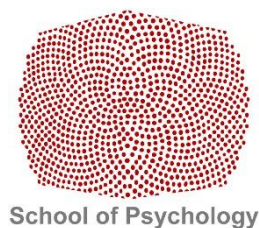# School Experience for Adopted Children, Young People, and their Families

A thesis submitted to the School of Psychology, Cardiff University, in partial fulfilment of the requirement for the degree of Doctor of Philosophy

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This thesis is dedicated to the children, young people and their families who took time to pause, reflect and respond.

Acknowledgements

Dissemination of Findings

Much of the work that comprises this thesis has been disseminated at conferences or submitted for peer review prior to publication. The aims, rationale, search strategy and methodology for the systematic review in chapter 2 was presented as a working paper at the *Breaking Boundaries: Humanities and Social Sciences Interdisciplinary Conference*. (2016, April 21) Cardiff University.

Following this, a version of the completed (but not updated) systematic review was published as Brown, A., Waters, C. S., & Shelton, K. H. (2017). A systematic review of school performance and behavioural and emotional problems for adopted children. *Adoption & Fostering*, $41_{(4)}$, 346-368. The published version of the systematic review was also included in an information pack to members of the Upper House and cited in the House of Lords debate on adopted children in schools (House of Lords (2019). May 14 Debate 'Schools: Adopted Children' (Vol 797, Col 1530)).

Early findings and methodology from chapter 4 was presented as a paper at the *Cardiff Adoption Research Conference*. (2017, June 30) Cardiff University. Finalised methodology, analysis and findings were later published as Brown, A., Waters, C. S., & Shelton, K. H. (2019). The educational aspirations and psychological well-being of adopted young people in the UK. *Adoption & Fostering*, $43_{(1)}$, 46-59.

List of Acronyms

ACES	Adverse Childhood Experiences
BPI	Behaviour Problem Index
CAMHS	Child and Adolescent Mental Health Services (UK)
CAPI	Computer Assisted Personal Interviewing
CARA	Child Assessment Report for Adoption (Wales)
CAO	Child Arrangements Order
CBCL	Child Behaviour Check List
CIN	Children in Need
CINP	Children in Need Plan
CLA	Children Looked After
CP	Child Protection
CPP	Child Protection Plan
CRCS	Children Receiving Care and Support (Wales only)
DfE	Department for Education
EHCP	Education, Health and Care Plan
FAS	Family Affluence Scale
FP	Foundation Phase (Wales only)
FSM	Free School Meals
ICA	Inter-Country Adoption
IWM	Internal Working Model
ISI-6G	Identity Style Inventory (6th Grade Revision)
KS1	Key Stage 1 (England only)
KS2	Key Stage 2 (Wales and England)
KS4	Key Stage 4 (Wales and England)
LAC	Looked After Children
NPD	National Pupil Database
ONS	Office of National Statistics (UK)
OOHC	Out of Home Care
PLASC	Pupil Level Annual School Census
PSM	Propensity Score Matching
PSSM	Psychological Sense of School Membership
RSES	Rosenberg Self-Esteem Scale
RO	Residential Order

SATs	Standardised Attainment Tests
SDQ	Strength and Difficulties Questionnaire
SEMH	Social and Emotional Mental Health
SENCo	Special Educational Needs Coordinator
SEND	Special Educational Needs & Disability
SGO	Special Guardianship Order
UKHLS	UK Household Longitudinal Survey
US	United States of America
USoc	Understanding Society Survey
WACS	Wales Adoption Cohort Study

Thesis Abstract

Education experience and performance for children adopted from care is worthy of comprehensive and robust investigation. An attainment gap exists for children adopted in the UK that persists throughout their educational career. Adoption is a relatively unique experience and adds a layer of complexity, difference, and vulnerability, to young people's lives that is poorly understood and under-researched. This thesis aims to explore and examine diverse experiences of school for adopted and non-adopted children, highlighted by a persistent educational attainment gap. In addition, this thesis aims to widen the scope of previous work on adopted children to encompass school experiences, behavioural and emotional adjustment and related individual developmental challenges known to affect learning.

A systematic review (Chapter 2) yielded 15 studies exploring educational, behavioural and emotional outcomes for adopted children (of which only one was from the UK), indicating a paucity of research in this area. The included studies revealed lower school performance and increased behavioural problems for adopted children compared to non-adopted peers.

