's Correlations*

	Belonging	Prosocial	SDQ	Int	Ext	LS	PosA	NegA	Peer	SE	Bull
Belonging	-										
Prosocial	.572**	-									
Total SDQ	-.558**	-.353*	-								
Int	-.606**	-.079	.663**	-							
Ext	-.258	-.363*	.823**	.214	-						
LS	.319	.412*	-.236	-.077	-.332	-					
PosAff	.381*	.279	-.419*	-.229	-.361*	.506**	-				
NegAff	-.389*	-.205	.565**	.666**	.345	-.175	-.175	-			
Peer	.342	.108	.007	-.169	.143	.196	.356	.067	-		
SE	.525**	.401*	-.459**	-.505**	-.302	.425*	.621**	-.565**	.379*	-	
Bullying	-.489**	-.027	.419*	.572**	.156	.054	-.017	.328	-.300	.122	-

Note. Prosocial = SDQ prosocial subscale, Int = SDQ internalising subscale, Ext = SDQ externalising

subscale, LS = life satisfaction, PosAff/PosA = positive affect, NegAff/NegA = negative affect, Peer =

*peer relationships (PROMIS), SE = self-esteem. Significance levels: ** p < .001, * p < .05.*

Following analysis of group differences, intercorrelations were carried out for each

subgroup, as seen in Table 9. Significant correlations remained for both groups on the total SDQ and

prosocial subscale. Results for both groups showed medium effect size for the relationship between

school belonging and negative affect, positive affect, and peer relationships. There was a medium to

large effect size for the relationships between school belonging and self-esteem for LA young people

($r = .449$) with this relationship reaching significance for NLA ($r = .638, p < .05$).

Table 9 *Spearman's Correlations by Subgroup*

	Bel	Peer	Bullying	Prosocial	SDQ	Int	Ext	LS	PosA	NegA	SE
Belonging	-	.373	-.608*	.620*	-.617*	-.640**	-.509*	-.002	.355	-.431	.449
Peer	.395	-	-.341	.347	-.115	-.061	-.109	.094	.522*	-.070	.561*
Bullying	-.271	.178	-	-.209	.491	.423	.428	.052	-.373	.349	-.337
Prosocial	.616*	.247	-.078	-	-.287	-.197	-.432	.497*	.226	-.202	.444
Total SDQ	-.530*	-.031	.164	-.527*	-	.910**	.871**	-.269	-.452	.832**	-.494
Int	-.614*	-.278	.472	-.123	.302	-	.642**	-.038	-.301	.713**	-.362
Ext	-.115	.329	-.138	-.364	.804**	-.197	-	-.549*	-.535*	.752**	-.553*
LS	.621**	.203	-.108	.498*	-.226	-.110	-.085	-	.508*	-.172	.408
PosAff	.360	.358	.290	.166	-.285	.000	-.179	.486	-	-.244	.718**
NegAff	-.396	.031	.204	-.266	.320	.636**	.098	-.299	-.079	-	-.445
SE	.638*	.459	-.080	.266	-.362	-.708**	-.012	.450	.471	-.684**	-

Note. Correlations for the LA group are above the diagonal and correlations for NLA below the

diagonal. Prosocial = SDQ prosocial subscale, Int = SDQ internalising subscale, Ext = SDQ externalising

subscale, LS = life satisfaction, PosAff/PosA = positive affect, NegAff/NegA = negative affect, Peer =

peer relationships (PROMIS), SE = self-esteem. Significance levels: ** p < .001, * p < .05.

During analysis for hypothesis one, groups significantly differed on peer relationships,

however, a non-significant but similar relationship was found for both groups in the association

between school belonging and peer relationships. Scores were placed on a scatter plot to provide a

visual representation of the relationship for both groups (Figure 3). Results demonstrate that lower

scores on peer relationships have the same impact on school belonging for LA young people as

higher scores on peer relationships in the NLA group.

Figure 3 *Scatterplot Representing the Relationship Between School Belonging and Peer relationship by Group*
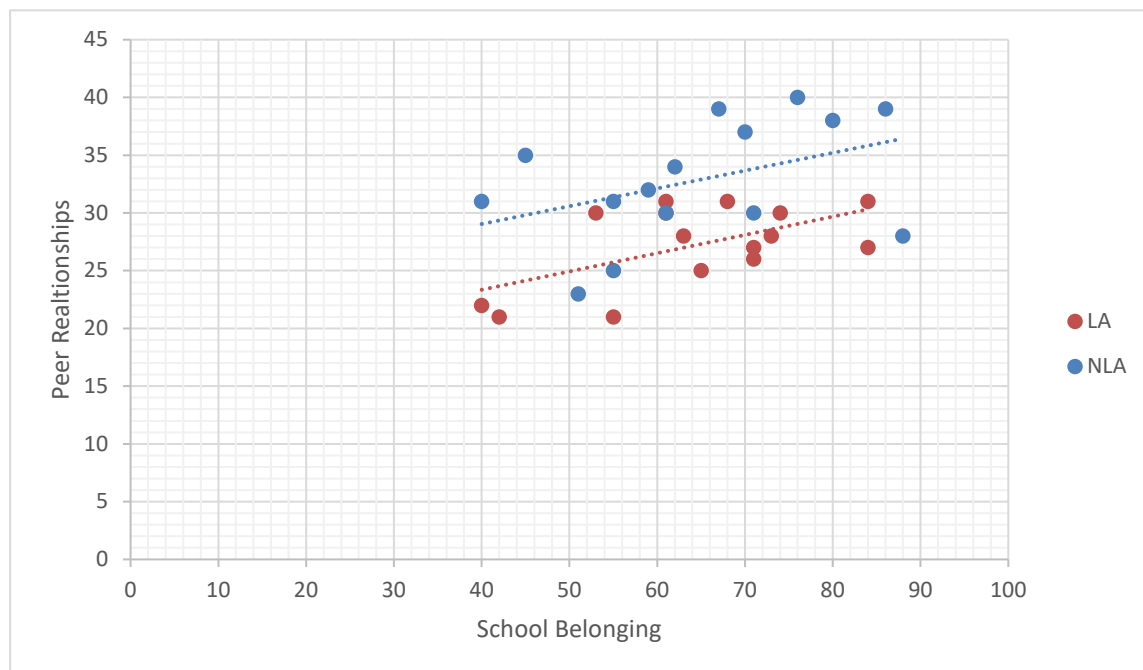
Hypothesis 4: Care status will moderate the relationship between school belonging and wellbeing.

Initial evidence from correlational analysis suggests two main differences between groups which warrant further exploration. The LA group demonstrate a relationship between school belonging and externalising symptoms ($r = -.509, p < .05$) which is not present for NLA ($r = -.115$). In addition, a relationship between school belonging and life satisfaction was evident for NLA ($r = .621, p < .05$) but showed little to no relationship for LA ($r = -.002$). To further explore these potential differences, moderation analysis was conducted using PROCESS with bootstrapped confidence intervals (5000 bootstraps). Results can be seen in Table 10. Levene's test indicated equal variances for both life satisfaction ($F = 3.047, p = .09$) and the externalising subscale ($F = 3.245, p = .08$). The relationship between school belonging (independent variable) and externalising symptoms (dependent variable) was analysed with the moderator variable as looked after status. The overall model was not significant, $R^2 = .161, F(3, 28) = 1.79, p = .173$. A second moderation model investigated school belonging (independent variable) and life satisfaction (dependent variable) as moderated by looked after status, which was also not significant, $R^2 = .198$,

$F(3,30) = 2.46, p = .082$. Scatterplots seen in Figures 3 and 4 give an indication of the

relationships between measures for both groups.

Table 10 *Moderation Analyses Between School Belonging and Externalising Symptoms and School Belonging and Life Satisfaction, Mediated by Looked After Status*

Moderation 1 – School belonging (IV), Looked after status (IVM), Externalising (DV)			
	B [BCI]	SE B	t	p-value
Constant	7.05 [4.33, 9.41]	1.28	4.806	.000
Belonging	-0.198 [-0.40, 0.02]	.107	-1.68	.104
LA status	0.20 [-1.49, 2.09]	.924	.218	.829
Interaction	0.08 [-0.06, 0.22]	.073	1.118	.273
Moderation 2 – School belonging (IV), Looked after status (IVM), Life satisfaction (DV)			
	B [BCI]	SE B	t	p-value
Constant	13.99 [9.67, 18.45]	2.296	5.516	.000
Belonging	-.02 [-0.51, 0.40]	.226	-.081	.903
LA status	2.21 [-0.21, 4.61]	1.261	1.609	.092
Interaction	0.07 [-0.15, 0.32]	.117	.536	.494

Note. Bootstrapped confidence intervals are contained in brackets [BCI]. IV = independent variable, IVM = independent variable moderator, DV = dependent variable.

Figure 4 *Scatterplot Representing the Relationship Between School Belonging and Externalising Symptoms by Group*
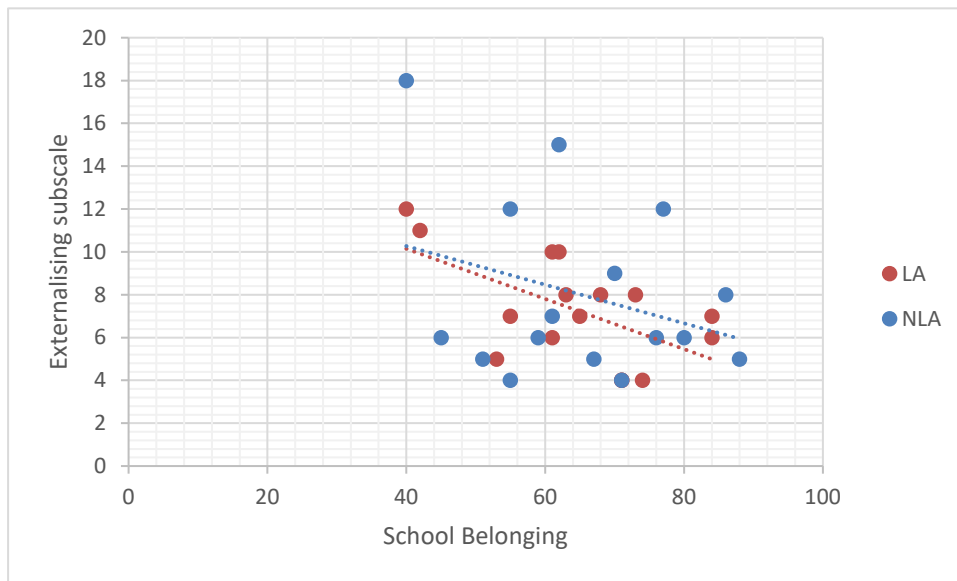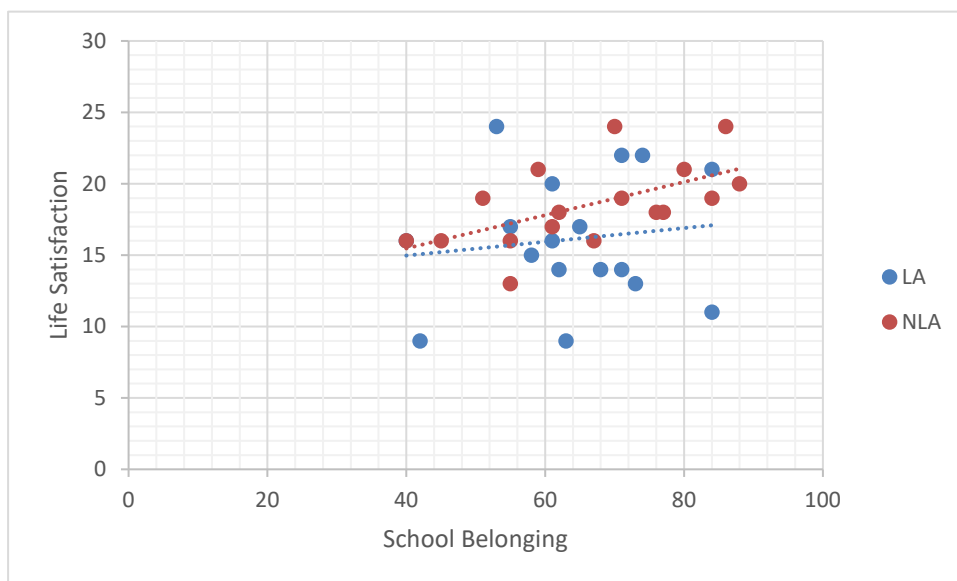

Figure 5 *Scatterplot Representing the Relationship Between School Belonging and Life Satisfaction by Group*

Hypothesis 5: Bullying vicitimation will be associated with lower school belonging for both groups

Mann Whitney U analysis indicated no significant differences between groups on the

bullying victimisation subscale (see Table 6). Frequency of bullying was analysed based on responses

to the question 'How often have you been bullied at school in the past couple of months?', The

variable was dichotomised by categorising participants into those who responded *I haven't been*

bullied (0) and those who responded that they had been bullied once or more (1). Chi-squared

analysis showed that the frequency of being bullied did significantly differ by looked after status,

with the LA group more likely than the NLA group to have been bullied, $X^2(1, 32) = 5.89, p < .05$.

Within the LA group, ten young people reported being bullied, compared to four young people who

reported being bullied in the NLA group. Descriptive results show that LA young people also

reported being bullied by more people, and for longer periods of time, as seen in Table 11.

Table 11 *Descriptive Results on Bullying Victimisation*

By how many people have you usually been bullied?					
	1	2-3	4-9	9+	Different groups
NLA	2	2	0	0	0
LA	2	3	1	0	3
How long has the bullying lasted?					
	1-2 weeks	~1 month	~6 months	~1 year	Several years
NLA	4	0	0	0	0
LA	4	2	1	2	0

When looking at correlations by group, a significant correlation was found for LA young

people between school belonging and the bullying subscale ($r = -.608, p < .05$) with large effect

size. The relationship between school belonging and bullying did not reach significance for the NLA

group but did show a medium effect size ($r = -.271$). To further explore this a moderation analysis

was conducted using PROCESS with bootstrapped confidence intervals (5000 bootstraps). The

dependent variable for analysis was bullying victimisation, the independent variable was school

belonging, and the moderator variable was looked after status. Levene's test indicated unequal

variances on bullying victimisation ($F = 10.212, p < .05$) so the moderation was adjusted for

heteroscedasticity using Davidson-Mackinnon. The overall model was statistically significant

(R^2= .474, *F*(3, 26) = 6.57, *p* = .002) and the interaction between school belonging and bullying

victimisation reached significance, $\beta = .347, 95\% \, BCI \, (0.2, 0.65), p = .002$. When young people

are looked after, there is a significant negative relationship between school belonging and bullying,

$b = -0.369, 95\% \, CI \, [-0.545, -0.194], t = -4.32, p < .001$. When young people are not looked

after, there is a non-significant negative relationship between school belonging and bullying, $b -$

$0.022, 95\% \ CI \ [-0.135, 0.091], t = -0.40, p = .09$. Results can be seen in Table 12 and Figure 5.

Table 12 *Moderation Analyses Between School Belonging and Bullying Victimisation, Mediated by Looked After Status*

Moderation 3 – School belonging (IV), Looked after status (IVM), Bullying victimisation (DV)				
	B [BCI]	SE(HC) B	t	p
Constant	11.51 [5.97, 18.1]	3.048	3.776	.001
Belonging	-0.72 [-1.3, -0.48]	.18	-3.990	.001
LA status	-4.52 [-7.99, -1.22]	1.714	-2.637	.014
Interaction	0.35 [0.2, 0.65]	.102	3.419	.002

Note. Bootstrapped confidence intervals are contained in brackets [BCI]. IV = independent variable,

IVM = independent variable moderator, DV = dependent variable.

Figure 6 *Scatterplot Representing the Relationship Between School Belonging and Bullying Victimisation by Group*
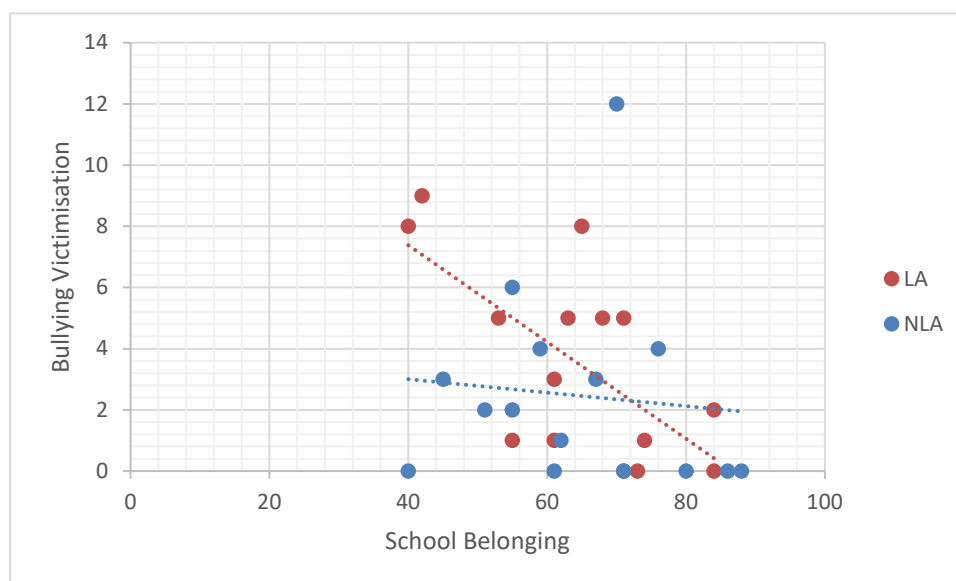
Hypothesis 6: Peers, student-teacher relationships, and general school atmosphere will help young

people to feel a sense of school belonging (qualitative data)

Qualitative responses were gathered from 15 LA participants and all 17 NLA participants in

response to the prompt 'Please list up to three things which help you to feel like you belong at

school'. Responses have been split into categories which can be seen in Table 13. The most common

response across groups was related to friends. Fifteen participants wrote friends or friendships as

their response with some participants expanding on this to include a best friend, a relationship

partner, and a good group of friends. One LA participant wrote that 'mates who say they are there

for you' is a key factor, and another NLA participant described their friends as 'incredible' and

'supportive'. Following on from friends, teachers and school staff were the next most common

answer, from nine young people across the two groups. Whilst most responses were 'teachers', two

LA young people also wrote about other school staff, including a mentor for looked after children.