Next, data from the Wales Adoption Cohort Study (WACS; PI K. Shelton; Chapter 3) was used to explore adoptive family needs in relation to beginning school. Open, reciprocal lines of communication between school and home, coupled with awareness of specific adoption related issues enabled adoptive families to flourish in the initial years after placement. Parental advocacy, in terms of support needs for their adopted children, also arose as an essential component of adoptive family success.

Examination of a nationally representative dataset (Understanding Society (USoc); UKDataService, 2020) explored differences on measures of emotional symptoms and behavioural problems, current school experience and career aspiration for adolescents, based on adoptive status (Chapter 4). Adopted young people were found to experience greater challenges in terms of emotional symptoms and behavioural problems. Adopted adolescents were also more likely to show an intention to seek full-time work at the end of compulsory schooling and were less likely to choose to continue education.

In the final empirical chapter (Chapter 5), school experience, educational and occupational aspiration were explored from the adolescent perspective. Outcomes were consistent with earlier findings. Adopted adolescents' feelings about being adopted were linked with self-esteem and school belonging. In addition, most adopted young

people reported a less than favourable reaction on the part of others to their adoptive status and fewer close friends. Findings are discussed in the context of existing research and limitations related to accessing vulnerable groups for research (Chapter 6).

Chapter 1: Introduction

A persistent and enduring educational attainment gap exists for children experienced of the care system, including those who are later adopted, despite decades of interest and research (Berridge et al., 2020; Howe, 2009). The putative effects of significant early adversity on emotional, cognitive, behavioural and educational domains of child development are inexorable and enduring (Petrenko, Friend, Garrido, Taussig, & Culhane, 2012; Anda et al., 2006). Care experienced children and young people, whether subsequently adopted, returned to the birth family or remaining in an out-of-home-care (OOHC) arrangement, will have been exposed to a certain level of early adversity and are potentially vulnerable to the damaging effects of those experiences. The deleterious impact of adverse early life experiences (e.g. abuse, neglect, family stress, loss and separation) on several areas of child development likely to affect learning, either directly or indirectly, is well documented (e.g. Norman et al., 2012; Romano, Babchishin, Marquis, & Frechette, 2015; Teicher & Samson, 2016). Numerous areas of concern for atypical developmental progress resulting from exposure to early adversity have been highlighted, including issues with social relationships (Bruce, Tarullo, & Gunnar, 2009; Cooper & Johnson, 2007), cognitive development (Beckett et al., 2006; Fry, Langley, & Shelton, 2016), emotional development (Dvir, Ford, Hill, & Frazier, 2014), participation in *risky* behaviours (Wijedasa & Selwyn, 2011), educational attainment (O'Sullivan & Westerman, 2007; Vorria, Ntouma, & Rutter, 2015) and lower entrance rates to post-compulsory education (Harrison, 2020; Jackson & Martin, 1998); this tenet holds true across borders (Christoffersen, 2012; Juffer, van IJzendoorn, & Palacios, 2011; Palacios & Brodzinsky, 2010).

The general aims of education not only include acquisition of knowledge and skills, but encompass an individual's development in relation to moral, spiritual, cultural, psychological and physical aspects (DfE, 2014a; Gill & Thomson, 2014). For most children, the school journey will be one of relative stability and will be characterised by experiences of success over adversity. However, navigating a successful course through the educational system can be problematic for many children but particularly for those who have experienced early adversity (Berridge et al., 2020). In the UK, curriculum, monitoring and assessment of educational attainment and achievement varies across the devolved nations, rendering direct comparisons between nations problematic. For Wales, England and Northern Ireland (NI) the education system is broadly similar and organised into several stages according to age: Key Stage

1 (5-7 years old), Key Stage 2 (7-11 years old), Key Stage 3 (11-14 years old) and Key Stage 4 (14-16 years old). In Scotland, a Primary phase covers pupils aged 5-12 years old and a secondary phase for pupils 12-16 years old. Statutory assessment for all the devolved nations occurs at 16 years old (GCSE for Wales, England and NI; Nationals for Scotland). Optional qualifications may be taken at 18 years old (A-Levels in Wales, England and NI, Highers in Scotland). Arrangements for monitoring and reporting progress throughout the school years are particular to each nation; for example, England monitors progress through statutory assessments at Year 1 (grammar and phonics), Year 2 Standardised Attainment Tests (SATs) and Year 6 (SATs).