Nine young people left responses which related to personal factors including the kind of person that

they are, their mindset, their achievements, and feeling appreciated and respected. The wider peer

group and school community was included as important for eight young people across groups who

left responses relating to good classmates or peers, a mix of people, a community, and being treated

the same as others. Being involved in clubs and activities at school was also seen as supporting

school belonging for eight young people. Communication was a key factor for five young people and

four young people reported factors relating to the broader school context such as a welcoming

atmosphere, education, and a good school day.

Table 13 *Qualitative Responses to the Prompt 'Please list up to three things which help you to feel like you belong at school'*

Category	LA	NLA	LA responses	NLA responses
Friends	8	12	Friends (5). My best friend. A good friend group. My mates always saying they're there for me if I need help. Hanging out with people who like me. My boyfriend.	Friends (10). Girlfriend. All of my incredible and supportive friends. Friendships.
Teachers/staff	4	5	Nice teachers. Teachers being proud of me. My teachers understand if I'm struggling in class or if I have to leave class. Teacher. Kind staff. LAC mentor.	Teachers (3). Good teacher. Some teachers I have.

Peer group/ wider school community	4	3	Good classmates. More mix people. Treated the same as others and not single out. Peers.	If there weren't mean people. Community. People that smile at me while walking.
Personal factors	4	5	I try hard. I am kind and helpful. I am me. Be appreciated. More able to express yourself. Not being taken out of class for social services/foster care reasons.	Getting a good school report. Getting rewarded for my good behaviour. Getting house points. Responsibility. Not being forced to do things you don't want to do. Mindset.
Clubs and activities	5	3	Clubs. Take part in activities. Football team. After school clubs and practicals. Rugby. Dodgeball at lunch time. Being head boy.	Doing sports for the school. Sport. Drama. Sports.
Communication	2	3	Communicate with me. People going out of their way to talk to me.	Praise. Communication. Encouragement. More communication with students, not just last minute.
School factors	1	3	Welcoming atmosphere.	Education. GCSEs. A good school day.

3.4 Discussion

The need to form meaningful and positive relationships has been recognised across theories

relating to human needs and motivation (Bowlby, 1969; Maslow, 1965; Ryan & Deci, 2000). The

belonging hypothesis extended this to suggest that individuals have an inherent drive to form good

quality, lasting relationships (Baumeister & Leary, 1995). In particular, a sense of belonging at school

has been associated with a number of positive outcomes across education and health (Allen et al.,

2021; Goodenow, 1993b; Loukas et al., 2010). Considering the importance of school belonging, the

additional risk factors which looked after young people might face, and the paucity of research with

this sample, the study explored six hypotheses. Differences across groups were explored followed by

analysis of associations between school belonging, peer relationships, and mental wellbeing outcomes. Based on initial results, moderation analysis was used to further explore the relationship between school belonging and life satisfaction, externalising behaviour, and bullying victimisation. Finally, qualitative data allowed for the examination of factors which impact school belonging across both groups.

Considering the study population as a whole, high school belonging was significantly negatively related to poor mental health outcomes including total SDQ scores and negative affect. School belonging was also positively related to measures of wellbeing including the SDQ prosocial subscale and positive affect. This is consistent with previous research which has suggested that high school belonging relates to increased positive affect and decreased negative affect (Vera et al., 2021), and that high school belonging is related to fewer mental health difficulties (Vaz et al., 2014). Whilst the relationship between school belonging, positive affect, and negative affect did not reach significance when results were split by group, effect sizes suggest that belonging is related to these factors for both groups.

When looking at the data by group, the relationship between school belonging and mental health outcomes remained for both groups, as measured by the total SDQ and prosocial subscales. The current study was not able to explore the direction of relationships due to its cross-sectional design; however, previous researchers suggest that school belonging has a long-term impact on overall mental health, including depression and anxiety (Shochet et al., 2006). There were observed differences between groups, with looked after children showing a strong negative relationship between school belonging and externalising symptoms, which was not present for young people who have not experienced care. Comparison of groups showed no significant differences on measures of school belonging or externalising symptoms despite previous research suggesting that looked after children or those with difficult home lives are at higher risk of psychiatric disorder and externalising problems (Goodman et al., 2004; Luke et al., 2018; Papachristou et al., 2020).

Moderation analysis to explore the relationship between school belonging and externalising scores revealed that looked after status does not significantly moderate the relationship between variables.

Moderation analysis was also conducted for the relationship between school belonging and life satisfaction, moderated by looked after status. School belonging has previously been related to life satisfaction (Özkan & Evren, 2020) with a directional relationship suggested between adolescents' school belonging and life satisfaction less than one year later (Arslan et al., 2020). Within the current study differences between groups on life satisfaction scores showed a medium effect size, despite not reaching significance which was likely due to issues with power. Life satisfaction was also significantly related to belonging for young people who had not experienced care and showed no relationship for those in care. Despite these findings, the relationship between school belonging and life satisfaction was not found to be moderated by looked after status. Whilst subjective wellbeing for all young people is influenced by a range of factors including: relationships; home, school, and neighbourhood environments; and safety and choice (Rees et al., 2010), life experiences outside of school may be particularly influential for children in care. For looked after children placement stability and close bonds with caregivers can impact mental health outcomes (Briggs, 2018; Jones et al., 2011) however the influences on subjective wellbeing may be far more complex. Discussing impacts on their subjective wellbeing within focus groups, 140 looked after children shared factors important to them including relationships with social workers and carers, trusting relationships, feeling trusted, having choice in decisions, and being informed (Wood & Selwyn, 2017). Family and friends were of key importance, and this included having appropriate contact arrangements to see siblings and parents. Considering the additional adverse experiences young people in care may have faced (Berridge, 2007), and the factors which are influencing their overall wellbeing, this evidence might suggest an explanation for the differences seen in life satisfaction and its relation to school belonging between groups.

Another area where groups differed is in the relationship between bullying and school belonging, with these two variables relating significantly, with a medium effect size, for looked after young people. Looked after young people reported increased levels of bullying including higher frequency, longer duration, and by more people. This is contrary to previous findings from 50 looked after children which suggested bullying rates were around 30%, similar to national figures for all children (Rao & Simkiss, 2007). Whilst being looked after may not be a contributing factor to being bullied (Maclean & Gunion, 2003), 67% of looked after children within the current study had experienced bullying in the last few months, compared with 20% of the matched group. Moderation analysis revealed a significant interaction effect between school belonging and looked after status, with a strong relationship present for looked after young people between school belonging and bullying. This finding warrants particular attention as bullied young people can experience long term negative outcomes associated with behaviour, social relationships, and mental health (Arseneault, 2017; Wolke et al., 2013). School belonging has been found to act as a mediator between bullying and mental health outcomes (Li et al., 2020) and therefore the interaction between school belonging and bullying is an important one, especially for vulnerable young people.

Considering the qualitative results, friends were reported, most commonly, by both groups as helping young people to feel they belong at school. School staff and the wider school community were also highlighted as important, including access to clubs, an accepting peer group, and the school atmosphere. Consistent with the idea that a sense of belonging is a subjective feeling and not something objectively measurable (Goodenow, 1993b), several of the young people talked about characteristics that they themselves hold which help them feel they belong. This included being kind and helpful to others, being themselves, being successful, and being appreciated. Whilst most qualitative factors were of roughly equal importance to both groups, friends were mentioned less regularly by looked after children. This is reflective of the quantitative results as peer relationship scores were significantly lower for looked after children. Despite this, the relationship between peer relationships and belonging was similar for both groups, with a medium effect size. Peer

relationships are a key aspect across belonging definitions (Allen et al., 2021; Libbey, 2004) and looked after children can experience increased diffciulties with friendships and peer relationships (Anderton, 2009). However, promising findings from the current study suggest that looked after children can experience the same sense of school belonging as non-looked after young people, despite having worse quality peer relationships.

In contrast, looked after children who experienced high levels of bullying reported lower school belonging scores, which was not the case for children who have not experienced care. Whilst the evidence is not directional, the impact of bullying and school belonging on one another appears far greater for looked after children. This might suggest that school belonging can protect against bullying but could also suggest that high school belonging does not just come from positive relationships with teachers and peers and an inclusive school environment (Goodenow, 1993b; Libbey, 2004), but also the absence of negative peer experiences. Whilst this is acknowledged somewhat in Baumeister and Leary's (1995) belonging hypothesis, the focus on belonging has largely been on forming significant, positive and long-lasting relationships which are free from negative affect and does not always focus on aspects which could negatively impact belonging. School belonging has been shown to moderate the negative outcomes of bullying experiences (Arslan et al., 2020), however, this buffering effect may not be present for looked after children if belonging is low when bullying is high.

Strengths and limitations

The small sample size within the current study limits the power of this research to estimate the true results for the whole population. However, this study facilitated inclusion of the experiences and views of looked after young people within research on school belonging, which was previously missing. Quantitative analysis is also rare within research with looked after young people as it can be difficult for researchers to recruit larger sample sizes, resulting in qualitative analysis being more common for this group (e.g., Sprecher et al., 2021; Stoddard et al., 2021). Young people and Virtual

Schools were engaged throughout the planning phase to ensure that the final survey was

appropriate and asked young people questions which they were comfortable answering as well as

giving them opportunities to share additional views, through the option to leave comments. Whilst

this is a strength of the current study, additional information on maltreatment, adversity, length of

time in care, or placement moves, was not sought which could have provided additional useful

information.

The results also do not provide directional information on the relationship between

variables, however, the results do fit with other evidence in this field. Whilst limited, the qualitative

results also provide additional information on factors which are important for young people in

feeling that they belong, providing them with additional voice. The self-report nature of the survey

ensures that young people's subjective views are considered, as opposed to the views of those

working with them such as social workers or carers. Looked after children highly value peer

relationships and belonging in shaping their identity whereas this is not always identified as

important by social workers (McMurray et al., 2011), highlighting the importance of self-report.

Participants within the study were matched as closely as possible, however, there were

differences between groups in gender. Participants who reported their gender as non-binary or

other were not appropriately matched due to all matched participants of the same age reporting

their gender as male or female. This is likely to have impacted on the group means for looked after

children as non-binary/other young people had lower mean scores than both male and female

participants on school belonging and peer relationships, and higher scores on bullying and the SDQ.

This is consistent with other research in which young people in the LGBTQ+ community experience

higher levels of bullying and discrimination and worse mental health (Bower-Brown et al., 2021;

Eisenberg et al., 2019; Fish, 2020), however the sample sizes did not allow for these findings to be

explored any further within the current study.

Considering that young people in care are at higher risk of mental health difficulties (Ford et al., 2007; Luke et al., 2018) it was surprising to find no significant differences between groups on the SDQ scale or subscales, suggesting potential selection effects. Within the current study those who took part were also all in the care of foster carers. Although their placement stability is unknown, foster care placements are associated with increased positive outcomes compared with residential care settings (Maclean & Gunion, 2003; Meltzer et al., 2003). That this research was not able to include the voices of those within residential care or independent living arrangement means that there is still a gap within the research in understanding the experiences of looked after children's school belonging.

Future directions

Considering the limitations of the current study discussed above, future research could focus on addressing these limitations and expanding the research to include young people who are looked after within residential or independent living settings. Following initial focus groups with looked after children, questions about their placements, home moves, or previous experiences were not included within the research. However, within future research this may be helpful to analyse the differences between individual experiences, school belonging, and mental wellbeing variables. This could be achieved through caregiver report in addition to self-report from young people. Additional research with an increased sample size would be beneficial to evaluate school belonging within the wider population. Alternatively, given that the experiences of looked after children are diverse and complex (Luke et al., 2018) more in-depth qualitative research would be useful to better understand the importance of school belonging for looked after children and to provide more detail on specific factors which help them to feel they belong at school.

Implications for practice

School belonging has been related to mental health outcomes across the research base, however currently schools report supporting those with special educational needs or existing mental health needs, over preventative efforts (Patalay et al., 2017). Despite schools being instrumental in providing early support to young people at risk of mental health difficulties (Department for Education, 2021b; Rose, 2021) full school policies and approaches are infrequent (Department for Education, 2018).

With a research base growing in support of the positive associations between school belonging and outcomes in education and health, the current research adds to the evidence base that the promotion of good school belonging should be a focus within educational settings. Information on specific interventions to increase belonging is growing (Allen et al., 2021) but remains limited (Slaten et al., 2016). However, this should not diminish our aim to increase school belonging for young people, especially for vulnerable groups. In line with definitions of belonging and the qualitative results from the current study, education settings should focus on the following aspects.

Friendships and peer relationships. This includes ensuring that young people experience positive interactions with peers and relationships that remain overtime, as consistent with the belonging hypothesis (Baumeister & Leary, 1995). For looked after children it should be considered that having supportive peer relationships *sometimes* can still lead to higher school belonging. To support peer relationships, schools can provide relationships education as part of a whole school curriculum and offer additional interventions targeting social skills, or providing peer support and mentoring (Anna Freud Centre, n.d.; DeLuca et al., 2018). Building social skills may be particularly important for young people in foster care to allow them to build and maintain high quality relationships (DeLuca et al., 2018).

Student relationships with teachers and school staff. This is considered an important aspect of belonging and includes teacher support, feeling cared about by staff, and being treated fairly by teachers (Centers for Disease Control and Prevention, 2009; Goodenow, 1993b; Resnick et al., 1997). Within the current study looked after children named teachers most highly, after friends, as supporting their school belonging, with 'understanding', 'kind' and 'proud' teachers being supportive. Looked after children have reported valuing teachers and professionals who take the time to get to know them (Sanders & Munford, 2016). In order to feel included within school, looked after children value having a key member of staff who is supportive, positive and caring (Maclean & Gunion, 2003) and who takes the time to understand their needs and personalise plans (Brodie, 2000).

The school environment. The overall school environment should give young people a voice, provide feelings of safety, and support engagement (Allen & Kern, 2019; Allen et al., 2021; Libbey, 2004). Within the current study a whole school environment supportive of belonging included a welcoming atmosphere, good classmates, a community, and not being treated differently to others. Looked after children reported the importance of being part of clubs and activities and this has been highlighted by professionals as a potential avenue for supporting looked after children to be successful in education (Coulling, 2000).

Feelings of success. Within the current study, self-esteem correlated to school belonging with a medium to large effect size for both groups, consistent with previous research which suggests self-esteem can predict later school belonging (O'Brien, 2015; Perry & Levins-Merillat, 2018). Several young people highlighted the importance of feelings of personal success as contributing to their school belonging. This included being helpful, kind, appreciated, and being given responsibility. The importance of feeling competent and having opportunities for success has been acknowledged in theories of motivation (Ryan & Deci, 2000). Opportunities for success are also considered important in the overall educational success of looked after children (Coulling, 2000). Whilst Goodenow and

Grady's (1993) definition of belonging includes feeling accepted and respected, promoting self-esteem and opportunities for success may be another important avenue for supporting school belonging in young people.

Bullying. Within the current study school belonging and bullying were related for looked after children. Similar to other minority groups such as LGBTQ+ youth and those from ethnically diverse backgrounds, those who were bullied were more likely to report they feel they do not belong (Biggart et al., 2013; Poteat, 2015). The current study highlights the importance of not just positive experiences for vulnerable young people, but the reduction of negative experiences. A range of approaches have been recommended for the prevention of and intervention in bullying with peer mentoring and buddy schemes common among schools and having a positive impact for all young people involved and in the reduction of bullying (Bishop, 2003; Tzani-Pepelasi et al., 2019). Schools implementing bullying policies and strategies for anti-bullying find that whole school approaches and school assemblies, focussed Personal Social Health and Economic Education (PSHEE), adult modelling, and restorative approaches, can be helpful in tackling bullying (Thompson & Smith, 2011). Focusing attention on ensuring those who are vulnerable feel included and are not subject to bullying may be especially important and whole-school approaches encouraging inclusion and understanding of diversity may be particularly beneficial. Resources are readily available to support schools to develop whole-school approaches to inclusion including books on celebrating difference (Dellenty, 2019), the inclusive classroom (Sobel & Alston, 2021), and the no outsiders programme (Moffat, 2020).

Conclusion

Overall, results suggest that school belonging is related to a range of mental wellbeing outcomes for both looked after children and children who have not experienced care, consistent with research involving young people who have experienced adversity (Gunnarsdóttir et al., 2021; Markowitz, 2017). Relationships between factors differed for looked after children, with lower

scores on friendships related to higher school belonging scores than for the matched group, and with bullying being of higher prevalence and far more related to school belonging. Whilst the results regarding peer relationships are encouraging, as looked after young people may need fewer peer relationships to feel the same sense of belonging, the significant relationship between bullying and belonging is an area that warrants attention. School belonging has been related to a range of mental wellbeing outcomes and therefore continues to be an important place where schools should focus their attention.

References

Abubakar, A., Van de Vijver, F. J., Alonso-Arbiol, I., Suryani, A. O., Pandia, W. S., Handani, P., ... & Murugumi, M. (2016). Assessing sense of school belonging across cultural contexts using the PSSM: Measurement and functional invariance. *Journal of Psychoeducational Assessment*, *34*(4), 380-388. https://doi.org/10.1177/0734282915607161

Akinmoju, O., Odigwe, B., Olusakin, T., Fakayode, D., Olaopa, F., Adejuwon, A., ... & Adebayo, A. (2020). School connectedness, violence-related behaviours and mental health status among in-school youth. *European Journal of Public Health*, *30* (Supplement 5)

Allen, K. A., Jamshidi, N., Berger, E., Reupert, A., Wurf, G., & May, F. (2021). Impact of school-based interventions for building school belonging in adolescence: A systematic review. *Educational Psychology Review*, 1-29. https://doi.org/10.1007/s10648-021-09621-w

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, *30*(1), 1-34. https://doi.org/10.1007/s10648-016-9389-8

Allen, K. A., Vella-Brodrick, D., & Waters, L. (2016). Fostering school belonging in secondary schools using a socio-ecological framework. *The Educational and Developmental Psychologist*, *33*(1), 97-121. https://doi.org/10.1017/edp.2016.5

Anderman, L. H. (1999). Classroom goal orientation, school belonging and social goals as predictors of students' positive and negative affect following the transition to middle school. *Journal of Research & Development in Education*.

Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of educational psychology*, *94*(4), 795. https://doi.org/10.1037/0022-0663.94.4.795

Anderton, N. (2009). *Friendship and social support of young people looked-after by their local authority* (Doctoral dissertation, University of Leicester).

Anna Freud Centre (n.d.). Peer support for children and young people's mental health and emotional wellbeing programme. Retrieved April 30, 2022, from https://www.annafreud.org/schools-and-colleges/peer-support/

Arango, A., Cole-Lewis, Y., Lindsay, R., Yeguez, C. E., Clark, M., & King, C. (2018). The protective role of connectedness on depression and suicidal ideation among bully victimized youth. *Journal of Clinical Child & Adolescent Psychology*. https://doi.org/10.1080/15374416.2018.1443456

Arseneault, L. (2017). The long-term impact of bullying victimization on mental health. *World psychiatry*, *16*(1), 27. https://doi.org/10.1002/wps.20399

Arslan, G., Allen, K. A., & Ryan, T. (2020). Exploring the impacts of school belonging on youth wellbeing and mental health among Turkish adolescents. *Child Indicators Research*, *13*(5), 1619-1635. https://doi.org/10.1007/s12187-020-09721-z

Arslan, G., & Duru, E. (2017). Initial development and validation of the School Belongingness Scale. *Child Indicators Research*, *10*(4), 1043-1058. https://doi.org/ 10.1007/s12187-016-9414-y

Arthur, M. W., Hawkins, J. D., Pollard, J. A., Catalano, R. F., & Baglioni Jr, A. J. (2002). Measuring risk and protective factors for use, delinquency, and other adolescent problem behaviors: The Communities That Care Youth Survey. *Evaluation review*, *26*(6), 575-601. https://doi.org/10.1177/0193841X0202600601

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, *117*(3), 497. https://doi.org/10.1037/0033-2909.117.3.497

Baumeister, R. F., & Leary, M. R. (2017). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Interpersonal development*, 57-89.

Bearman, P. S., Jones, J., & Udry, J. R. (1997). The national longitudinal study of adolescent health: Research design. Chapel Hill, NC: Carolina Population Center. https://doi.org/ 10.1017/thg.2012.137

Berridge, D. (2007). Theory and Explanation in Child Welfare: Education and Looked-after Children. *Child & Family Social Work*, *12*(1), 1–10. https://doi.org/10.1111/j.1365-2206.2006.00446.x

Biggart, A., O'Hare, L., & Connolly, P. (2013). A need to belong? The prevalence of experiences of belonging and exclusion in school among minority ethnic children living in the 'White hinterlands'. *Irish Educational Studies*, *32*(2), 179-195. https://doi.org/10.1080/03323315.2013.765264

Bishop, S. (2003). The development of peer support in secondary schools. *Pastoral Care in Education*, *21*(2), 27-34. https://doi.org/10.1111/1468-0122.00259

Blakemore, S. J. (2008). The social brain in adolescence. *Nature Reviews Neuroscience*, *9*(4), 267-277. https://doi.org/10.1038/nrn2353

Bodkin-Andrews, G., Craven, R. G., Marsh, H. W., & Marin, A. (2005, December). Construct validation of the self-description questionnaire II (short version) for Indigenous Australian secondary school students. In *November AARE Conference Parramatta*.

Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of adolescent health*, *40*(4), 357-e9. https://doi.org/10.1016/j.jadohealth.2006.10.013

Booker, K. C. (2006). School belonging and the African American adolescent: What do we know and where should we go?. *The High School Journal*, *89*(4), 1-7. https://doi.org/10.1353/hsj.2006.0005

Borba, M. (1989). *Esteem Builders: A K-8 Self-Esteem Curriculum for Improving Student Achievement, Behavior and School Climate*. BL Winch & Assoc./Jalmar Press, 45 Hitching Post Dr., Bldg. 2, Rolling Hills Estates, CA 90274 (ISBN-0-915190-53-2, paperback, $39.95; ISBN-0-91519088-5, spiralbound).

Bower-Brown, S., Zadeh, S., & Jadva, V. (2021). Binary-trans, non-binary and gender-questioning adolescents' experiences in UK schools. *Journal of LGBT Youth*, 1-19. https://doi.org/10.1080/19361653.2021.1873215

Bowlby, J. (1969). Attachment and loss: volume I: attachment. In *Attachment and Loss: Volume I: Attachment* (pp. 1-401). London: The Hogarth Press and the Institute of Psycho-Analysis.

Briggs, A. (2018). *Towards belonging: Negotiating new relationships for adopted children and those in care*. Routledge.

Brodie, I. (2000). Children's homes and school exclusion: Redefining the problem. *Support for Learning*, *15*(1), 25–29. https://doi.org/10.1111/1467-9604.00138

Brown, L. (2014). *Belonging and Support as Predictors of Health and Education in Black Males* (Doctoral dissertation, Walden University).

Butler, R. J., & Gasson, S. L. (2005). Self esteem/self concept scales for children and adolescents: A review. *Child and Adolescent mental health*, *10*(4), 190-201. https://doi.org/10.1111/j.1475-3588.2005.00368.x

Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. Russell Sage Foundation.

Centre for Longitudinal Studies (n. d.). *Millennium Cohort Study.* https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/

Centers for Disease Control and Prevention. (2009). School connectedness: Strategies for increasing protective factors among youth. US Department of Health and Human Services.

Chen, I. H., Gamble, J. H., & Lin, C. Y. (2021). Peer victimization's impact on adolescent school belonging, truancy, and life satisfaction: A cross-cohort international comparison. *Current Psychology*, 1-18. https://doi.org/10.1007/s12144-021-01536-7

Children Act 1989*,* c. 41. (UK). https://www.legislation.gov.uk/ukpga/1989/41

Chipuer, H. M., & Pretty, G. M. (1999). A review of the sense of community index: Current uses, factor structure, reliability, and further development. *Journal of Community psychology*, *27*(6), 643-658. https://doi.org/10.1002/(SICI)1520-6629(199911)27:6%3C643::AID-JCOP2%3E3.0.CO;2-B

Cho, S. M., & Shin, Y. M. (2013). The promotion of mental health and the prevention of mental health problems in child and adolescent. *Korean journal of pediatrics*, *56*(11), 459. https://doi.org/10.3345/kjp.2013.56.11.459

Clements-Nolle, K., & Waddington, R. (2019). Adverse childhood experiences and psychological distress in juvenile offenders: The protective influence of resilience and youth assets. *Journal of Adolescent Health*, *64*(1), 49-55. https://doi.org/ 10.1016/j.jadohealth.2018.09.025

Conley, C. S., Durlak, J. A., & Kirsch, A. C. (2015). A meta-analysis of universal mental health prevention programs for higher education students. *Prevention science*, *16*(4), 487-507. https://doi.org/10.1007/s11121-015-0543-1

Coulling, N. (2000). Definitions of Successful Education for the "Looked After" Child: a Multi-agency Perspective. *Support for Learning*, *15*(1), 30–35. https://doi.org/10.1111/1467-9604.00139

Craggs, H., & Kelly, C. (2018). Adolescents' experiences of school belonging: A qualitative meta-synthesis. *Journal of Youth Studies*, *21*(10), 1411-1425. https://doi.org/10.1080/13676261.2018.1477125

Critical Appraisal Skills Programme (2018). *CASP Cohort Study Checklist*. Retrieved January 2, 2022, from https://casp-uk.net/casp-tools-checklists/

Daley, S. C. (2019). *School connectedness and mental health in college students* (Doctoral dissertation, Miami University).

Davey, C. G., & McGorry, P. D. (2019). Early intervention for depression in young people: a blind spot in mental health care. *The Lancet Psychiatry*, *6*(3), 267-272. https://doi.org/10.1016/S2215-0366(18)30292-X

Davis, J. P., Merrin, G. J., Ingram, K. M., Espelage, D. L., Valido, A., & El Sheikh, A. J. (2019). Examining pathways between bully victimization, depression, & school belonging among early adolescents. *Journal of Child and Family Studies*, *28*(9), 2365-2378. https://doi.org/10.1007/s10826-019-01340-9

Dellenty, S. (2019). *Celebrating Difference: A whole-school approach to LGBT+ inclusion*. Bloomsbury Publishing.

DeLuca, H. K., Claxton, S. E., & van Dulmen, M. H. (2019). The peer relationships of those who have experienced adoption or foster care: A meta-analysis. *Journal of Research on Adolescence*, *29*(4), 796-813. https://doi.org/10.1111/jora.12421

Demanet, J., & Van Houtte, M. (2012). School belonging and school misconduct: The differing role of teacher and peer attachment. *Journal of youth and adolescence*, *41*(4), 499-514. https://doi.org/10.1007/s10964-011-9674-2

Department for Education (2018). Mental health and wellbeing in schools. Retrieved April 8, 2022, from https://www.gov.uk/government/publications/mental-health-and-wellbeing-provision-in-schools

Department for Education (2021a). *Children looked-after by local authorities in England.* Retrieved April 8, 2022, from https://www.gov.uk/government/publications/children-looked-after-return-2022-to-2023-guide

Department for Education (2021b). *Keeping children safe in education.* Retrieved April 8, 2022, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1021914/KCSIE_2021_September_guidance.pdf

Department of Health and Social Care and Department for Education (2017). *Transforming children and young people's mental health provision: a green paper.* Retrieved April 8, 2022, from https://www.gov.uk/government/consultations/transforming-children-and-young-peoples-mental-health-provision-a-green-paper

Devine, K. A., Willard, V. W., Hocking, M. C., Stapleton, J. L., Rotter, D., Bukowski, W. M., & Noll, R. B. (2018). PROMIS peer relationships short form: How well does self-report correlate with data from peers?. *Journal of pediatric psychology*, *43*(9), 1059-1067. https://doi.org/10.1093/jpepsy/jsy038

DeWalt, D. A., Thissen, D., Stucky, B. D., Langer, M. M., Morgan DeWitt, E., Irwin, D. E., ... & Varni, J. W. (2013). PROMIS Pediatric Peer Relationships Scale: development of a peer relationships

item bank as part of social health measurement. *Health Psychology*, *32*(10), 1093. https://doi.org/ 10.1037/a0032670

Diebel, T., Woodcock, C., Cooper, C., & Brignell, C. (2016). Establishing the effectiveness of a gratitude diary intervention on children's sense of school belonging. *Educational and Child Psychology*, *33*(2), 117-129.

Diaz, J. D. (2005). School attachment among Latino youth in rural Minnesota. *Hispanic Journal of Behavioral Sciences*, *27*(3), 300-318. https://doi.org/10.1177/0739986305276746

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological inquiry*, *9*(1), 33-37. https://doi.org/10.1207/s15327965pli0901_3

Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D. W., & Oishi, S. (2009). New measures of well-being. In *Assessing well-being* (pp. 247-266). Springer, Dordrecht. https://doi.org/10.1007/978-90-481-2354-4_12

Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International journal of wellbeing*, *2*(3). https://doi.org/10.5502/ijw.v2i3.4

Due, C., Riggs, D. W., & Augoustinos, M. (2016). Experiences of school belonging for young children with refugee backgrounds. *The Educational and Developmental Psychologist*, *33*(1), 33-53. https://doi.org/10.1017/edp.2016.9

Ebesutani, C., Bernstein, A., Martinez, J. I., Chorpita, B. F., & Weisz, J. R. (2011). The youth self report: Applicability and validity across younger and older youths. *Journal of Clinical Child & Adolescent Psychology*, *40*(2), 338-346. https://doi.org/10.1080/15374416.2011.546041

EHCAP, 2014. Scoring the Strengths & Difficulties Questionnaire for age 4-17. Retrieved November 12, 2021, from https://www.ehcap.co.uk/content/sites/ehcap/uploads/NewsDocuments/236/SDQEnglishUK4 -17scoring-1.PDF.

Eisenberg, M. E., Gower, A. L., Rider, G. N., McMorris, B. J., & Coleman, E. (2019). At the intersection of sexual orientation and gender identity: Variations in emotional distress and bullying experience in a large population-based sample of US adolescents. *Journal of LGBT youth*, *16*(3), 235-254. https://doi.org/10.1080/19361653.2019.1567435

Elmelid, A., Stickley, A., Lindblad, F., Schwab-Stone, M., Henrich, C. C., & Ruchkin, V. (2015). Depressive symptoms, anxiety and academic motivation in youth: Do schools and families

make a difference?. *Journal of adolescence*, *45*, 174-182.
https://doi.org/10.1016/j.adolescence.2015.08.003

Emond, R. (2014). Longing to Belong: Children in Residential Care and Their Experiences of Peer
Relationships at School and in the Children's Home. *Child & Family Social Work*, *19*(2), 194–
202. https://doi.org/10.1111/j.1365-2206.2012.00893.x

European Joint Action on Mental Health and Wellbeing (2013–2016). *Mental health in school.*
Retrieved May 6, 2022, from https://mentalhealthandwellbeing.eu/mental-health-and-
schools/

Evans, G. (2017). *The story of colour: an exploration of the hidden messages of the spectrum*. Michael
O'Mara Books.

Ferguson, E. D. (1989). Adler's motivational theory: An historical perspective on belonging and the
fundamental human striving. *Individual Psychology*, *45*(3), 354.

Fish, J. N. (2020). Future directions in understanding and addressing mental health among LGBTQ
youth. *Journal of Clinical Child & Adolescent Psychology*, *49*(6), 943-956.
https://doi.org/10.1080/15374416.2020.1815207

Ford, T., Vostanis, P., Meltzer, H., & Goodman, R. (2007). Psychiatric disorder among British children
looked after by local authorities: comparison with children living in private households. *The
British Journal of Psychiatry*, *190*(4), 319-325. https://doi.org/10.1192/bjp.bp.106.025023

Fryer, T. (2020). A short guide to ontology and epistemology: Why everyone should be a critical
realist. Retrieved April 30, 2022, from https://tfryer.com/ontology-guide/

Furlong, M. J., O'brennan, L. M., & You, S. (2011). Psychometric properties of the Add Health School
Connectedness Scale for 18 sociocultural groups. *Psychology in the Schools*, *48*(10), 986-997.
https://doi.org/10.1002/pits.20609

Gadermann, A. M., Schonert-Reichl, K. A., & Zumbo, B. D. (2010). Investigating validity evidence of
the satisfaction with life scale adapted for children. *Social Indicators Research*, *96*(2), 229-
247. https://doi.org/10.1007/s11205-009-9474-1

Gaete, J., Valenzuela, D., Godoy, M. I., Rojas-Barahona, C. A., Salmivalli, C., & Araya, R. (2021).
Validation of the Revised Olweus Bully/Victim Questionnaire (OBVQ-R) Among Adolescents in
Chile. *Frontiers in psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.578661

Gao, F., Mei, Q., & Guo, C. (2020). Relationship between depression and student engagement of
senior high school students and the mediating role of resilience. *Revista Argentina de Clinica
Psicologica*, *29*(1), 14. https://doi.org/10.24205/03276716.2020.3

Gere, J., & MacDonald, G. (2010). An update of the empirical case for the need to belong. *Journal of individual psychology*, *66*(1), 93-115.

Goldstine-Cole, K. (2020). *Buffering Child Maltreatment: School Connectedness as a Protective Factor in a Community Sample of Young Adults* (Doctoral dissertation, Harvard University).

Gomer, B., Jiang, G., & Yuan, K. H. (2019). New effect size measures for structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, *26*(3), 371-389. https://doi.org/10.1080/10705511.2018.1545231

Gonzales, N. A., Germán, M., Kim, S. Y., George, P., Fabrett, F. C., Millsap, R., & Dumka, L. E. (2008). Mexican American adolescents' cultural orientation, externalizing behavior and academic engagement: The role of traditional cultural values. *American Journal of Community Psychology*, *41*(1), 151-164. https://doi.org/10.1007/s10464-007-9152-x

Goodenow, C. (1993a). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, *30*(1), 79-90. https://doi.org/10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X

Goodenow, C. (1993b). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of early adolescence*, *13*(1), 21-43. https://doi.org/10.1177/0272431693013001002

Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *The journal of experimental education*, *62*(1), 60-71. https://doi.org/10.1080/00220973.1993.9943831

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Child Psychology & Psychiatry & Allied Disciplines, 38*, 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x

Gummadam, P., Pittman, L. D., & Ioffe, M. (2016). School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. *The Journal of Experimental Education*, *84*(2), 289-306. https://doi.org/10.1080/00220973.2015.1048844

Gunnarsdóttir, H., Hensing, G., & Hammarström, A. (2021). Poor school connectedness in adolescence and adulthood depressiveness: a longitudinal theory-driven study from the Northern Sweden Cohort. *European Journal of Public Health*, *31*(4), 797-802. https://doi.org/10.1093/eurpub/ckab027

Gushue, N. R. A. (1996). Adolescent mental health and psychological sense of community: contemporaneous and longitudinal associations.

Hagborg, W. J. (1998). An investigation of a brief measure of school membership. *Adolescence*, *33*(130), 461.

Hammarström, A., Westerlund, H., Kirves, K., Nygren, K., Virtanen, P., & Hägglöf, B. (2016). Addressing challenges of validity and internal consistency of mental health measures in a 27-year longitudinal cohort study–the Northern Swedish Cohort study. *BMC medical research methodology*, *16*(1), 1-9. https://doi.org/10.1186/s12874-015-0099-6

Harter, S. (1982). The perceived competence scale for children. *Child development*, 87-97. https://doi.org/10.2307/1129640

Hatchel, T., Espelage, D. L., & Huang, Y. (2018). Sexual harassment victimization, school belonging, and depressive symptoms among LGBTQ adolescents: Temporal insights. *American Journal of Orthopsychiatry*, *88*(4), 422. https://doi.org/10.1037/ort0000279

Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd edition). New York: The Guilford Press.

Hernández, M. M., Robins, R. W., Widaman, K. F., & Conger, R. D. (2017). Ethnic pride, self-esteem, and school belonging: A reciprocal analysis over time. *Developmental psychology*, *53*(12), 2384. https://doi.org/10.1037/dev0000434

Högberg, B., Petersen, S., Strandh, M., & Johansson, K. (2021). Determinants of Declining School Belonging 2000–2018: The Case of Sweden. *Social Indicators Research*, *157*(2), 783-802. https://doi.org/10.1007/s11205-021-02662-2

Holmes, J. (2014). *John Bowlby and attachment theory*. Routledge.

Huang, Y. T. (2011). The impact of self-esteem, factors in family and school contexts on trajectories of adolescent depressive symptom. *Chinese Journal of Guidance and Counseling*, *29*, 161-181.