In Wales, the Welsh Government collates pupil attainment data for Children Receiving Care or Support (CRCS), and those in the general population. Due to legislation changes the CRCS census replaced the Children in Need (CIN) census, but are fundamentally different, thus excluding comparisons over time. Most noticeably, the Children Looked After (CLA) census is not currently linked to the educational Pupil Level Annual School Census (PLASC) dataset. Ascertaining educational outcomes for adopted children in Wales is therefore not possible. The most recent published data for the general population and CRCS is from 2019 and are presented in Table 1.

Table 1

Proportion of Pupils in Wales Achieving Expected Level of Attainment at Each Key Stage Statutory Assessment, by Care Experience Status

Pupil group	FP	KS2[a]	KS4[b]
General Population	80.0	87.8	53.8
CRCS			
CLA	60.8	69.39	17.23
CP	55.47	68.13	19.35
CRCS - other	36.15	42.51	11.93
Adopted	-	-	-

Note. FP=Foundation Phase; KS2=Key Stage 2; KS4=Key Stage 4; CRCS=Children Receiving Care and Support, at 31st March 2019; CP=Children on the child protection register but not looked after; CRCS-other=Children Receiving Care and Support but not looked after and not on the CP; [a]Core Subject Indicator - percentage of pupils achieving expected level or above in English/ Welsh, Maths & Science in combination; [b]Level 2 inclusive – equivalent to 5 GCSEs at grade A*-C, including Welsh/ English and Maths
(Source: Welsh Assembly Government, 2021b-e)

In England, the Department for Education (DfE) annually collates details of pupil attainment in statutory assessments. The assessment and reporting system for education attainment in England is complex and has undergone recent changes, leaving direct comparisons across time ambiguous. Where available, the most recent headline outcome figures paint a bleak picture for care experienced children when compared to the general pupil population (Table 2) that is similar to data published every year for the past decade (DfE, 2010, 2011, 2012, 2013, 2014b, 2016d, 2017, 2018, 2019b, 2020d, 2020e).

Table 2

Proportion of Pupils in England Achieving Expected Level of Attainment at Each Key Stage Statutory Assessment, by Care Experience Status

Pupil group	Key Stage 1		Key Stage 2		Key Stage 4	
	Reading	Maths	Reading	Maths	GCSE[a]	Attainment 8[b]
General population	75	76	73	79	64.6	46.7
CLA	52	49	49	51	17.9	19.1
CIN	48	48	45	48	19.8	19.2
Adopted[c,d]	62	62	57	56	37.4	32.2

Note. [a] Benchmark GCSE indicator is a grade 4 and above in both English and maths; [b]Attainment 8 - recent benchmark indicator introduced in 2016, figures are a relative scale score, possible range 0-90; [c]2019 Key Stage 1 data for adopted children unavailable, figures reported are for 'disadvantaged pupils', which include FSM eligibility, have been in LA care for 1 day or more in the last year or left LA care in England and Wales through adoption, SGO, RO or CAO; [d] partial data – estimated 73% coverage at KS2, 52% at KS4.

(Source: DfE, 2019c, 2020c, 2020e)

It would be logical to account for the attainment gap between care-experienced pupils and the general pupil population by considering the relatively high proportions of children and young people with an identified Special Educational Need (SEN). Whilst SEN may account for some of the variance, an attainment gap persists (albeit less pronounced) once SEN is accounted for (Berridge et al., 2020). Participants in the Berridge et al. (2020) study identified four main explanations for the discrepancy in educational progress:

- the experience of stability and continuity in helping children to overcome previous harmful experiences;
- children's social, emotional and mental health difficulties (SEMH) and the extent to which these were being addressed;

- school strategies and responses to deal with the difficulties of CIN and CIC, and whether these were perceived as understanding and helpful;
- children's problems with their peer relations, influenced by their SEMH.

(Berridge et al., 2020; p9)

The explanations gleaned from interviews with over 100 pupils, school staff, parents and carers in this study are poignant because they refer to factors indirectly related to the learning process (as opposed to cognitive difficulties, curriculum, school type, for example). It may be that the needs of care-experienced pupils, whilst compromising learning potential, may not be at such a level to trigger assessment by professionals outside of the schools' ordinary provision. Consideration of indirect, but still important, factors does raise a question of what constitutes 'success' at school and whether measurement in a points-based academic attainment system, that highlights challenges and concerns, adequately captures vital gains in development and recovery for pupils entering school at a relative disadvantage.