Huebner, E. S., Suldo, S., Valois, R. F., Drane, J. W., & Zullig, K. (2004). Brief multidimensional students' life satisfaction scale: sex, race, and grade effects for a high school sample. *Psychological reports*, *94*(1), 351-356. https://doi.org/10.2466/PR0.94.1.351-356

Huynh, V. W., & Gillen-O'Neel, C. (2016). Discrimination and sleep: The protective role of school belonging. *Youth & Society*, *48*(5), 649-672. https://doi.org/10.1177/0044118X13506720

Johnson, J., Atkinson, M., & Rosenberg, R. (2015). *Millennium Cohort Study: Psychological, Developmental and Health Inventories.* Centre for Longitudinal Studies, UCL. https://cls.ucl.ac.uk/wp-content/uploads/2018/08/Guide-to-Psychological-Inventories-in-MCS3.pdf

Jones, R., Everson-Hock, E. S., Papaioannou, D., Guillaume, L., Goyder, E., Chilcott, J., ... & Swann, C. (2011). Factors associated with outcomes for looked-after children and young people: a correlates review of the literature. *Child: care, health and development*, *37*(5), 613-622. https://doi.org/10.1111/j.1365-2214.2011.01226.x

Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time?. *Journal of research on adolescence*, *22*(2), 235-251. https://doi.org/10.1111/j.1532-7795.2012.00783.x

Karababa, A. (2020). The reciprocal relationships between school engagement and self-esteem among Turkish early adolescents: a three-wave cross-lagged model. *Children and Youth Services Review*, *116*, 105114. https://doi.org/10/1016/j.childyouth.2020.105114

Katreniakova, Z., Sarkova, M., Nagyova, I., & van Dijk, J. P. (2005). Contribution of bullying, school connectedness and self-esteem to psychological well-being in adolescents. In *European Journal of Public Health*, *15,* 170.

Kelly, G. (1955). Personal construct psychology. *Nueva York: Norton*.

Keyes, C. L. (2006). Subjective well-being in mental health and human development research worldwide: An introduction. *Social indicators research*, *77*(1), 1-10. https://doi.org/10.1007/s11205-005-5550-3

Keyes, C. L., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & Van Rooy, S. (2008). Evaluation of the mental health continuum–short form (MHC–SF) in setswana-speaking South Africans. *Clinical psychology & psychotherapy*, *15*(3), 181-192. https://doi.org/10.1002/cpp.572

Kia-Keating, M., & Ellis, B. H. (2007). Belonging and connection to school in resettlement: Young refugees, school belonging, and psychosocial adjustment. *Clinical child psychology and psychiatry*, *12*(1), 29-43. https://doi.org/10.1177/1359104507071052

King, R. B. (2015). Sense of relatedness boosts engagement, achievement, and well-being: A latent growth model study. *Contemporary Educational Psychology*, *42*, 26-38. https://doi.org/10.1016/j.cedpsych.2015.04.002

King, K. A., Vidourek, R. A., Davis, B., & McClellan, W. (2002). Increasing self-esteem and school connectedness through a multidimensional mentoring program. *Journal of school health*, *72*(7), 294-299. https://doi.org/10.1111/j.1746-1561.2002.tb01336.x

Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and

academic outcomes in secondary education: A meta-analytic review. *Research Papers in Education*, *35*(6), 641-680. https://doi.org/10.1080/02671522.2019.1615116

Kovacs, M. (1992). *The Children's Depression Inventory manual.* North Tonawanda, NY: Multi-Health Systems. https://doi.org/10.1002/9781118625392.wbecp419

Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: a practical primer for t-tests and ANOVAs. *Frontiers in psychology*, *4*, 863. https://doi.org/10.3389/fpsyg.2013.00863

La Salle, T. P., Rocha-Neves, J., Jimerson, S., Di Sano, S., Martinsone, B., Majercakova Albertova, S., ... & Zvyagintsev, R. (2021). A multinational study exploring adolescent perception of school climate and mental health. *School psychology*, *36*(3), 155. https://doi.org/10.1037/spq0000430

Larsen, R. (2009). The contributions of positive and negative affect to emotional well-being. *Psihologijske teme*, *18*(2), 247-266.

Lester, L., Waters, S., & Cross, D. (2013). The relationship between school connectedness and mental health during the transition to secondary school: A path analysis. *Journal of Psychologists and Counsellors in Schools*, *23*(2), 157-171. https://doi.org/10.1017/jgc.2013.20

Lewis, G., Pelosi, A. J., Glover, E., Wilkinson, G., Stansfeld, S. A., Williams, P., & Shepherd, M. (1988). The development of a computerized assessment for minor psychiatric disorder. *Psychological medicine*, *18*(3), 737-745. https://doi.org/10.1017/S0033291700008448

Li, L., Chen, X., & Li, H. (2020). Bullying victimization, school belonging, academic engagement and achievement in adolescents in rural China: A serial mediation model. *Children and youth services review*, *113*, 104946. https://doi.org/10.1016/j.childyouth.2020.104946

Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *The Journal of school health*, *74*(7), 274. https://doi.org/10.1111/j.1746-1561.2004.tb08284.x

Libbey, H. P. (2007). *School connectedness: Influence above and beyond family connectedness*. University of Minnesota.

Liu, Q., Xu, Y., Li, Y., Raat, H., & Jiang, M. (2021). Bidirectional Associations Between School Connectedness and Mental Health Problems in Early Adolescence: A Cross-Lagged Model. *School Mental Health*, *13*(4), 730-742. https://doi.org/10.1177/0272431619858401

Lohmeier, J. H., & Lee, S. W. (2011). A school connectedness scale for use with adolescents. *Educational Research and Evaluation*, *17*(2), 85-95. http://doi.org/10.1080/13803611.2011.597108

Loukas, A., Roalson, L. A., & Herrera, D. E. (2010). School connectedness buffers the effects of negative family relations and poor effortful control on early adolescent conduct problems. *Journal of research on adolescence*, *20*(1), 13-22. https://doi.org/10.1111/j.1532-7795.2009.00632.x

Lovibond, S., & Lovibond, P. (1995). *Manual for the Depression Anxiety Stress Scales*.

Sydney, Australia: Psychology Foundation.

Luke, N., Sinclair, I., Woolgar, M., & Sebba, J. (2018). What works in preventing and treating poor mental health in looked after children?. Retrieved February 18, 2022, from https://www.mhinnovation.net

Maclean, K., & Gunion, M. (2003). Learning with Care: The Education of Children Looked after Away from Home by Local Authorities in Scotland. *Adoption and Fostering*, *27*(2), 20–31. https://doi.org/10.1177/030857590302700205

Markowitz, A. J. (2017). Associations between school connection and depressive symptoms from adolescence through early adulthood: moderation by early adversity. *Journal of research on adolescence*, *27*(2), 298-311. https://doi.org/10.1111/jora.12275

Marraccini, M. E., & Brier, Z. M. (2017). School connectedness and suicidal thoughts and behaviors: A systematic meta-analysis. *School psychology quarterly*, *32*(1), 5. https://doi.org/10.1037/spq0000192

Marsh, H. W., Ellis, L. A., Parada, R. H., Richards, G., & Heubeck, B. G. (2005). A short version of the Self Description Questionnaire II: operationalizing criteria for short-form evaluation with new applications of confirmatory factor analyses. *Psychological assessment*, *17*(1), 81. https://doi.org/10.1037/1040-3590.17.1.81

Marshall, M. L. (2004). Examining school climate: Defining factors and educational influences.

Maslow, A. H. (1943). Preface to motivation theory. *Psychosomatic Medicine, 5,* 85– 92. https://doi.org/10.1097/00006842-194301000-00012

Maslow, A. H. (1965). Higher and lower order needs. *Understanding Human Motivation, Cleveland/New York: The World Publishing Company*.

McDougall, T. (2011). Mental health problems in childhood and adolescence. *Nursing Standard (through 2013)*, *26*(14), 48. https://doi.org/10.7748/ns2011.12.26.14.48.c8857

Mcgraw, K., Moore, S., Fuller, A., & Bates, G. (2008). Family, peer and school connectedness in final year secondary school students. *Australian Psychologist*, *43*(1), 27-37. https://doi.org/10.1080/00050060701668637

McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School belonging among low-income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools*, *45*(5), 387-401. https://doi.org/10.1002/pits.20304

McMahon, S. D., Singh, J. A., Garner, L. S., & Benhorin, S. (2004). Taking advantage of opportunities: Community involvement, well-being, and urban youth. *Journal of Adolescent Health*, *34*(4), 262-265. https://doi.org/10.1016/j.jadohealth.2003.06.006

McMurray, I., Connolly, H., Preston-Shoot, M., & Wigley, V. (2011). Shards of the Old Looking Glass: Restoring the Significance of Identity in Promoting Positive Outcomes for Looked-after Children. *Child & Family Social Work*, *16*(2), 210–218. https://doi.org/10.1111/j.1365-2206.2010.00733.x

McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of school health*, *72*(4), 138-146. https://doi.org/10.1111/j.1746-1561.2002.tb06533.x

Meltzer, H., Gatward, R., Corbin, T., Goodman, R., & Ford, T. (2003). The mental health of young people looked after by local authorities in England. *London: The Stationery Office*.

Membride, H. (2016). Mental health: early intervention and prevention in children and young people. *British Journal of Nursing*, *25*(10), 552-557. http://doi.org/10.12968/bjon.2016.25.10.552

Milfont, T. L., Merry, S., Robinson, E., Denny, S., Crengle, S., & Ameratunga, S. (2008). Evaluating the short form of the Reynolds Adolescent Depression Scale in New Zealand adolescents. *Australian & New Zealand Journal of Psychiatry*, *42*(11), 950-954. https://doi.org/10.1080/00048670802415343

Miller, K., Wakefield, J., & Sani, F. (2018). Identification with the school predicts better mental health amongst high school students over time. *Educational Child Psychology*, 21-9.

Moallem, I. (2013). A meta-analysis of school belonging and academic success and persistence.

Moffa, K., Dowdy, E., & Furlong, M. J. (2016). Exploring the contributions of school belonging to complete mental health screening. *The Educational and Developmental Psychologist*, *33*(1), 16-32. https://doi.org/10.1017/edp.2016.8

Moffat, A. (2020). *No Outsiders: Everyone Different, Everyone Welcome: Preparing Children for Life in Modern Britain*. Routledge.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (The PRISMA Group). (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. https://doi.org/10.1371/journal.pmed1000097

Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation biology*, *28*(5), 1167-1177. https://doi.org/10.1111/cobi.12326

Neel, C. G. O., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child development*, *84*(2), 678-692. https://doi.org/10.1111/j.1467-8624.2012.01862.x

Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. *Social and personality psychology compass*, *5*(1), 1-12. https://doi.org/10.1111/j.1751-9004.2010.00330.x

Newman, B. M., Newman, P. R., Griffen, S., O'Connor, K., & Spas, J. (2007). The relationship of social support to depressive symptoms during the transition to high school. *Adolescence*, *42*(167), 441.

NSPCC (2021). *Child mental health.* Retrieved on April 8, 2022, from https://learning.nspcc.org.uk/child-health-development/child-mental-health#

Nyberg, A., Rajaleid, K., Westerlund, H., & Hammarström, A. (2019). Does social and professional establishment at age 30 mediate the association between school connectedness and family climate at age 16 and mental health symptoms at age 43?. *Journal of Affective Disorders*, *246*, 52-61. https://doi.org/10.1016/j.jad.2018.12.027

O'Brien, K. M. (2015). *Belonging and socioemotional wellbeing among students in transition from primary to secondary school* (Doctoral dissertation, Monash University).

Olweus, D. (1996). Revised Olweus bully/victim questionnaire. *Journal of Psychopathology and Behavioral Assessment*. https://doi.org/10.3389/fpsyg.2021.578661

Osman, A., Wong, J. L., Bagge, C. L., Freedenthal, S., Gutierrez, P. M., & Lozano, G. (2012). The depression anxiety stress Scales—21 (DASS-21): further examination of dimensions, scale reliability, and correlates. *Journal of clinical psychology*, *68*(12), 1322-1338. https://doi.org/10.1002/jclp.21908

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan — a web and mobile app for systematic reviews. Systematic Reviews 5:210. https://doi.org/10.1186/s13643-016-0384-4.

Özkan, Ç., & Evren, E. (2020). Academic Procrastination, School Attachment, and Life Satisfaction: A Mediation Model. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *38*(2), 225-242. https://doi.org/10.1007/s10942-020-00336-5

Pang, Y. C. (2015). *The relationship between perceived discrimination, economic pressure, depressive symptoms, and educational attainment of ethnic minority emerging adults: The moderating role of school connectedness during adolescence* (Doctoral dissertation, Iowa State University).

Papachristou, E., Flouri, E., Midouhas, E., Lewis, G., & Joshi, H. (2020). The role of primary school composition in the trajectories of internalising and externalising problems across childhood and adolescence. *Journal of abnormal child psychology*, *48*(2), 197-211. https://doi.org/10.1007/s10802-019-00584-9

Patalay, P., & Fitzsimons, E. (2018). Development and predictors of mental ill-health and wellbeing from childhood to adolescence. *Social psychiatry and psychiatric epidemiology*, *53*(12), 1311-1323. https://doi.org/10.1007/s00127-018-1604-0

Patalay, P., Gondek, D., Moltrecht, B., Giese, L., Curtin, C., Stanković, M., & Savka, N. (2017). Mental health provision in schools: approaches and interventions in 10 European countries. *Global Mental Health*, *4*. https://doi.org/10.1017/gmh.2017.6

Pate, C. M., Maras, M. A., Whitney, S. D., & Bradshaw, C. P. (2017). Exploring psychosocial mechanisms and interactions: Links between adolescent emotional distress, school connectedness, and educational achievement. *School mental health*, *9*(1), 28-43. https://doi.org/10.1007/s12310-016-9202-3

Pavot, W., Diener, E. D., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of personality assessment*, *57*(1), 149-161. https://doi.org/10.1207/s15327752jpa5701_17

Peña-López, I. (2019). PISA 2018 Results. What School Life Means for Students' Lives. Retrieved February 18, 2022, from https://www.oecd.org/publications/pisa-2018-results-volume-iii-acd78851-en.htm

Perales, F., & Campbell, A. (2020). Health disparities between sexual minority and different-sex-attracted adolescents: quantifying the intervening role of social support and school belonging. *LGBT health*, *7*(3), 146-154. https://doi.org/10.1089/lgbt.2019.0285

Perkins, K. N., Carey, K., Lincoln, E., Shih, A., Donalds, R., Kessel Schneider, S., ... & Green, J. G. (2021). School Connectedness Still Matters: The Association of School Connectedness and Mental

Health During Remote Learning Due to COVID-19. *The Journal of Primary Prevention*, *42*(6), 641-648. https://doi.org/10.1007/s10935-021-00649-w

Perry, J. C., & Lavins-Merillat, B. D. (2018). Self-esteem and school belongingness: A cross-lagged panel study among urban youth. *Professional School Counseling*, *22*(1). https://doi.org/10.1177/2156759X19826575

Petrillo, G., Capone, V., Caso, D., & Keyes, C. L. (2015). The Mental Health Continuum–Short Form (MHC–SF) as a measure of well-being in the Italian context. *Social indicators research*, *121*(1), 291-312. https://doi.org/10.5964/ejop.v13i1.1163

Phan, H. P. (2013). Antecedents and consequences of school belonging: Empirical evidence and implications for practices. *Journal of Educational and Developmental Psychology*, *3*(2), 117. https://doi.org/10.5539/jedp.v3n2p117

Pikulski, P. J., Pella, J. E., Casline, E. P., Hale, A. E., Drake, K., & Ginsburg, G. S. (2020). School connectedness and child anxiety. *Journal of Psychologists and Counsellors in Schools*, *30*(1), 13-24. https://doi.org/10.1017/jgc.2020.3

Pittman, L. D., & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of Experimental Education*, *75*(4), 270-290. https://doi.org/10.3200/JEXE.75.4.270-292

Poston, B. (2009). Maslow's hierarchy of needs. *The surgical technologist*, *41*(8), 347-353.

Poteat, V. P., Rivers, I., & Scheer, J. R. (2015). Mental health concerns among LGBTQ youth in schools. In *Critical Issues in School-based Mental Health* (pp. 113-125). Routledge. https://doi.org/10.1146%2Fannurev-clinpsy-021815-093153

Prati, G., Cicognani, E., & Albanesi, C. (2017). Psychometric properties of a multidimensional scale of sense of community in the school. *Frontiers in Psychology*, *8*, 1466. https://doi.org/10.3389/fpsyg.2017.01466

Prati, G., & Cicognani, E. (2021). School sense of community as a predictor of well-being among students: A longitudinal study. *Current Psychology*, *40*(2), 939-943. https://doi.org/10.1007/s12144-018-0017-2

Prince, E. (2010). *Exploring the effectiveness of inclusion: is a sense of school belonging the key factor in understanding outcomes?* (Doctoral dissertation, University of Southampton).

Prince, E. J., & Hadwin, J. (2013). The role of a sense of school belonging in understanding the effectiveness of inclusion of children with special educational needs. *International Journal of Inclusive Education*, *17*(3), 238-262. https://doi.org/10.1080/13603116.2012.676081

Qualtrics (2022). Used May 2021 to June 2022, from https://www.qualtrics.com. Provo, Utah, USA.

Radloff, L. S. (1991). The use of the Center for Epidemiologic Studies Depression Scale in adolescents
    and young adults. *Journal of youth and adolescence*, *20*(2), 149-166.
    https://doi.org/10.1007/BF01537606

Rao, V., & Simkiss, D. (2007). Bullying in schools: A survey of the experience of looked after
    children. *Adoption & Fostering*, *31*(3), 49-57. https://doi.org/10.1177/030857590703100307

Ratner, B. (2009). The correlation coefficient: Its values range between+ 1/− 1, or do they?. *Journal of
    targeting, measurement and analysis for marketing*, *17*(2), 139-142.
    https://doi.org/10.1057/jt.2009.5

Rees, G., Goswami, H., & Bradshaw, J. (2010). Developing an index of children's subjective well-being
    in England. Retrieved February 18, 2022, from
    https://www.york.ac.uk/inst/spru/pubs/pdf/childswb.pdf

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., ... & Udry, J. R.
    (1997). Protecting adolescents from harm: findings from the National Longitudinal Study on
    Adolescent Health. *Jama*, *278*(10), 823-832. https://doi.org/10.1001/jama.278.10.823

Reynolds, W. M. (1994). Assessment of depression in children and adolescents by self-report
    questionnaires. In *Handbook of depression in children and adolescents* (pp. 209-234). Springer,
    Boston, MA. http://doi.org/10.1002/9780470479216.corpsy0798

Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological
    environment and early adolescents' psychological and behavioral functioning in school: The
    mediating role of goals and belonging. *Journal of educational psychology*, *88*(3), 408.
    https://doi.org/10.1037/0022-0663.88.3.408

Rojas, M. (2007). The complexity of well-being: A life-satisfaction conception and a domains-of-life
    approach. *Researching well-being in developing countries: From theory to research*, 259-280.

Rose (2021). *Mental health, safeguarding & child protection: Three key considerations.* Retrieved
    April 8, 2022, from https://www.sec-ed.co.uk/best-practice/mental-health-safeguarding-child-
    protection-three-key-considerations/

Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy.
    Measures package*, *61*(52), 18. https://doi.org/10.1037/t01038-000

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific
    self-esteem: Different concepts, different outcomes. *American sociological review*, 141-156.
    https://doi.org/10.2307/2096350

Rowe, F., Stewart, D., & Patterson, C. (2007). Promoting school connectedness through whole school approaches. *Health Education*. https://doi.org/10.1108/09654280710827920

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, *55*(1), 68. https://doi.org/10.1037/0003-066X.55.1.68

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, *69*(4), 719. https://doi.org/10.1037/0022-3514.69.4.719

Sanders, J., & Munford, R. (2016). Fostering a Sense of Belonging at School - Five Orientations to Practice That Assist Vulnerable Youth to Create a Positive Student Identity. *School Psychology International*, *37*(2), 155–171. https://doi.org/10.1177/0143034315614688

Sawatzky, R., Ratner, P. A., Johnson, J. L., Kopec, J. A., & Zumbo, B. D. (2009). Sample heterogeneity and the measurement structure of the Multidimensional Students' Life Satisfaction Scale. *Social Indicators Research*, *94*(2), 273-296. https://doi.org/10.1007/s11205-008-9423-4

Saylor, C. F., Finch, A. J., Spirito, A., & Bennett, B. (1984). The children's depression inventory: a systematic evaluation of psychometric properties. *Journal of consulting and clinical psychology*, *52*(6), 955. https://doi.org/10.1037/0022-006X.52.6.955

Seligson, J. L., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS). *Social Indicators Research*, *61*(2), 121-145. https://doi.org/10.1023/A:1021326822957

Seon, Y., & Smith-Adcock, S. (2021). School belonging, self-efficacy, and meaning in life as mediators of bullying victimization and subjective well-being in adolescents. *Psychology in the Schools*, *58*(9), 1753-1767. https://doi.org/10.1002/pits.22534

Sharp, P. (2014). *Nurturing emotional literacy: A practical for teachers, parents and those in the caring professions*. Routledge.

Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child & Adolescent Psychology*, *35*(2), 170-179. https://doi.org/10.1207/s15374424jccp3502_1

Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual review of psychology*, *70*, 747-770. https://doi.org/10.1146/annurev-psych-010418-102803

Sieving, R. E., Beuhring, T., Resnick, M. D., Bearinger, L. H., Shew, M., Ireland, M., & Blum, R. W. (2001). Development of adolescent self-report measures from the National Longitudinal Study of Adolescent Health. *Journal of adolescent health*, *28*(1), 73-81. https://doi.org/10.1016/s1054-139x(00)00155-5

Silva, S. A., Silva, S. U., Ronca, D. B., Gonçalves, V. S. S., Dutra, E. S., & Carvalho, K. M. B. (2020). Common mental disorders prevalence in adolescents: A systematic review and meta-analyses. *PLoS One*, *15*(4). https://doi.org/10.1371/journal.pone.0232007

Simons-Morton, B. G., Crump, A. D., Haynie, D. L., & Saylor, K. E. (1999). Student–school bonding and adolescent problem behavior. *Health education research*, *14*(1), 99-107. https://doi.org/10.1093/her/14.1.99

Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg Self-Esteem Scale: Overall and across demographic groups living within the United States. *Evaluation & the health professions*, *33*(1), 56-80. https://doi.org/10.1177/0163278709356187

Singh, K., Chang, M., & Dika, S. (2010). Ethnicity, self-concept, and school belonging: Effects on school engagement. *Educational Research for Policy and Practice*, *9*(3), 159-175. http://doi.org/10.1007/s10671-010-9087-0

Snow, K., H., S., S., K., J., K., A., D. O., & P., M. (2013). Aspirations and Belonging: Touchstones for The Journey. *International Journal of Child, Youth and Family Studies*, *4*(3), 381. https://doi.org/10.18357/ijcyfs43201312435

Sobel, D., & Alston, S. (2021). *The Inclusive Classroom: A new approach to differentiation*. Bloomsbury Publishing.

Spear, L. P. (2000). Neurobehavioral changes in adolescence. *Current directions in psychological science*, *9*(4), 111-114. https://doi.org/10.1111/1467-8721.00072

Spence, S. H., Barrett, P. M., & Turner, C. M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of anxiety disorders*, *17*(6), 605-625. https://doi.org/10.1016/s0887-6185(02)00236-0

Sprecher, E. A., Tuitt, I., Hill, D., Midgley, N., & Sleed, M. (2021). No typical care story: How do care-experienced young people and foster carers understand fostering relationships?. *Adoption & Fostering*, *45*(3), 248-264. https://doi.org/10.1177/03085759211037156

St-Amand, J., Girard, S., & Smith, J. (2017). Sense of belonging at school: Defining attributes, determinants, and sustaining strategies. http://doi.org/10.22492/ije.5.2.05

Stiles, A. A., & Gudiño, O. G. (2018). Examining bidirectional associations between school engagement and mental health for youth in child welfare. *School mental health*, *10*(4), 372-385. https://doi.org/10.1007/s12310-018-9248-5

Stoddart, J., Wright, A. C., Spencer, M., & Wichelen, S. V. (2021). 'I'm the centre part of a Venn diagram': belonging and identity for Taiwanese-Australian intercountry adoptees. *Adoption & Fostering*, *45*(1), 71-89. https://doi.org/10.1177/0308575921989825

Sturman, D. A., & Moghaddam, B. (2011). The neurobiology of adolescence: changes in brain architecture, functional dynamics, and behavioral tendencies. *Neuroscience & Biobehavioral Reviews*, *35*(8), 1704-1712. https://doi.org/10.1016/j.neubiorev.2011.04.003

Sullivan, G. M., & Feinn, R. (2012). Using effect size—or why the P value is not enough. *Journal of graduate medical education*, *4*(3), 279-282. https://doi.org/10.4300/JGME-D-12-00156.1

Thompson, F., & Smith, P. K. (2011). The use and effectiveness of anti-bullying strategies in schools. *Research Brief DFE-RR098*, 1-220. Retrieved April 28, 2022, from https://www.gov.uk/government/publications/the-use-and-effectiveness-of-anti-bullying-strategies-in-schools

Tian, L., Chen, H., & Huebner, E. S. (2014). The longitudinal relationships between basic psychological needs satisfaction at school and school-related subjective well-being in adolescents. *Social Indicators Research*, *119*(1), 353-372. https://doi.org/10.1007/s11205-013-0495-4

Tillery, A. D., Varjas, K., Roach, A. T., Kuperminc, G. P., & Meyers, J. (2013). The importance of adult connections in adolescents' sense of school belonging: Implications for schools and practitioners. *Journal of School Violence*, *12*(2), 134-155. https://doi.org/10.1080/15388220.2012.762518

Tzani-Pepelasi, C., Ioannou, M., Synnott, J., & McDonnell, D. (2019). Peer support at schools: The buddy approach as a prevention and intervention strategy for school bullying. *International journal of bullying prevention*, *1*(2), 111-123. https://doi.org/10.1007/s42380-019-00011-z

Ungar, M. (2008). Resilience across cultures. The British Journal of Social Work, 38, 218- 235. https://doi.org/10.1093/bjsw/bcl343

UNICEF (2021). Mental health. https://data.unicef.org/topic/child-health/mental-health/

Vallerand, R. J., Pelletier, L. G., & Koestner, R. (2008). Reflections on self-determination theory. *Canadian Psychology/Psychologie Canadienne*, *49*(3), 257. https://doi.org/10.1037/a0012804

Van Roy, B., Veenstra, M., & Clench-Aas, J. (2008). Construct validity of the five-factor Strengths and Difficulties Questionnaire (SDQ) in pre-, early, and late adolescence. *Journal of Child Psychology and Psychiatry*, *49*(12), 1304-1312. https://doi.org/10.1111/j.1469-7610.2008.01942.x

Vaz, S., Falkmer, M., Parsons, R., Passmore, A. E., Parkin, T., & Falkmer, T. (2014). School belongingness and mental health functioning across the primary-secondary transition in a mainstream sample: Multi-group cross-lagged analyses. *PLoS One*, *9*(6). https://doi.org/10.1371/journal.pone.0099576

Veenhoven, R. (2012). Happiness: Also known as "life satisfaction" and "subjective well-being". In *Handbook of social indicators and quality of life research* (pp. 63-77). Springer, Dordrecht.

Vera, E., Heineke, A., Daskalova, P., Schultes, A. K., Pantoja-Patiño, J., Duncan, B., ... & Furtado, C. (2021). Emergent bilingual high school students' social and emotional experiences. *Psychology in the Schools*, *58*(10), 1932-1961. https://doi.org/10.1002/pits.22559

Vostanis, P., Humphrey, N., Fitzgerald, N., Deighton, J., & Wolpert, M. (2013). How do schools promote emotional well-being among their pupils? Findings from a national scoping survey of mental health provision in English schools. *Child and Adolescent Mental Health*, *18*(3), 151-157. https://doi.org/10.1111/j.1475-3588.2012.00677.x

Washburn, M. (2009). *A sense of belonging in school: Exploring the patterns and correlates among urban adolescents*. New York University.

Walton, G. M., & Brady, S. T. (2020). The social-belonging intervention. *Handbook of wise interventions: How social psychology can help people change*, 36-62.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, *54*(6), 1063. https://doi.org/10.1037/0022-3514.54.6.1063

Wells, J., Barlow, J., & Stewart-Brown, S. (2003). A systematic review of universal approaches to mental health promotion in schools. *Health education*. https://doi.org/10.1108/09654280310485546

Whitlock, J. L. (2006). Youth perceptions of life at school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*, *10*(1), 13-29. https://doi.org/10.1207/s1532480xads1001_2

Winefield, H. R., Gill, T. K., Taylor, A. W., & Pilkington, R. M. (2012). Psychological well-being and

psychological distress: is it necessary to measure both?. *Psychology of Well-Being: Theory,*

Research and Practice, *2*(1), 1-14. https://doi.org/10.1186/2211-1522-2-3

Wingspread declaration on school connections (2004). *Journal of School Health*, *74*(7), 233-234.

https://doi.org/10.1111/j.1746-1561.2004.tb08279.x

Wolke, D., Copeland, W. E., Angold, A., & Costello, E. J. (2013). Impact of bullying in childhood on

adult health, wealth, crime, and social outcomes. *Psychological science*, *24*(10), 1958-1970.

https://doi.org/10.1177%2F0956797613481608

Wood, M., & Selwyn, J. (2017). Looked after children and young people's views on what matters to

their subjective well-being. *Adoption & Fostering*, *41*(1), 20-34.

https://doi.org/10.1177/0308575916686034

World Health Organization (2021). *Adolescent mental health*. Retrieved April 8, 2022, from

https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Yule, K., Houston, J., & Grych, J. (2019). Resilience in children exposed to violence: A meta-analysis of

protective factors across ecological contexts. *Clinical child and family psychology review*, *22*(3),

406-431. https://doi.org/10.1007/s10567-019-00293-1

Yurgelun-Todd, D. (2007). Emotional and cognitive changes during adolescence. *Current opinion in*

neurobiology, *17*(2), 251-257. https://doi.org/10.1016/j.conb.2007.03.009

Appendix A – Data Extraction Table

Author, year, title	Article type, country	Timescale	Design	Analysis	Sample	Belonging measure	Wellbeing measure	Summary of findings
Arango et al. (2018). The protective role of connectedness on depression and suicidal ideation among bully victimized youth	Journal article USA	6 month follow up	Screening measures in-person self-report, follow up in-person with trained staff	Regression model	n = 142 74.6% female Age range 12-15 (m = 13.41) 47.18% African American, 36.62% Caucasian, 8.45% Multiracial, 7.75% other	School connectedness scale (Resnick et al., 1997). 6 items.	Reynolds Adolescent Depression Scale-2: Short form (Reynolds, 2008). 10 items.	School connectedness negatively associated with depression. Depression predicting T2 school connectedness -.30, p<.05. School connectedness predicting T2 depression -0.29, p<.05.
Arslan et al. (2020). Exploring the impacts of school belonging on youth wellbeing and mental health among Turkish adolescents	Journal article Turkey	2 time points, late sep/early oct, late may/early June (same school year)	30 minute paper survey during class time	Structural equation modelling - Bivariate correlations	n = 402, 301 included 54.2% female, 48.8% male Age range 10-14 (m = 12.11)	School Belongingness Scale (Arslan & Duru, 2017). 10 items.	The satisfaction with life scale (Diener et al., 1985). 5 items. Youth internalising behaviour screener (Arslan, 2019). 10 items.	School belonging T1 predicted Life satisfaction T2 (β = .39, p<.001). Belonging T1 predicted T2 internalising behaviour (β = .35, p<.001) but not after mediating for T1 mental health problems (β = -.04).

Bond et al. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes	Journal article Australia	Year 8, year 10, 1 year post-secondary	Questionnaire using laptops in school. Phone interviews for those not present	Bivariate associations (grouped into high, moderate, low, very low school connectedness)	n at T1 = 2,678, n at T3 = 1,902 47% male	School connectedness scale (Arthur et al., 2002). 20 items as 3 excluded due to low factor loadings	Computerised version of the Clinical Interview Schedule - Revised (Lewis et al., 1988)	Year 8 students with very low school connectedness were more likely to report depressive symptoms in year 10. No relationships appear to be significant.
Gunnarsdóttir et al. (2021). Poor school connectedness in adolescence and adulthood depressiveness: a longitudinal theory-driven study from the Northern Sweden Cohort	Journal article Sweden	Participants age 16 in 1981 and follow up at age 21, 30, 43	Unknown	Explorative factor analysis - generalised linear model	n = 1,083, 94% at all timepoints 481 women, 526 men	7 items included, no previous measure referenced	Six symptoms e.g., sleep problems, coded 0-2	Poor school connectedness associated with future depressiveness (β = 0.124, CI = 0.10, 0.15), even when depressiveness age 16 added to the model. Association found for those with and without social/material adversities at age 16.
Gushue (1996). Adolescent mental health and psychological sense of	Dissertation Canada	4-year study but looking at	At home interview and telephone interview	Multi-sample regression analysis	n = 247 (older and younger siblings). 180 at T2.	Modified version of Sense of community index	Self-esteem measured by Self-perception Profile (Harter, 1988). 5 item subscale of	School sense of community significantly predicted school loneliness (-.190, p<.05) but no other measures were significant

community: contemporaneous and longitudinal associations		years 3 and 4			Older siblings 47.2% male, 52.8% female. Younger siblings 46.8% male, 53.2% female	(Perkins et al., 1990). 12 items - adapted to say school/student instead of block/neighbour	Global self-worth used (out of 45 items). Index of Wellbeing (Campbell, Converse, & Rodgers, 1976). 9 items.	(general loneliness, self-esteem, happiness, subjective wellbeing). Subjective wellbeing T1 predicted school sense of community T2 (.202, p<.05) but no other relationships were significant (happiness, self-esteem, school loneliness).
					Age range 10-14 and 12-16 for sibling groups			
Hernández et al. (2017). Ethnic pride, self-esteem, and school belonging: A reciprocal analysis over time	Journal article Australia	~2 years between time points. 5th grade, 7th grade, 9th grade. Two interviews in each year, within 2 weeks	Trained bilingual researchers conducted home interviews using laptops	Cross lagged latent panel structural equation modelling	n = 674	School attachment scale (Gonzales et al., 2008). 7 items.	General self-esteem scale of Self-description questionnaire II-Short (Marsh et al., 2005)	Self-esteem predicted increases in school belonging for boys from T1 and T2 (β = .15, p<.01), and from T2 to T3 (β = .19, p<.01). Effects were not significant for girls. School belonging did not predict self-esteem across timepoints.
					50% female			
					Mean age = 10.4			
					All Mexican origin			
Jose, Ryan, & Pryor (2012). Does social connectedness promote a greater sense of well-being	Journal article New Zealand	2006, 2007, 2008 at the same time during the	Computer administered questionnaire	Fully cross-lagged model and partial cross-lagged model	n = 1,774 all timepoints	6 items from PSSM (Goodenow, 1993) and school connectedn	14 item scale constructed of future orientation (Ryff & Keyes, 1995), confidence (Ryff wellbeing	School connectedness significantly predicted mental wellbeing from T1 to T2 (.06, p<.05) and T2 to T3 (.08, p<.01). Wellbeing to school belonging paths were also
					52% female, 48% male			

in adolescence over time?		school year			Age range 10-15 (m = 12.21) at time 1	ess scale (Blum, McNeely, & Rinehart, 2002)	scale and Rosenberg self-esteem scale), life satisfaction (subjective wellbeing scale: Diener et al., 1985), and positive affect (adapted from Radloff, 1977)	significant from T1 to T2 (.19, p<.001) and T2 to T3 (.13, p<.001).
					52% European New Zealand, 30% Maori, 12% Pacific islander, 6% Other			
Lester, Waters & Cross (2013). The relationship between school connectedness and mental health during the transition to secondary school: A path analysis	Journal article Australia	4 waves. End of year 7, beginning of year 8, end of year 8, beginning of year 9	Home and in class questionnaires	Cross-lagged models used to model causal paths	n = 3,123 at least 3 timepoints	Connectedness to school scale, 4 items adapted from Resnick and McNeely (1997)	Depression and Anxiety Stress Scale (Lovibond & Lovibond, 1995), 7 items for depression, 7 for anxiety.	T1 to T2 a reciprical relationship exists for females, increased depression associated with decreased connectedness (β = -.10), increased connectedness associated with decreased depression (β = -.09). For males increased depression was associated with decreased connectedness (β= -.01) but opposite association not significant (β= -.41). Significant reciprocal relationships between all other measures and time points including for connectedness and anxiety.
					Half male			
					Age range 11-15			
Markowitz (2017). Associations between school	Journal article	1995, 1996, 2001/2002	In home interview	Least squared	T1 n = 11,183, T3 n = 8,570	School connection -	10 items from Center for Epidemiologic	School connection increase led to significant decrease in depressive symptoms in late adolescence

connection and depressive symptoms from adolescence through early adulthood: moderation by early adversity	USA	, 2007/2008		regression models	Age range 12-18 years at T1, 26-32 at T3	6 items at T2.	Studies Depression scale (Radloff, 1991) - only 9 items at T3.	(p<.01). The main effect of school connectedness on depressive symptoms remained in size for young people who had experienced adversity.
McGraw et al. (2008). Family, peer and school connectedness in final year secondary school students	Journal article Australia	1 year between measures	Survey in class followed by postal/email survey	Regression analysis	T1 n = 941, T2 n = 204 T2 82 males, 122 females T2 age range 17-20 82% Australian born, 18% other (UK, Europe, Middle East, Asia)	Psychological Sense of School Membership (Goodenow, 1993). 18 item	Depression, anxiety and stress scale (DASS; Lovibond & Lovibond) short form - measures negative emotions. 21 items +1 item for suicide ideation	School connectedness significantly predicted anxiety T2 (-.30), depression T2 (-.25) and stress T2 (-.25). No significant effect if T1 negative affect taken into account
McMahon et al. (2004). Taking advantage of opportunities: Community involvement, well-being, and urban youth	Journal article USA	Across 2 academic years, pre and post test timepoint unknown	Questionnaires distributed and read aloud in classrooms	Hierarchical linear regressions	n = 229 T1, 202 T2 61% female Age range 10-15 African American	Psychological sense of school membership scale (PSSM). 5 items.	Rosenberg self-esteem scale. 10 items (not assessed in relation to school belonging) Anxious/depressed syndrome scale from Youth Self-Report. 16 items.	In year 2 of the study a strong sense of school belonging at pretest led to fewer internalising symptoms (anxiety and depression) at posttest. P<0.05

| Moffa, Dowdy, & Furlong (2016). Exploring the contributions of school belonging to complete mental health screening. | Journal article