Adopted children in particular frequently struggle in school and adoptive parents report that the needs of their children are often not recognised or appropriately managed by the education system (Barratt, 2012). The nature of adopted pupils' struggles in school is echoed in surveys of adoptive families. From a survey of 2676 adopters with a child of school age, 80% reported that their child required more support in school than their peers and 60% indicated that supporting their child through school was one of the top challenges they faced (AUK, 2020a). In addition, a majority (70%) of adoptive parents felt that their child's educational progress was negatively affected by challenges related to well-being at school and that almost two-thirds of their children experience problems outside the classroom at school (AUK, 2018).

An added layer of complexity for children adopted from care exists that may further exacerbate difficulties in resolving experiences of early adversity and adjusting to adoptive life, particularly at school. Children adopted from care become part of a hidden, but no less vulnerable, group in the education system and may be overlooked for allocation of additional support and guidance (Barratt, 2012). The needs of children adopted from care (and their families) may be obscured for several reasons including: a) the legal duty to monitor academic attainment and well-being at local authority level ceases once an adoption order is made. Adopted children are subsumed into the general pupil population and are no longer monitored as a specific, separate group - the impact of early adversity and consequent needs, however, remains; b) it is not a requirement that schools are notified about the adoptive status of any of their pupils (as opposed to CLA, CIN where schools are aware to comply with statutory safeguarding requirements

and to make appropriate adjustments to teaching). Ignorance of adoptive status in an educational setting increases the risk of interactions that are perceived as negative or hurtful, no matter how well-intentioned, from peers and staff, further compounding challenges already faced by children adopted from care; c) adoption is often seen as a panacea for earlier troubles, consequently, expectations to flourish in an adoptive placement may be raised; d) the notion of permanence (i.e. achieving a stable family context) is the underlying philosophy of most child welfare practice and policy (Neil & Beek, 2020; Samuels, 2009) which may inadvertently add increased expectations on the part of adopted child(ren) and adoptive parent(s), for successful adjustment to the new *permanent* family context.

The reasons outlined above are problematic for adoptees who are required to simultaneously navigate potentially stressful environments, such as school, whilst managing the likely impact of early adversity; the nature of which presents barriers for successful navigation. Children spend a significant amount of time in a school setting. It is therefore crucial to understand the impact of the interaction between early adversity and adoptive status on adoptees' experiences of school, including their capacity to form and maintain relationships with peers and adults within the school community; develop a positive and sustainable concept of self that enables growth into well-functioning members of society (Bornstein & Suwalsky, 2021); and acquire new knowledge, experience and skills.

Despite a wealth of empirical studies demonstrating various challenges (psychologically, physically, educationally) faced by children and young people experienced of the care system (e.g. McGuire et al., 2021; Sinclair et al., 2020; Somers et al., 2020) there is a dearth of studies delineating these challenges for children who have left care through adoption, and their families, within the UK in relation to school and education (Howe, 2009; Paniagua, García-Moya, & Moreno, 2020). This thesis represents a first step in addressing this shortfall.

This chapter provides a conceptual landscape within which the following empirical chapters are then placed. Key concepts and ideas which permeate the thesis are outlined at the outset allowing the reader to avoid unnecessary repetition. These key concepts will be later developed when pertinent to the aims of individual chapters. Thus, the present chapter will provide an account of children and young people's experiences of the UK care and education systems, including academic and occupational expectations. To justify the empirical dissociation of children adopted from care from CLA and CIN in terms of educational experiences, needs and outcomes,

it may be necessary to compare these groups alongside non-care-experienced children and young people. The primary focus, however, will remain on domestically adopted children, where possible, as they continue to represent an under-researched group. An emerging body of international research on adopted children's school experiences will be evaluated to place the thesis in a global context but also to highlight potential issues faced by adopted children and young people in the UK. Clarification of my own ontological and epistemological position will be provided before turning to the research aims.

Children's social care in the UK

Children considered to be at risk from harm within the family (known in the UK as children in need, CIN) may be protected through a variety of state interventions. Children's entry into the UK state care system may occur for a variety of reasons, including concerns over health or development or if the child has a disability. Involvement of the children's social care system may begin with efforts to support parents in adequately caring for their children in the home (Farmer, 2009; Neil, Young, & Hartley, 2018) through a multi-agency support plan, depending on level of need (Children in Need Plan (CINP) or Child Protection Plan (CPP); Berridge et al., 2020), If the remain-at-home option proves unsuccessful or inappropriate, then other pathways to protect and care for the child are considered. A care order is made through the judicial system when a child is relinquished, abandoned or the level of need is identified by the state as requiring intervention, resulting in removal from the birth family to protect the child's health and wellbeing; the child then becomes a ward of the state (often termed Children Looked After, CLA). In the UK, this is usually by local authority in which the child lives. A plan for permanence should be devised for children remaining in care for more than four months (Anthony et al., 2016) which may include placement in long term foster care, adoption by relatives or unrelated adults.

Characteristics of children in the different categories of care status for Wales and England follow similar patterns. The most recent demographic data available is presented in Table 3. To be classed as a child looked after for this data collection, the most recent period of care must be continuous for the 12 months leading up to 31st March 2020. Ethnicity and category of need data for adopted children in Wales was unavailable. The average at age adoption in Wales and England was 37 months and 36 months respectively.

Table 3

Demographics for Children in England and Wales by Care Status, at 31st March 2020

Demographic	CRCS/ CIN		CLA		Children adopted	
	Wales	England	Wales	England	Wales	England
Sex						
Male	55.34	53.8	53.97	56.18	57.63	51.74
Age (years)						
<1	4.34	4.74	4.74	5.16	1.69	6.4
1-4	17.58	16.18	18.55	13.55	81.36	77.33
5-9	27.05	22.25	23.92	18.36	15.25	15.12
10-15	37.85	32.13	36.96	39.17	-	1.45
16+	16.18	23.17	15.83	23.76	-	0.29
Ethnicity[a]						
White	89.35	71.72	91.35	74.08	-	82.85
Mixed	3.11	8.81	3.42	9.72	-	10.47
Asian	1.99	7.4	1.88	4.35	-	1.16
Black	1.27	8.63	1.53	7.32	-	1.74
Other	1.18	3.44	1.81	4.55	-	3.78
Category of Need						
Abuse/ neglect	53.41	5.86	69.07	64.66	-	77.62
Family dysfunction[b]	12.45	14.08	14.64	14.02	-	12.21
Acute Stress[c]	11.25	8.44	7.86	7.6	-	4.65
Total *n*	16 580	389 260	7170	80 080	295	3440

Note. [a]Total *n* for known ethnicity in England was 373,790; [b]Defined as 'Children whose needs primarily arise from living in a family where the parenting capacity is chronically inadequate' (DfE, 2019a; p55) [c]Defined as 'Children whose needs arise from living in a family that is going through a temporary crisis that diminishes the parental capacity to adequately meet some of the children's needs' (DfE, 2019a; p54); CIN=Children in Need; CRCS = Children Receiving Care and Support (Wales only) (Source: DfE, 2020a, 2020b; Welsh Assembly Government, 2021a-e,)

Fostering

Foster care is usually a temporary arrangement, though it can be a long-term plan depending on the child's needs. Long-term foster care differs from adoption in the level of legal security for the child. It is not unusual for children to experience several moves amongst foster carers before adulthood (McGuire et al., 2018; Wijedasa & Selwyn, 2011) with each episode of separation and loss detrimental to development

(e.g. Bada et al., 2008; Barth et al., 2007; Rubin, O'Reilly, Luan, & Localio, 2007). Foster carers share the responsibility for the child with the local authority and the child's parents, whereas adoptive parents gain full parental responsibility when an adoption order is granted following placement (AdoptionUK, 2012; CoramBAAF, 2016; Midgen, 2011). Thus, differences between fostering and adoption, albeit subtle, begin to emerge in the early stages of social care involvement that may play vital roles in understanding differences in experience of life events and development, including education and school. It is possible that perceptions of permanence may influence adopted children and young people's adjustment to life post-placement.

Adoption

Adoption is the provision of a permanent family, where the formal transfer of parental obligations and rights to adults other than birth parents are made (Palacios et al., 2019). Children, whose birth family are unable or deemed unfit to provide an appropriate level of care, may receive provision of interventions and focussed support from state social care services. Should the child's well-being, lifelong safety needs and welfare continue to be at risk from maltreatment and relational uncertainty, the child may be placed in an alternative family setting. Adoption can provide the most personal, social and legally stable option for many children (Palacios et al., 2019). Families established through adoption are distinctive in their formation, composition and development (March & Miall, 2000). Pathways to adoption are numerous and complex; children have different pre-placement experiences, are adopted at different ages and experience a range of family contexts. Consequently, a general *adoption experience* does not exist: 'being adopted is a heterogeneous life experience' (Brodzinsky, Gunnar, & Palacios, 2021; p2)

In the UK, a child may be adopted within the wider birth family (kinship adoption) or with an unrelated family (van IJzendoorn & Juffer, 2006). Only under exceptional circumstances is an adoption order reversed (CoramBAAF, 2016) and the child may move out of the adoptive home prematurely; even then the adoptive parents may retain legal status as parents of the child (Selwyn, Meakings, & Wijedasa, 2015). The rate of adoption disruption in the UK has been calculated at 3.2%. Risk factors linked to disruption include the child's age at disruption, age at placement and time between placement and adoption order; teenagers were ten times more likely to experience disruption than young children (Selwyn. et al., 2015).