USA | October 2014 and October 2015 (1 year) | In class questionnaire | Hierarchical multiple regressions | T1 n = 1,867, T2 n = 1159 | 5 items from school satisfaction subscale of the Multidimensional Students' Life Satisfaction Scale (Huebner, 1994). | T1 - BMSLSS (Seligson, Huebner, & Valois, 2003) - global life satisfaction. Items from SDQ to measure psychological distress (Goodman, 1997). T2 - The Social Emotional Health Survey - Secondary, 36 items. 7 item scale designed for this study to measure anxious and depressed emotional experiences | Modelled together life satisfaction, psychological distress, and school belonging from T1 significantly predicted social-emotional wellbeing T2 ($F(3, 1145) = 157.64, p < 0.001, R^2 = .29$). Addition of belonging scores significantly contributed to predictive model (p<.001) but with small effect size f^2 = .035. Modelled together life satisfaction, psychological distress, and school belonging from T1 significantly predicted internal distress T2. Overall model was significant $F(3, 1145) = 119.84, p < 0.001, R^2 = .24$). Addition of belonging mean scores predicted internal distress but explained variance in internal distress was not substantial. |
					Male 48%, female 51%, 1% other			
					Grades 9-11 (age 14-17)			
					46.5% Latino/Hispanic, 38.4% White, 2.8% Asian, 0.9% Black/African American, 0.3% Native Hawaiian or Pacific islander, 0.4% American Indian or Alaskan native, and 10.6% (n=123) Mixed.			
Nyberg et al. (2019). Does social and professional establishment at age 30 mediate the association between school connectedness and family climate at age 16 and mental	Journal article

Sweden | Age 16, 30, 43 | Questionnaire | Mediation model | n = 1,083 at T1, 1010 at final timepoint | 6 questions relating to school connectedness | 6 coded items | Direct effect between school connectedness and depression was significant when adjusted for sex and baseline depressive symptoms (−0.147, p = .000) |

health symptoms at age 43?								
O'Brien (2015). Belonging and socioemotional wellbeing among students in transition from primary to secondary school	Dissertation Australia	1 year apart, following year 6 transition	Survey and in-person interview	Pearson's correlations	n = 241 141 females, 100 males Age range 11-13 (m = 12.2)	School Belonging scale (Roeser, Midgley, & Urdan, 1992). 4 items.	Self-esteem scale (Harter, 1982). 3 items.	Belonging T1 significantly correlated with self-esteem T2 (.355, p<.05). Self-esteem T1 was also significantly correlated with belonging T2 (.443, p<.05).
Patalay & Fitzsimons (2018). Development and predictions pf mental ill-health and wellbeing from childhood to adolescence.	Journal article UK	Age 11 (final year of primary schooling) and 14	Paper questionnaire completed at home	Regression analysis	n = 9,553 taken from a larger sample of 19,500 50.85% female Age 11 and 14 84.4% White, 8.7% Asian, 2.8% Black, 2.7% Mixed, 1.4% Other	Measure of school connectedness taken from Millennium Cohort Study – number of items unknown, which items, also unknown.	Depressive symptoms – Short Mood and Feelings Questionnaire (Messer et al., 1995). 13 items. Mental wellbeing – measured satisfaction in different domains (school, family, friends, schoolwork, appearance, life). 6 items.	School connectedness related to depressive symptoms at age 14 (r = -.14, p<0.001), even when time one mental health was controlled for (r = -.12, p<0.001), and related to wellbeing at age 14 (r = .15, p<0.001) even when time one mental health was controlled for (r = .11, p<0.001).
Perry & Lavins-Merillat (2018). Self-esteem and school	Journal article USA	Sept/Oct and April/May	In class questionnaire	Path regression	n = 175 37.1% male, 59.4% female, 3.4% not reported	Psychological sense of school membership	Rosenberg self-esteem scale (Rosenberg, 1965). 10 items.	Belongingness T1 to Self-esteem (SE) T2 not significant after controlling for SE T1.

					Age range 14-18 (m = 15.78)	(Goodenow, 1993). 18 items.		Total proportion of variance in School Belongingness T2 accounted for by the regression model was R^2= .42. The effect of .14 for the SE T1 impact on school belongingness T2 path was significant (t = 2.13, p < .05; denoted as β2) after controlling for school belonging T1.
belongingness: A cross-lagged panel study among urban youth					Black/African American 57.1%, multiethnic 22.3%, White 7.4%, Puerto Rican 1.7%, 1% other, 8.6% did not report.			
Prati & Cicognani (2021). School sense of community as a predictor of well-being among students: A longitudinal study	Journal article Italy	Beginning and end of school year (>1 year)	Anonymous online survey	Bayesian linear regression	n = 106	Scale of Sense of Community in the School (Prati et al., 2017). 10 items.	Italian version - Mental Health Continuum Short Form (Keyes et al., 2008). 14 items across 3 dimensions: emotional, psychological, social	School sense of community T1 significantly predicted wellbeing T2 (β = 0.24, 95% CI = 0.02, 0.45) when age, gender, wellbeing (T1) added to the model. Bayes factor 6.10.
					Male n = 97 (92%)			
					Age range 13-17 (m = 14.42)			
Shochet et al. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a	Journal article USA	1 year	Exam condition questionnaire in school	Hierarchical linear regression	n = 2,567	Psychological sense of school membership scale (Goodenow, 1993b). 18 items.	Children's depression inventory (CDI; Kovacs, 1992). 27 items. Self-report SDQ (Goodman, 1997). 25 items.	When controlling for previous scores school belonging (T1) was found to significantly predict depressive symptoms (T2) for boys and girls (coefficient = -2.07, p<.01), (coefficient = -1.94, p<.05). Accounting for prior symptoms, school belonging (T1) predicted
					1,293 male, 1,274 female			
					Age range 12-14			

community prediction study					72% Caucasian Anglo Australians, 0.8% Aboriginal or Torres Strait Islander. Remaining students 70 different ethnic origins including 9.1% European, 6.3% Asian, 4.6% Pacific region, 3.1% Middle Eastern, 2.6% New Zealand or Maori, 1% African		Spence children's anxiety scale (Spence, 1998). 44 items.	future anxiety symptoms for girls (coefficient = -1.81, p=.05) but not for boys. It predicted general functioning (SDQ, T2) for boys (coefficient = -0.88, p<.05) but not for girls. Impact of mental health T1 on school belonging T2 was not significant.
Washburn (2009). A sense of belonging in school: Exploring the patterns and correlates among urban adolescents	Dissertation USA	Oct/Nov 2001, every 6 months over the next 2 years	Researcher administered questionnaire	Clyster analysis for school belonging subgroups	n = 104 56% male 10th and 11th grade, age 14-17 T1 35.6% Latino, 38.5% Asian, 14.4% African American, 11.5% other.	Connection to school scale (Washburn & Kuriakose, 2001) - revised version of PSSM. 12 items.	Shortened version of Children's Depression Inventory (Kovacs, 1985). 10 items. Rosenberg self-esteem scale (1965). 10 Items.	Belonging groups take account of belonging at all 4 time points. There were significant differences in depression T4 for cluster groups, even when accounting for adjustment outcomes T1. Connected group reported significantly lower levels of depression than the average group, low increasing group, and detached group. Connected group had significantly higher self-esteem than all 3 other groups taken separately.

Appendix B – Quality assurance checklist

The CASP (2018) Cohort study tool was used for quality assurance as it provided relevant questions to assess the quality of longitudinal studies using one sample. Use of a CASP checklist also ensured that any qualitative research which was included could be quality assured using a similar CASP checklist. The questions "was the exposure accurately measured to minimise bias?" and "was the outcome accurately measured to minimise bias?" were adapted to assess the variables/measures included within research, details of the way this section was adapted can be seen below under *variables*. Results of quality assurance were summarised using the following categories.

Clear focus & rationale – the study addresses a clearly focused issue considering the population, risk factors, the direction of expected relationships, and predicted outcomes.

Sample - cohort recruitment was acceptable and there is no obvious bias. The sample is representative and is drawn from the target population.

Variables – there is an accurate measure used for each variable (school belonging and mental health). The article considers bias, whether measures were objective or subjective, validity and reliability, and whether analysis was blind (if appropriate).

Confounders considered – this includes consideration of:

- Factors in design/analysis – restrictions in design or analysis to control for confounding variables
- Follow up of participants – analysis on attrition of participants
- Follow up time is long enough

Clear results – Methos of analysis is appropriate. Consider how much detail has been given on the results of the study, whether there is information on the strength of relationships, possible bias, variables controlled for etc.

Effect size – effect size reported within the article.

Results application – consider whether the type of study was appropriate, whether the sample represents the population and whether the setting/context is appropriate and applicable.

Fit with other evidence – can the results be placed within the context of other research in this field?

Implications – consider whether the study has practical implications and are these justified by the findings. Suggestions supported by additional evidence if needed.

Study	Clear focus & rationale	Sample	Variables	Confounders considered	Clear results	Effect size	Results applicable	Fit with other evidence	Implications for practice
Arango, A., Cole-Lewis, Y., Lindsay, R., Yeguez, C. E., Clark, M., & King, C. (2018).	Yes	Yes	Yes	Yes	Yes	Yes	Some limitations	Yes	Yes
Arslan, G., Allen, K. A., & Ryan, T. (2020).	Yes	Yes	Yes	Partial	Yes	Yes	Yes	Yes	Yes
Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007).	Yes	Yes	Limited evidence available	Yes, but not gender	Partial	No	Yes, but unknown demographics	Yes	No
Gunnarsdóttir, H., Hensing, G., & Hammarström, A. (2021).	Yes	Yes	Unknown validity	Yes	Yes	Yes - β	Yes	Yes	Yes
Gushue, N. R. A. (1996).	Yes	Yes	Mostly yes, not all	Yes	Yes	Yes	Yes	Yes	Yes
Hernández, M. M., Robins, R. W., Widaman, K. F., & Conger, R. D. (2017).	Yes	Yes	Unknown validity for SB measure	Yes	Limited – non-sig. paths not included	Yes - β	Yes	Yes	Limited

Jose, P. E., Ryan, N., & Pryor, J. (2012).	Yes	Yes	No for wellbeing measure	Yes	Partial	Yes - β	Yes	Yes	Yes
Lester, L., Waters, S., & Cross, D. (2013).	Unclear	Yes	Mostly yes, not all	Yes	Yes	Yes - β	Yes	Yes	Yes
Markowitz, A. J. (2017).	Yes	No – see previous paper	No on school belonging measure	Yes	Yes	Yes - β	Yes	Yes	Yes
Mcgraw, K., Moore, S., Fuller, A., & Bates, G. (2008).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
McMahon, S. D., Singh, J. A., Garner, L. S., & Benhorin, S. (2004).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Somewhat
Moffa, K., Dowdy, E., & Furlong, M. J. (2016).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nyberg, Rajaleid, Westerlund, & Hammarström (2019)	Yes	Yes	Unknown validity	Yes	Yes	Yes	Yes	Yes	Yes
O'Brien, K. M. (2015).	Yes	Yes	Unknown validity	Yes	Yes	Yes	Yes	Yes	Most based on qual. aspect
Patalay & Fitzsimons (2018).	Yes	Yes	Unknown belonging measure	Yes	Yes	Yes	Yes	Yes	Not for belonging

Perry, J. C., & Lavins-Merillat, B. D. (2018).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prati, G., & Cicognani, E. (2021).	Yes	Yes, more males	Yes	Yes	Yes	Yes	Yes	Yes	No
Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006).	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Washburn, M. (2009).	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Appendix C – Psychometric properties of measures

Article	Measure	Validity: Construct, content, criterion	Reliability: Internal consistency, test-retest	Notes
Arango (6 items) Lester (4 items adapted from Resnick)	School Connectedness Scale (Resnick et al., 1997)	Unknown - explored within Furlong, O'Brennan, & You (2011) but full text not freely available	Internal consistency within Resnick et al. (1997) α=.75 Current study (Arango et al., 2018) α = .85 Good internal consistency in previous studies across gender, race/ethnic groups, grade level (all α>.75) (Sieving et al., 2001). Lester study average α = 0.80	These items have since been included in a more extensive school connectedness scale which has shown good psychometric properties (Lohmeier & Lee, 2011). Lester chose to use only 4 – unclear on details of why.
Arslan	School Belongingness Scale (Arslan & Duru, 2017)	(Arslan & Duru, 2017) Structural validity analysed Scale correlation with overall student subjective wellbeing questionnaire r=.57	Internal reliability in current study was adequate (α = .78). Adequate latent construct reliability and internal reliability (Arslan, 2019)	Scale created by the author and validated. Two latent constructs.
Bond	School connectedness scale (Arthur et al., 2002)	Specific scale not validated	Internal consistency high (α = .87) No other psychometric information	Items taken from a larger questionnaire created by Arthur et al. (2002)
Gunnarsdottir Nyberg	7 item measure/6 item measure	Unknown	Gunnarsdottir α = .72	
Gushue	Adapted Sense of community index (Perkins et al., 1990)	Confirmed construct validity however some question over appropriateness for adolescence	reliabilities for school sense of community in current study between .59 and .73 (low to acceptable)	This measure was initially designed for adult populations in community settings but has been assessed with an

			Reliabilities for whole scale r=.64 but unacceptable for subscales (Chipuer, & Pretty, 1999).	adolescent population with regards to community. Not previously used for school as far as I can tell.
Hernandez	School attachment scale (see Gonzales et al., 2008)	Unknown	Gonzales et al. (2008) α =.71 Current study α = .60-.79	Derived from 3 other scales by Gonzales – 2 of which had α =.69 and .70, no details on the third.
Jose (6 items) McGraw (18 items) McMahon (5 items) Perry (18 items) Shochet (18 items)	PSSM (Goodenow, 1993a)	Goodenow (1993a) good construct validity supported Good criterion validity reported for brief measure of 11 items (Hagborg, 1998)	Good internal consistencies reported across studies Internal reliability in current studies: α = .89, .85, .90	Not sure about 6 item version
Moffa	Brief Multidimensional Students' Life Satisfaction Scale (Huebner et al., 2004)	Factor analysis conducted and results informed current study (Sawatzky et al., 2009) Seligson et al. (2002) - Criterion validity good (r=.62-.66) Construct validity correlations were moderate Convergent and discriminant validity supported	α = .87 current study Seligson et al. (2002) = .75	
O'Brien	School Belonging scale (Roeser, Midgley, & Urdan, 1996)	Unknown	Current study α = .71 and .80 Previous α = .76 (Roeser, et al., 1996)	Hard to find information on validation of this scale -

Prati	Scale of Sense of Community in the School (Prati et al., 2017)	Prati et al. (2017) Good discriminant & convergent (high correlations), criterion validity (subscales sig. correlated with wellbeing measure)	Good internal consistency previously (.73-.86) (Prati et al., 2017) α = .84 current study	
Washburn	Connection to school scale (Washburn & Kuriakose, 2001) - revised version of PSSM (Goodenow, 1993a).	Construct validity measured with PSSM. Moderately strong, positive correlation between scales (r=.68, n=93, p<.0005)	Test-retest reliability over 2 weeks was good (α=.81). Good internal reliability over 4 time points, 6 months apart (α=.86, .86, .83, .88).	Belonging measure created using existing measure (Goodenow, 1993b) and information from structured interviews in the first 2 years of the 4-year study.
Arango	Reynolds Adolescent Depression Scale-2: Short form (Reynolds, 2008)	Construct validity with suicide ideation and general wellbeing r=0.48 and 0.53. High criterion validity (0.95) with long-form version (Milfont et al., 2008)	Current study internal consistency α = .88 Good internal reliability α = .88 (Milfont et al., 2008)	
Arslan	The satisfaction with life scale (Diener et al., 1985)	College population - Correlations with other scales from .50 to .75 (Diener et al., 1985)	Diener (1985) two-month test-retest .82 correlation, α = .87. Internal consistency α = .72 for current study	Diener evaluated the scale on creation, it has since been evaluated and found to be valid and reliable for a range of populations (Pavot et al., 1991)
Arslan	Youth internalising behaviour screener (Arslan, 2019)	Reported by author to be good within previous studies	Reported by author to be good within previous studies Internal reliability was α = .86 across timepoints	Scale created by the author with reference to their work in 2019. This article/work couldn't be found online, only an article about externalising behaviour screening (internalising submitted for publication)