The severing of legal ties with birth parents raises ethical and human rights dilemmas (Simmonds, 2009). Adoption is a relatively established practice in the UK but, internationally, few countries offer adoption as one of the main pathways out of care (e.g. US, Canada, Spain, Portugal). This number has grown in recent years as concerns mount regarding lack of stability and permanence in foster care (Neil et al., 2018). Social care practice in many European countries prioritises long-term foster care and residential care over adoption as a means of securing permanence. Understanding the determinants of adoption across political borders is difficult as few countries publish up-to-date and reliable information; variations in concepts and definitions behind the data limit the usefulness of cross-country comparisons (United Nations, 2009). Conflation in the research literature regarding type of OOHC placement may occur, particularly in demarcating adoptive and foster placements and type of adoption (e.g. Pace, Zavattini, & Tambelli, 2015).

The US accounts for nearly half the total global adoptions (United Nations, 2009) and a large proportion of the extant adoption literature has emerged from the US; some differences in policy and practice to the UK are therefore noteworthy. There are three main pathways to adoption in the US: Foster Care Adoption (also referred to as Welfare Adoption), Private Domestic Adoption (also known as Independent or Direct-placement adoption) and International Adoption (sometimes referred to as Intercountry or Transnational adoption). Foster care adoption concerns children involved with child protection/ welfare services prior to adoption. Legal proceedings enable public welfare services to remove children from their birth families and oversee the adoption process. Private domestic adoption refers to children who were adopted privately from within the US. Arrangements can be made between individuals (via a legal representative) or through private adoption agencies. Regulation of private adoption varies from state to state (Child Welfare Information Gateway, 2021). Children placed through international adoption originate from countries outside the US, and private adoption agencies mediate the adoption process with prospective adopters.

The main pathway to adoption in the UK is adoption from foster care, and a minority of adoptions are intercountry. Private adoption in the UK is not legally permissible. It is important to acknowledge the impact of these differences in policy when reviewing and comparing adoption research. Pre-placement experience may differ according to type of adoption and potentially confound interpretation of findings, particularly if samples do not distinguish between adoption type.

In the UK, adoption from care mainly occurs in response to serious risks in family environment, children for whom such alternative care is sought are prone to having a range of complex needs (Anda et al., 2006) as a result of the early adversity experienced pre-placement. Exposure to early adversity can have far-reaching, long-term developmental consequences for children (Grotevant & McDermott, 2014; Rutter, 2005). Adoption, however, can provide opportunities for children to achieve some recovery from negative effects of early adversity (e.g. Brodzinsky et al., 2021; Neil et al., 2018; van IJzendoorn & Juffer, 2006). On the whole, adopted children benefit from placement into a stable and nurturing environment (Palacios & Brodzinsky, 2010). In the extreme, those experiencing severe pre-adoption deprivation in institutions make 'astonishing' (van IJzendoorn & Juffer, 2006: p1233) catch-up in terms of physical growth and significant gains in terms of IQ, cognitive function, behaviour, language development and school performance (van IJzendoorn & Juffer, 2006); thus adoption is regarded by many as a 'successful intervention' (ibid. p1228). Gains apply to children who are domestically or internationally adopted (van IJzendoorn, Juffer, & Poelhuis, 2005) when compared to non-adopted peers or siblings. The effectiveness of adoption, as an intervention in the lives of care-experienced children and young people, may be multifactorial; for example, initial assessment of needs, quality of placement, and ongoing support (Palacios, 2020). However, as Fisher (2015) suggests, both types of out-of-home-care provide a fundamental level of nurturing and care for the most vulnerable children as they have mediating qualities on life-course trajectories.

Placement into a nurturing, stable family environment alone may not be enough, however, to mitigate the impact of early adverse experiences, and additional support from external agencies is often required (Meakings, Shelton, & Coffey, 2016). Post-placement support for adoptive families appears to make an essential contribution in providing opportunities for adopted children to make positive gains and recovery from experiences of early adversities, and for families to flourish (Atkinson & Gonet, 2007; McKay, Ross, & Goldberg, 2010).

As domestically adopted children in the UK pass through the care system at some point, and for a certain amount of time before adoptive placement, it is reasonable to assume that adopted children may well have been exposed to early adverse experiences comparable to their peers who remain in and around the care system (Tregeagle, Moggach, Trivedi, & Ward, 2019) and that the resulting vulnerabilities do not disappear once placed in an adoptive family. Adopted children's needs and challenges are like those of children in need and children looked after in many ways, but

assumptions may be made about their abilities and capacity to recover, thus concealing challenges faced in adjusting to adoptive life, including education.

Whilst there are many similarities between types of placement, the extant differences may impact on the child's development in several ways. One of the main differences may be related to the notion of permanence. An adoptive placement, from the outset, has an expectation of permanence (Biehal, 2012; Samuels, 2009) and this may be shown in overt and covert attitudes and behaviors amongst family members within the placement and associated professionals. Much of the emphasis, from the child's point of view, in the transition to an adoptive placement concentrates on what the child gains from the move, including the notion of a *forever family* and legal permanence (Brodzinsky, 2011; D. Brodzinsky, 2014). Consequently, adopted children may feel the weight of expectation that the placement should be successful and may burden themselves with that responsibility (Neil, 2012; Soares, Ralha, Barbosa-Ducharne, & Palacios, 2018).

If adoption were a panacea for the impact of early adversities on development, then parity in outcomes, between adopted children and their non-adopted peers, including educational attainment and progress, should eventually be seen. This is not the case as the DfE data highlighted in Table 2 (above) is corroborated by empirical research (Anderman, Ha, & Liu, 2021; Paniagua et al., 2020; Zill & Bramlett, 2014) and parental surveys (AUK, 2020a, 2021). Further, the lack of marked differences between adoptees and children looked after or in need, further strengthen the justification for empirical investigation into the educational attainment and experience of children and young people with a history of early adversity, particularly those adopted from care.

Education for care-experienced pupils

School for most children is characterised by acquisition of knowledge and skills, friendships made, and qualifications gained. Wider aims of education describe the lifelong benefits of engagement with learning, not only to develop skills and knowledge but also growth of the individual in moral, cultural, spiritual, psychological and physical aspects (Gill & Thomson, 2014). For most children and young people this may largely be true, but level of engagement and quality of experience are likely to fluctuate over the educational life course. Much depends on competing influences in psychological and physical development. Some children, however, experience schooling as problematic. Individual differences and disabilities may pose barriers to accessing

education and schooling in the same fashion as most of their peers. For children where instability in family life exists, or concerns around safety are apparent, school becomes challenging in a variety of aspects. A minority of those children are known to display startling levels of resilience and fortitude in the face of early adversities and *do* go on to a largely successful educational experience (Brady & Gilligan, 2020; Harrison, 2020). For a significant minority the effects of early adversity and a sub-optimal home environment may pose insurmountable cumulative challenges for positive intra- and interpersonal development (e.g. social, emotional, relationship and learning challenges) (Guyon-Harris, Humphreys, Fox, Nelson, & Zeanah, 2019).

Education is a dynamic process for pupils and teachers, understanding how it is experienced has reciprocal benefits for both parties – improvements made to teaching strategy are often as a result of teachers reflecting on pupils' responses in learning interactions and evaluation of their holistic needs (Pollard & Collins, 2005). The opportunities of care experienced pupils for better educational progress may be enhanced through positive school impact such as supportive teachers, safe school environment and development of academic resilience (Sinclair, Fletcher, O'Higgins, Luke, & Thomas, 2021). Improving school and teacher awareness of these issues may lead to adjustment of school policy and classroom practice to the benefit of vulnerable pupils. This may be a moot point, however, as despite schools' knowledge of their earlier adverse experiences, the performance of children in need or looked after, is still one of under-achievement (Berridge et al., 2020; O'Higgins, Luke, & Strand, 2021).

A comprehensive exploration of care status and educational attainment (including a systematic review and secondary analysis of a large, administrative dataset in England) led Luke and O'Higgins (2018) to conclude that a child's care status itself does not appear to explain the attainment gap between care experienced pupils and their peers. Furthermore, Luke and O'Higgins (2018) found the attainment gap to be reduced or absent when other factors (e.g. attendance, prior attainment, change of school) are taken into account. It may be possible to extrapolate these findings to children who left care through adoption, as many of their educational and psychological needs remain once in an adoptive placement. It could be argued that additional layers of complexity and nuance are added to an adopted child's educational profile as they not only carry forward the legacy of early adversities (as well as existing genetic, prenatal and epigenetic factors) but also face resolving these experiences within a new family and, most likely, a new school.