Bond	Computerised Clinical Interview Schedule - Revised (Lewis et al., 1988)	Only abstract freely available which suggests measure is valid and reliable – no further information and no information included within current study		Difficult to find validity and reliability information about the clinical interview schedule too
Gunnarsdottir Nyberg	6 symptoms taken from	Factor structure was acceptable (RMSEA .00-.06) (Hammarström et al., 2016)	α >.6 across all 4 timepoints (Hammarström et al., 2016)	At the start of the study they say they struggled to find validated measures for mental health
Gushue	Self-perception Profile (Harter, 1988)	Unknown	Reliabilities between .75 and .81 for current study Butler and Gasson (2005) Global Self-Worth α = .78 to .84; Subscales α = .71 to .86	Subscale of another measure (self-perception profile) which has been validated
Gushue	Index of Wellbeing (Campbell, Converse, & Rodgers, 1976)	Study cites Campbell et al. as showing good convergent and discriminant validity	Within paper cites previous research α = .89 Current study α = .86-.90	Book unavailable to check validity and reliability. Difficult to find elsewhere as too many related studies using 'index' 'wellbeing'
Hernandez	General self-esteem scale of Self-description questionnaire II-Short (Marsh et al., 2005)	1 item previously did not have good factor loading within self-esteem scale (Bodkin-Andrews et al., 2005). Marsh et al. (2005) - Correlation with short and long form .94 Most test-retest correlations good with lowest .58 Support for convergent validity	Marsh et al. (2005) - Internal consistencies above .80 Current study αs = .68-.76	Unsure whether this factor loading information was considered within the current study – this study was with an indigenous Australian population not Mexican
Jose	14 item scale constructed of future orientation (Ryff & Keyes, 1995), confidence (Ryff wellbeing scale and	Report adequate model fit (RMSEAs = .06, .06, .07)	Within current study α = .78 for future orientation, α = .83 for confidence, α = .78 for life	Scales previously used and validated but combined within the current study so less

	Rosenberg self-esteem scale), life satisfaction (subjective wellbeing scale: Diener et al., 1985), and positive affect (adapted from Radloff, 1977)		satisfaction, α = .71 for positive affect	information on psychometric properties
Lester (14 items) McGraw (21 items)	Depression and Anxiety Stress Scale (Lovibond & Lovibond, 1995)	Corelations with other scales measuring depression and anxiety (r=.73-.80) (Osman et al., 2012)	Osman et al. (2012) .81-.84 for anxiety and depression subscales Current study .76-.86 across subscales (McGraw) and .82-.89 (Lester)	21 items include stress subscale
Markowitz	Center for Epidemiologic Studies Depression scale (Radloff, 1991)	Radloff (1991) states convergent and discriminant validity established	Radloff (1991) states high internal consistency and test-retest Current study α = 0.8	Scale created with items from previously validated scales. No specific details on reliability and validity within Radloff. Only 10/20 items used with no detail.
McMahon Perry Washburn	Rosenberg self-esteem scale (Rosenberg, 1965)	Sinclair et al. (2010) Convergent validity good (.40-.82 across groups), discriminant validity adequate	Washburn very good internal reliability (α = .89 - .91) Perry α = 0.85 & 0.87 Previous research showed very good overall reliability (.91) Sinclair et al. (2010)	Differences across groups highlighted e.g., discriminant validity correlations very different (lower) for 'Hispanic' and 'other' populations
McMahon	Anxious/depressed syndrome scale from Youth Self-Report (Achenbach et al., 1991)	Concurrent validity confirmed for some subscales (Ebesutani et al., 2011)	Anxious/depressed syndrome scale α = .75-.83 (Ebesutani et al., 2011)	
Moffa Shochet	SDQ (Goodman, 1997)	Van Roy et al. (2008) Acceptable model fit for convergent validity. State it has been shown in previous studies across a range of	Van Roy et al. (2008) Moderate internal reliabilities for subscales with lowest .59 for conduct problems in early	Suggest adding an addition construct (positive construal) would increase variance in overall scale and suggests some improvements

		measures. Correlations found between constructs – confirmed structure	adolescent group. Overall scale α = .74-.80 across ages. α = .85 in Shochet	
O'Brien	Self-esteem scale (Harter, 1982)	General subscale doesn't appear to be analysed for validity (only cognitive, social, physical which aren't used within current study).	Current study α = .73 and .76 O'Brien reports previous α = .92 Good internal reliability found for subscales >.73 Good test-retest reliability for subscales .69-.87 (Harter, 1982)	3-item subscale of Perceived Competence Scale for Children.
Prati	Italian version - Mental Health Continuum Short Form (Keyes et al., 2008)	Petrillo et al. (2015) - Convergent validity confirmed with subscales moderately correlating with wellbeing measures Divergent validity confirmed with high mental health scores	High internal reliability (.86) and moderate test-retest reliability Petrillo et al. (2015) Current α = .82 at T1 and .90 at T2.	Lots of evidence across different versions using different languages. This evidence came from an Italian context
Shochet (27 items) Washburn – shortened (10)	Children's depression inventory (CDI; Kovacs, 1992)	Saylor et al. (1984) - Criterion validity – significant results found in 1 of 3 small sample analyses – scores did differ but not sig. Concurrent validity good with some other scales but not with psychiatric rating of depression.	Washburn internal consistency good (α = .80, .79, .77, .81) Saylor et al. (1984) - Test-retest varied from .38 in a non-clinical sample to .87. Significant correlations in split-half reliability. Good internal consistency (.80-.94) Shochet reports consistent reliability and test-retest in previous studies (.71 to .89, .56 to .87; Reynolds, 1994).	Used as a continuous measure rather than to classify depressed/non-depressed, so seems okay that criterion validity was not found to be significant, there were differences found still. Good internal consistency across populations Reynolds full text not available so not checked

| Shochet | Spence children's anxiety scale (Spence, 1998) | Spence et al. (2003) Convergent and discriminant validity - Correlations with anxiety (.75) Did sig. correlate with depression measures but less than anxiety (.60) | Spence et al. (2003) High internal consistency (.92) and split half reliability (.90) Satisfactory test-retest (.63) Current study α = .89 | |

Appendix D – Recruitment Documents

Gatekeeper E-mail/Letter Template for virtual schools

Dear XXX

My name is Abigail Cohman and I am a Trainee Educational Psychologist at the University of Southampton. Subject to approval by the University of Southampton ethics committee I will be carrying out a research project regarding secondary aged children's experiences at school and how this may relate to their wellbeing. As part of my research I would like to explore the school experiences of children who are living in care. The research will involve young people filling out an online survey anonymously, and sharing some demographic details (e.g., age, gender, who they live with). I have attached an information sheet for more details about the project.

As a virtual school I am writing to ask whether you, and the young people you work with, would be interested in being part of the project. As the survey will be carried out anonymously online, I would need to have a brief discussion with you about gaining consent for young people who wish to take part, and about setting the survey up for them.

If you would like to support with the project, I can arrange a time for us to meet virtually to answer any questions and explain more about the research. Please get in touch via my university email address: XXXXXX

Thank you for your time and I hope to hear from you soon.
Yours sincerely,
Abigail Cohman

Gatekeeper E-mail/Letter Template for schools

Dear XXX

My name is Abigail Cohman and I am a Trainee Educational Psychologist at the University of Southampton. Subject to approval by the University of Southampton ethics committee I will be carrying out a research project regarding secondary aged children's experiences at school and how this may relate to their wellbeing. The research will involve young people filling out an online survey anonymously, and sharing some demographic details (e.g., age, gender, who they live with). I have attached an information sheet for more details about the project.

I am writing to ask whether you, and the young people you work with, would be interested in being part of the project. As the survey will be carried out anonymously online, I would need to have a brief discussion with you about consent for young people, and about setting the survey up for them.

If you would like to support with the project, I can arrange a time for us to meet virtually to answer any questions and explain more about the research. Please get in touch via my university email address: XXXXXX

Thank you for your time and I hope to hear from you soon.
Yours sincerely,
Abigail Cohman

Participant information Sheet

Study title: School factors and their association with wellbeing in secondary school age pupils.
Researcher: Abigail Cohman
ERGO number: 63524
Version and date: V2, 29.11.2021

Hello! My name is Abi, I am a student at the University of Southampton.

I am training to become an educational psychologist. As part of my training, I am doing some research with children and young people aged 11-19 about their experiences at school and their wellbeing. I'm contacting you to see if you would like to take part in my research.

What will happen to me if I take part?

If you agree to take part, you will be sent a questionnaire which you can fill out on the computer. It should take about 20 minutes, but you can take as much time as you need. You might be asked to fill it in at school or you can do it at home. You can stop at any time during the questionnaire.

Are there any benefits for me if I take part?

When you complete the questionnaire you will receive a £10 Amazon voucher to say thank you for your time. A voucher will be given to you or your parent/caregiver at school. Your answers to the questionnaire will also be helpful for understanding young people's experiences.

Are there any risks involved?

There is a possibility that you might feel a bit uncomfortable answering some of the questions, but you can take a break of stop at any time you want. You can fill in the questionnaire on your own or you can have some help from an adult if you'd prefer, they will be asked to keep your answers private.

What information will I give?

You will be asked about your age, gender and ethnicity. You will also be asked some multiple-choice questions about school and your wellbeing or mental health. At the end you will be able to add any comments about your school experiences. I won't ask for your name or any information which identifies you, this means the information you share will be *anonymous* and I won't know that the information came from you. After you have submitted your answers, I won't be able to remove them from my research because I won't know which answers are yours. I will write up the results of the survey and submit it as part of my university course. I might include your quotes or comments, but I will use made up names so no one will know they came from you.
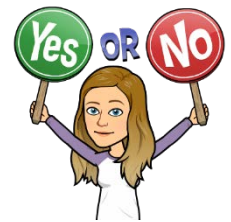
Do I have to take part?
It is your choice whether you take part, you do not have to. If you decide you want to, your head teacher, carer, or parent will also have to agree.

What happens if I change my mind?
You can change your mind at any time and stop filling in the questionnaire. You don't have to tell me why and you will not be in trouble.

What happens if there is a problem?
If you have any worries about anything to do with this research, you can speak to your carer or parent or someone at school, or you can contact me through an adult and I will do my best to answer your questions.

Carer/Parent Information Sheet

Study Title: School factors and their association with wellbeing in secondary school age pupils.
Researcher: Abigail Cohman
ERGO number: 63524
Version and date: V2, 29.11.2021

Your child/a child in your care is being invited to take part in the above research study. In order for them to take part information is being provided to you to explain why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information. If you are NOT happy for children in your care to participate you will be asked to complete an OPT OUT form, provided with this information sheet. This form should be returned to your child's school within two weeks of receiving this information.

What is the research about?

My name is Abigail Cohman and I am a Trainee Educational Psychologist at the University of Southampton. I am inviting your child to participate in a study regarding their experiences at school and how this may relate to their wellbeing.

This study was approved by the Faculty Research Ethics Committee (FREC) at the University

of Southampton (ERGO Number: 63524)

What will happen to them if they take part?

This study involves your child completing an anonymous questionnaire online which should take approximately 20 minutes of their time. The questionnaire will ask a few non-identifying questions about them, followed by some multiple-choice questions and one open-ended question on school experiences. They can take as long as they need on the questionnaire and can decide to stop during if they do not wish to continue. They will be asked to complete this at school, or at home, in a private space.

Why have they been asked to participate?

This study is looking at school factors and wellbeing in secondary school and college aged children (11-19) from a range of backgrounds. Your child has been asked to participate as they fall into this age range and their school/virtual school has been approached by the researcher and agreed to forward on information about the study on the researcher's behalf. I am aiming to recruit around 80 children and young people for this study.

What are the possible benefits of taking part?

If you give consent for your child to take part and they decide to take part in this study, they will receive a £10 Amazon voucher for their time. Participation will also contribute to knowledge in this area of research. The voucher will be issued by your child's school on completion of the questionnaire.

What information will be collected?

The questions in this survey ask for information in relation to the child's age, gender, school experiences, friendships, and wellbeing/mental health.

Are there any risks involved?

It is expected that taking part in this study will not cause young people any psychological discomfort and/or distress, however, should they feel uncomfortable they can leave the survey at any time. At the end of the survey your child should have an opportunity to talk with school staff if needed, and some activities will be suggested to support their mood, as well as some links to websites and charities should they need any support.

What will happen to the information collected?

All information collected for this study will be stored securely on a password protected computer and backed up on a secure server. Only members of the research team will have access to this information. The information collected will be analysed and written up as part of the researcher's dissertation and may be published in scientific journals or presented at

scientific conferences or as part of outreach events. Quotes/responses from the open-ended question may be included however these will not be linked to your child and will remain anonymous.

The University of Southampton conducts research to the highest standards of ethics and research integrity. In accordance with our Research Data Management Policy, data will be held for 10 years after the study has finished when it will be securely destroyed.

Will participation be confidential?

Your child's participation and the information we collect about them during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your child's information, as a research participant, strictly confidential.

Do we have to take part?

No, it is entirely up to you and your child/young person to decide whether or not they take part. If you are happy for them to take part you don't need to do anything. If you DO NOT want them to take part you can complete the form sent with this information sheet and return it to your child's school. You can discuss participation with the young person, using the participant information sheet.

What happens if I change my mind?

You and your child/young person have the right to change your minds and withdraw without giving a reason and without your participant rights being affected. If you decide not to take part you/the young person can just close the survey. Once survey data has been submitted it will no longer be possible to withdraw the information as it will be anonymous and will not be linked to your child.

What happens if there is a problem?

If you are unhappy about any aspect of this study and would like to make a formal complaint, you can contact the Head of Research Integrity and Governance, University of Southampton, on the following contact details: Email: rgoinfo@soton.ac.uk, phone: + 44 2380 595058. Please quote the Ethics/ERGO number above. Please note that by making a complaint you or the child might be no longer anonymous.

Where can I get more information?

Please discuss participation with your young person, using the participant information sheet. If either of you would like any more information you can contact the researcher at any time:

Abi Cohman, Trainee Educational Psychologist, University of Southampton
Email: XXXXX

If you have any questions or concerns, you can also contact my supervisor Cora Sargeant: XXXXX

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly funded organisation, the University must ensure that it is in the public interest when we use personally identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and can identify a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at
http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable

information about you for 10 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Thank you for taking the time to read the information sheet.

Adverts for use by Virtual Schools

UNIVERSITY OF Southampton

Research Help Needed

Are you age 11-19?

Take part in a 20 minute online survey about your school experiences and wellbeing

£10 Amazon voucher to say thank you for your time

Thank you!

CONTACT XXXX VIA XXXXX TO TAKE PART

ERGO number: 63524 Version 1, 29.11.2021

Participants needed

Hello! My name is Abi, I am a student at the University of Southampton.

I am doing some research with children and young people aged 11-19 about their experiences at school and their wellbeing.

What will it involve?
An online questionnaire which should take about twenty minutes. You'll be asked questions about your school experiences and your wellbeing/ mental health. You can fill it in at school or home and take as long as you need, you can have help if you want to. You can also stop any time if you change your mind. I won't ask for your name so no one will know your answers to the questions unless you show them.

When you complete the questionnaire, you will receive a £10 Amazon voucher to say thank you for your time. You'll also be helping us to learn more about young people's experiences.

Where can I get more information?
If you're interested in taking part you can tell XXXXX at XXXXX (e.g., Maria at the Virtual school) who can give you some more information and check with your carer/guardian that it's okay for you to take part. After that they can set you up with the online survey. Don't forget that you can change your mind about taking part any time until you've finished the survey.

If you have any questions or concerns, you can also contact the research supervisor Cora Sargeant (Senior Teaching Fellow): XXXXX

Virtual School consent form

Virtual School consent form for child participation in research

Study title: School factors and their association with wellbeing in secondary school age pupils.
Researcher name: Abigail Cohman
ERGO number: 63524 **Version number & Date**: V1, 06.09.2021

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (06.09.2021 / version 1) and have had the opportunity to ask questions about the study.	
I agree that the relevant consents have been gained for the children on the roll of the virtual school who will be taking part in the study.	
I understand that participation is voluntary and they or I may withdraw them from the study for any reason without participation rights being affected.	
Young people have been provided with information about the study and understand what will happen; they have had the opportunity to and may at any time ask questions.	
I understand that if they are withdrawn from the study that it may not be possible to remove the data once the personal information is no longer linked to the data.	
I understand that they may be quoted directly in reports of the research but that they will not be directly identified (e.g. that any identifying information will be removed).	

Name ………………………………………………………………………………….

Role & Organisation ………………………………………………………………………………………

Signature ....….. Date………………………………………

Name of researcher (print name)………………………………………………………………………

Signature of researcher ………………………………………………………………………………….

Date……………………………………………………………………………………………………….

PLEASE RETURN THIS FORM TO THE RESEARCHER
ABI COHMAN - XXXX
If you have any questions or concerns, you can also contact my supervisor Cora Sargeant
(Senior Teaching Fellow): XXXX

Consent form for schools

Parent/Guardian **OPT-OUT** form

This form should be returned to your child's school by <u>DATE</u> (to be completed depending on when this form and PIS are sent out, adults are to be given at least 2 weeks to opt-out)

Study title: School factors and their association with wellbeing in secondary school age pupils.

Researcher name: Abigail Cohman
ERGO number: 63524
Version and date: V1, 06.09.2021

I do **NOT** wish my child/dependent to be included in this study

Signature of parent/guardian…………………………………………………………………………

Name of child/dependent (print name)……………………………………………………………

Date………………………………………………………………………………………………………

If you would like to get in touch with the researcher please contact Abigail Cohman at XXXX (please note this may affect you/your child's anonymity)

If you have any questions or concerns, you can also contact the research supervisor Cora Sargeant (Senior Teaching Fellow): XXXX

Instructions for adults setting up the survey

Instructions included within the email sent to the headteachers/school liaison when the link to the questionnaire was provided. They then distributed the email to relevant adults who were supporting young people by setting up the questionnaire.

Dear X,
Thank you for supporting with this research project. This email contains the information needed to allow young people to access the online questionnaire in order to take part in this study. The questionnaire should only be set up and completed for young people who have

expressed an interest and who's carers/parents or head-teachers have given consent for them to take part.

Please read the following information before setting up the questionnaire for young people.

In order to maintain confidentiality young people completing the questionnaire will need to be provided with a private space away from other children and unnecessary adults. Young people will have the choice to complete the questionnaire independently however they may choose to have an adult to support them. Please ensure adult support is offered and available, should they need it.

The link to the questionnaire is contained at the end of this email. The questionnaire should be set up by an adult. The participant information is contained on the first page of the survey if the young person would like to read it again, there is also a tick box for you to complete to confirm consent for any young person under the age of 16. In order to protect the confidentiality of the young person, you will be asked to confirm that you will not discuss any of the child's responses with anyone else, unless you have a safeguarding concern. If you have any concerns about the information raised during the survey (including a safeguarding issue), please follow the safeguarding procedures in your setting.
The questionnaire is expected to take around 20 minutes. At the end of the questionnaire an adult should be made available to the young person to allow them to discuss the questionnaire or any issues raised, should they choose to. Although the survey is not expected to cause distress, young people may wish to have some time alone or with an adult before returning to class or other activities. A debrief is available at the end of the survey and can be provided via email to print if needed.

The questionnaire can be accessed via the following link:
LINK

Please feel free to contact me at any time if you have questions about the research or the process.

Abigail Cohman: XXXX

If you have any questions or concerns, you can also contact my supervisor Cora Sargeant (Senior Teaching Fellow): XXXX

Thank you again for supporting with this research project.

Appendix E - Qualtrics Survey

Study Title: School/College factors and their association with wellbeing in secondary school and further education.
Researcher: Abigail Cohman
ERGO number: 63524
Version 3

Date: 19.02.2022

You are being invited to take part in the above research study. Hopefully you have already read or seen information about the research, but it is also included below. If you are still happy to take part in the survey you will be asked to tick the box at the bottom of this page.

What is the research about?
My name is Abi, I am a student at the University of Southampton training to become an educational psychologist. As part of my training I am doing some research with children and young people aged 11-19 about their experiences at school and their wellbeing.

What will happen to me if I take part?
You will complete an online questionnaire which should take about 20 minutes, but you can take as much time as you need.

Are there any benefits for me if I take part?
When you complete the questionnaire you will receive a £10 voucher to say thank you for your time. You can leave your email address at the end of the survey to receive your voucher. Your answers to the questionnaire will also be helpful for understanding young people's experiences.

Are there any risks involved?
There is a possibility that you might feel a bit uncomfortable answering some of the questions, but you can take a break of stop at any time you want. You can fill in the questionnaire on your own or you can have some help from an adult if you'd prefer, they have been asked to keep your answers private.

What information will I give?
You will be asked some questions about you and some multiple-choice questions about school/college and your wellbeing or mental health. At the end you will be able to add any comments about your school/college experiences. I won't ask for your name or any information which identifies you, this means the information you share will be anonymous and I won't know that the information came from you. After you have submitted your answers, I won't be able to remove them from my research because I won't know which answers are yours. I will write up the results of the survey and submit it as part of my university course. I might include your quotes or comments, but I will use made up names so no one will know they came from you.

Do I have to take part?
It is your choice whether you take part, you do not have to. You can change your mind at any time and stop filling in the questionnaire. You don't have to tell anyone why and you will not be in trouble.

What happens if there is a problem?
If you have any worries about anything to do with this research, you can speak to your carer or parent or someone at school/college.

Consent to take part

I confirm that I am 16 or older and have read and understood the participant information above.

I am an adult setting up the survey/supporting this young person (e.g., member of school staff, social worker, parent/carer) and I confirm that the person with legal responsibility for this child has given consent for them to take part.

→

For those 16+ choosing option 1, the following page is shown to confirm consent

Consent to take part

Confirm

I agree to take part in this research project and agree for my data to be used for the purpose of this study.

○

I understand my participation is voluntary and I may withdraw (at any time) for any reason without my participation rights being affected.

○

I understand that if I withdraw from the study that it may not be possible to remove the data.

○

I understand that I may be quoted directly in reports of the research but that I will not be directly identified.

○

→

If option 2 is selected the following will appear:

In order to protect the confidentiality of the young person, please tick this box to confirm that you will not discuss any of the child's responses with anyone else, unless you have a safeguarding concern. If you have any concerns about the information raised during this survey (including a safeguarding issue), please contact the designated safeguarding lead at your school.

I confirm

→

As the child or young person taking part in this study please complete the question below to confirm that you have read/watched and understood the information about the study and that you would like to take part

I have read/watched and understood the information provided and would like to take part in the study

I have read/watched and understood the information provided and would NOT like to take part in the study

I have NOT seen or understood the information about the study

If option 2 is selected:

Thank you for your time. If you do not want to take part you can now close the survey.

If you would like some support with aspects of school life or your mental health and wellbeing please speak to an adult at school or contact one of the charities below who all offer advice and support to young people.
Young minds: https://youngminds.org.uk/
Mind: https://www.mind.org.uk/information-support/for-children-and-young-people/
Anxiety UK: https://www.anxietyuk.org.uk/ 03444 775 774 or text 07537 416 905
Bullying UK: https://www.bullying.co.uk/ 08088002222
Childline offer a range of support via phone or on their website: 08001111, https://www.childline.org.uk/

Lots of other useful links can be found on the Princes Trust website: https://www.princes-trust.org.uk/help-for-young-people/who-else/housing-health-wellbeing/wellbeing/mental-health

If option 3 is selected:

Thank you for showing interest in this study. A participant information sheet and video is available for you to read/watch so that you can understand more about the study. Please restart the survey to view the participant information before continuing.

As the child or young person taking part in this study please complete the question below to confirm that you have read/watched and understood the information about the study and that you would like to take part

I have read/watched and understood the information provided and would like to take part in the study

I have read/watched and understood the information provided and would NOT like to take part in the study

I have NOT seen or understood the information about the study

If all criteria for continuation in the survey are met:

You will now be asked some questions. You can have an adult nearby or supporting you if you choose. Please answer as honestly as possible. You can leave the survey at any time if you no longer want to take part.

How old are you?

Which school year are you in?

What is your ethnic background?

Dropdown options (what is your ethnic background?) – participants select from one of the options in bold and are then presented with the options below depending on their choice.

White

- English, Welsh, Scottish, Northern Irish or British
- Irish
- Gypsy or Irish Traveller
- Any other White background

Mixed or Multiple ethnic groups

- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed or Multiple ethnic background

Asian or Asian British

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background

Black, African, Caribbean or Black British

- African
- Caribbean
- Any other Black, African or Caribbean background

Other ethnic group

- Arab
- Any other ethnic group

e.g.,

you choose. Please answer as honestly as possible. You can leave the survey at any time if
you no longer want to take part.

How old are you?

Which school year are you in?

| White |
| Mixed or Multiple ethnic groups |
| Asian or Asian British |
| Black, African, Caribbean or Black British |
| Other ethnic group |
| Prefer not to say |

Mixed or Multiple ethnic groups

White or Black Caribbean

White or Black African

White and Asian

Any other Mixed or Multiple ethnic background

If 'prefer not to say' is selected, then no additional options are offered.

What gender do you identify as?

Male

Female

Non-binary/third gender

Other (please enter below)

Prefer not to say

Is the gender you identify as different to the one you were assigned to at birth?

Yes

No

Prefer not to say

Who do you live with?

Birth parent(s)

Adoptive parent(s)

Foster carer(s)

A family member who is not my parent (e.g., grandparent)

Other (please enter below)

Prefer not to say

For each of the following statements, please tick the box that describes you the best. Please read each sentence carefully and answer honestly. Thank you.

In most ways my life is close to the way I would want it to be	Disagree a lot	Disagree a little	Don't agree or disagree	Agree a little	Agree a lot
The things in my life are excellent	Disagree a lot	Disagree a little	Don't agree or disagree	Agree a little	Agree a lot
I am happy with my life	Disagree a lot	Disagree a little	Don't agree or disagree	Agree a little	Agree a lot
So far I have gotten the important things I want in life	Disagree a lot	Disagree a little	Don't agree or disagree	Agree a little	Agree a lot
If I could live my life over, I would have it the same way	Disagree a lot	Disagree a little	Don't agree or disagree	Agree a little	Agree a lot

Comments (optional)

→

Choose the answer for each statement that is most true for you.

	1 - Not at all true	2	3	4	5 - Completely True
I feel like a part of my school	○	○	○	○	○
People at my school notice when I am good at something	○	○	○	○	○
It is hard for people like me to be accepted at my school	○	○	○	○	○

	1 - Not at all true	2	3	4	5 - Completely True
Other students in my school take my opinion seriously	○	○	○	○	○
Most teachers at my school are interested in me	○	○	○	○	○
Sometimes I feel as if I don't belong in my school	○	○	○	○	○

Comments (optional)

[   ]

Choose the answer for each statement that is most true for you.

	1 - Not at all true	2	3	4	5 - Completely True
There is at least one teacher or adult I can talk to in my school if I have a problem	○	○	○	○	○
People at my school are friendly to me	○	○	○	○	○
Teachers here are not interested in people like me	○	○	○	○	○

	1 - Not at all true	2	3	4	5 - Completely True
I am included in lots of activities at my school	○	○	○	○	○
I am treated with as much respect as other students in my school	○	○	○	○	○
I feel very different from most other students at my school	○	○	○	○	○

Comments (optional)

[   ]

Choose the answer for each statement that is most true for you.

	1 - Not at all true	2	3	4	5 - Completely True
I can really be myself at my school	O	O	O	O	O
Teachers at my school respect me	O	O	O	O	O
People at my school know that I can do good work	O	O	O	O	O

	1 - Not at all true	2	3	4	5 - Completely True
I wish I were in a different school	O	O	O	O	O
I feel proud to belong to my school	O	O	O	O	O
Other students at my school like me the way I am	O	O	O	O	O

Comments (optional)

[   ]

→

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft!

Please give your answers on the basis of how things have been for you over the last six months.

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	O	O	O
I am restless, I cannot stay still for long	O	O	O
I get a lot of headaches, stomach-aches or sickness	O	O	O
I usually share with others (food, games, pens etc.)	O	O	O
I get angry and often lose my temper	O	O	O
I am usually on my own. I generally play alone or keep to myself	O	O	O
I usually do as I am told	O	O	O
I worry a lot	O	O	O

→

Please give your answers on the basis of how things have been for you over the last six months.

	Not True	Somewhat True	Certainly True
I am helpful if someone is hurt, upset or feeling ill	○	○	○
I am constantly fidgeting or squirming	○	○	○
I have one good friend or more	○	○	○
I fight a lot. I can make other people do what I want	○	○	○
I am often unhappy, down-hearted or tearful	○	○	○
Other people my age generally like me	○	○	○
I am easily distracted, I find it difficult to concentrate	○	○	○
I am nervous in new situations. I easily lose confidence	○	○	○

→

Please give your answers on the basis of how things have been for you over the last six months.

	Not True	Somewhat True	Certainly True
I am kind to younger children	○	○	○
I am often accused of lying or cheating	○	○	○
Other children or young people pick on me or bully me	○	○	○
I often volunteer to help others (parents, teachers, children)	○	○	○
I think before I do things	○	○	○
I take things that are not mine from home, school or elsewhere	○	○	○
I get on better with adults than with people my own age	○	○	○
I have many fears, I am easily scared	○	○	○
I finish the work I'm doing. My attention is good	○	○	○

© Robert Goodman, 2005

Comments (optional)

→

Indicate the extent (amount) you have felt this way over the last week

	1 - Very slightly or not at all	2 - A little	3 - Moderately	4 - Quite a bit	5 - Extremely
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○

	1 - Very slightly or not at all	2 - A little	3 - Moderately	4 - Quite a bit	5 - Extremely
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○

Comments (optional)

→

Indicate the extent (amount) you have felt this way over the last week

	1 - Very slightly or not at all	2 - A little	3 - Moderately	4 - Quite a bit	5 - Extremely
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○

	1 - Very slightly or not at all	2 - A little	3 - Moderately	4 - Quite a bit	5 - Extremely
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

Comments (optional)

[   ]

→

Please read the statements below and think about the last 7 days. Please respond to each question or statement by marking one box per row.

In the past 7 days...

	1 - Never	2 - Almost never	3 - Sometimes	4 - Often	5 - Almost always
I felt accepted by other kids my age...	○	○	○	○	○
I was able to count on my friends...	○	○	○	○	○
I was able to talk about everything with my friends...	○	○	○	○	○
I was good at making friends...	○	○	○	○	○

In the past 7 days...

	1 - Never	2 - Almost never	3 - Sometimes	4 - Often	5 - Almost always
My friends and I helped each other out...	○	○	○	○	○
Other kids wanted to be my friend...	○	○	○	○	○
Other kids wanted to be with me...	○	○	○	○	○
Other kids wanted to talk to me...	○	○	○	○	○

Comments (optional)

[   ]

→

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

On the whole, I am satisfied with myself.	Strongly agree	Agree	Disagree	Strongly disagree
At times I think I am no good at all.	Strongly agree	Agree	Disagree	Strongly disagree
I feel that I have a number of good qualities.	Strongly agree	Agree	Disagree	Strongly disagree
I am able to do things as well as most other people.	Strongly agree	Agree	Disagree	Strongly disagree
I feel I do not have much to be proud of.	Strongly agree	Agree	Disagree	Strongly disagree

| I certainly feel useless at times. | Strongly agree | Agree | Disagree | Strongly disagree |

| I feel that I'm a person of worth, at least on an equal plane with others. | Strongly agree | Agree | Disagree | Strongly disagree |

| I wish I could have more respect for myself. | Strongly agree | Agree | Disagree | Strongly disagree |

| All in all, I am inclined to feel that I am a failure. | Strongly agree | Agree | Disagree | Strongly disagree |

| I take a positive attitude toward myself. | Strongly agree | Agree | Disagree | Strongly disagree |

Comments (optional)

→

Here are some questions about being bullied by other students. First we define or explain the word bullying. We say a student is being bullied when another student, or several other students

- say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names
- completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- hit, kick, push, shove around, or lock him or her inside a room
- tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her
- and other hurtful things like that.

When we talk about bullying, these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying, when a student is teased repeatedly in a mean and hurtful way.

But we don't call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

These questions are about your life in school in the past couple of months, that is, the period from start of school after summer/winter holiday vacation until now. So when you answer, you should think of how it has been during the past 2 or 3 months and not only how it is just now.

How often have you been bullied at school in the past couple of months?

| I haven't been bullied at school in the past couple of months |
| It has only happened once or twice |
| 2 or 3 times a month |
| About once a week |
| Several times a week |

→

In the past couple of months...

	It hasn't happened to me	Only once or twice	2 or 3 times a month	About once a week	Several times a week
I was called mean names, was made fun of, or teased in a hurtful way	○	○	○	○	○
Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me	○	○	○	○	○
I was hit, kicked, pushed, shoved around, or locked indoors	○	○	○	○	○
Other students told lies or spread false rumours about me and tried to make others dislike me	○	○	○	○	○
I had money or other things taken away from me or damaged	○	○	○	○	○

In the past couple of months...

	It hasn't happened to me	Only once or twice	2 or 3 times a month	About once a week	Several times a week
I was threatened or forced to do things I didn't want to do	○	○	○	○	○
I was bullied with mean names or comments about my race or the colour of my skin	○	○	○	○	○
I was bullied with mean names, comments, or gestures with a sexual meaning	○	○	○	○	○
I was bullied with mean or hurtful messages, calls or pictures, or in other ways on my mobile phone or over the internet	○	○	○	○	○
I was bullied in another way	○	○	○	○	○

By how many students have you usually been bullied?

I haven't been bullied at school in the past couple of months

Mainly by one student

by a group of 2-3 students

by a group of 4-9 students

by a group of more than 9 students

by several different students or groups of students

How long has the bullying lasted?

I haven't been bullied at school in the past couple of months

it lasted one or two weeks

it lasted about a month

it lasted about 6 months

it lasted about a year

it has gone on for several years

Comments (optional)

→

Thank you for completing the multiple choice questions. For the final question please list up to three things which help you to feel like you belong at school

→

At the end of the survey (before debriefing) the following will be presented:

Thank you for completing this survey. If you would like to leave an email address so that
you can receive your £10 Amazon voucher please click on the link below.

Click here to enter your email address

Your email address will not be connected to the answers you have given in this survey.

→

If participants choose not to leave an email and click next the debriefing statement will be displayed.
This has been edited to reflect the changes in recruitment protocol and now reads:

The aim of this research was to explore your experiences at school/college and how they relate to
your wellbeing. Your data will help our understanding of how much young people feel like they
belong at school/college and how this relates to your wellbeing/mental health. Once again, results of
this study will not include your name or any other identifying characteristics. The research did not
use any deception.

Now you've finished the questionnaire you could try one of the following to help you reset before
going back to your day.

Listen to your favourite song or watch a video you enjoy.
Play a game or have a chat with someone you trust.
Think about the best day you've ever had.
Get someone to tell you a funny joke or make one up yourself!

If you would like some support with aspects of school life or your mental health and wellbeing
please speak to an adult at school or contact one of the charities below who all offer advice and
support to young people.
Young minds: https://youngminds.org.uk/ Mind: https://www.mind.org.uk/information-support/for-
children-and-young-people/
Anxiety UK: https://www.anxietyuk.org.uk/ 03444 775 774 or text 07537 416 905
Bullying UK: https://www.bullying.co.uk/ 08088002222
Childline offer a range of support via phone or on their website:
08001111, https://www.childline.org.uk/

Lots of other useful links can be found on the Princes Trust website: https://www.princes-
trust.org.uk/help-for-young-people/who-else/housing-health-wellbeing/wellbeing/mental-health

Thank you for your participation in this research. If you have questions about your rights as a
participant in this research, or if you feel that you have been placed at risk, you may contact the
University of Southampton Head of Research Integrity and Governance

You can now close the survey.

If participants click on the link this will take them to a separate Qualtrics survey where the following will be displayed:

Please leave an email address below to receive your £10 Amazon voucher

[   ]

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The aim of this research was to explore your experiences at school/college and how they relate to your wellbeing. Your data will help our understanding of how much young people feel like they belong at school/college and how this relates to your wellbeing/mental health. Once again, results of this study will not include your name or any other identifying characteristics. The research did not use any deception.

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Get someone to tell you a funny joke or make one up yourself!

If you would like some support with aspects of school life or your mental health and wellbeing please speak to an adult at school or contact one of the charities below who all offer advice and support to young people.

Young minds: https://youngminds.org.uk/

Mind: https://www.mind.org.uk/information-support/for-children-and-young-people/

Anxiety UK: https://www.anxietyuk.org.uk/ 03444 775 774 or text 07537 416 905

Bullying UK: https://www.bullying.co.uk/ 08088002222

Childline offer a range of support via phone or on their website: 08001111, https://www.childline.org.uk/

Lots of other useful links can be found on the Princes Trust website: https://www.princes-trust.org.uk/help-for-young-people/who-else/housing-health-wellbeing/wellbeing/mental-health

Thank you for your participation in this research. If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the University of Southampton Head of Research Integrity and Governance (023 8059 5058, rgoinfo@soton.ac.uk).

You can now close the survey.

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