Factors affecting adopted pupils in school

The majority of children who were the subject of a care order and subsequently left care through adoption will have faced adverse experiences to some extent (Anthony, Paine, & Shelton, 2019) the effects of early adversity persist over time (Paine, Fahey, Anthony, & Shelton, 2020). Recent research has shown that, on average, children adopted from care have been exposed to more Adverse Childhood Experiences (ACES; Blake, Ruderman, Waterman, & Langley, 2021; Felitti et al., 1998) than the general population, with negative implications for their mental health after placement (Anthony et al., 2019). Adverse experiences of care in childhood (e.g. abuse, neglect) may increase the risk of neurological and physical impairment (Waid & Alewine, 2018) and, in turn, lead to poorer social, cognitive, emotional and behavioural outcomes (Anda et al., 2006; Romano et al., 2015; Teicher & Samson, 2016). The impact of early adversity on child development increases vulnerability to maladjustment for adopted children. Misconceptions about the potency of adoption to remedy earlier troubles exacerbate the impact by not appreciating the enduring aspect of early adversities. In school, risks for maladjustment may be compounded still further should the educational and psychological needs of adopted children not be fully understood.

Historically, early studies examining adoptees' experiences of school were beset with methodological issues (e.g. atheoretical interpretations of apparent patterns in data; focus on small clinical, or selective non-clinical samples; failure to control for mediating variables and questionable validity in some measures used; Brodzinsky, 1987) and were largely concerned with academic achievement and special educational needs in specific populations (Brodzinsky & Steiger, 1991; Paniagua et al., 2020). Since these tentative beginnings in the late 1960s and early 1970s, the field of research in adoption and education has improved its methodologies and refined its approach to better understand the nuances and complexities that characterise adoptees' experiences of education and school; much in line with the trends in general adoption research identified by Palacios & Brodzinsky (2010). In particular, there is growing interest in the role played by adoptees' socio-emotional adjustment in relation to school outcomes (Paniagua et al., 2020; Tan, Liu, & Smith, 2020). Whilst Brodzinsky (1987) notes that though most adoptees will develop psychological issues associated with adoption, only a minority will develop issues at clinical level (and those issues tend to be more likely to occur in middle childhood and adolescence), it may be suggested that those adopted pupils who fall under the clinical borderline may not receive additional support in the classroom commensurate with their need.

Responsibility for creating appropriate conditions in an adoptive placement for recovery after early adversity may also extend from the immediate adoptive family into the child's community, most certainly the school environment. Continuity between environments is essential in providing the consistency required for successful emotional and behavioral adjustment for adopted children. This would mean that parents and school staff should align their understanding of the challenges faced and application of supportive strategies in this recovery. This is a two-way interaction for not only school staff continuing the work of the adoptive family, but also adoptive parents continuing the approaches to teaching, learning and engagement employed by the school. For this to happen successfully, open and clear communication between both parties would seem to be essential.

Establishing an accurate picture of education outcomes for adopted children in the UK would be a logical first step to identify areas of need and explore possible explanations. In England, local authorities are required to collate educational outcome data for all children in its jurisdiction and send to the DfE for recording. Educational outcome data for children and young people categorised as CIN or CLA are published annually by the DfE. Since 2014, the DfE has also published similar data for adopted children and young people, but this is regarded as experimental data as identifying adopted cases relies on returns from the annual school census completed by parents and is therefore incomplete. Interrogation of the adoptive dataset to the same extent as the CLA/ CIN is not possible, thus preventing detailed and rigorous examination of outcomes which may otherwise inform educational policy and pedagogy.

Socialisation of adoption

The social aspects of adoptees' school experiences are under-researched (Paniagua et al., 2020), much is known regarding experiences and outcomes for children in and on the edge of care (Barratt, 2012; Midgen, 2011; O'Higgins et al., 2021) but few studies focus on the needs of children adopted from care (Howe, 2009; Novara, Lenzi, & Santinello, 2020). Progress in academic attainment is an essential purpose of any education system and is used as a major factor to evaluate its effectiveness. However, academic prowess is only one function of education, alongside development of personal attributes including individuals' development in terms of moral, spiritual, cultural, social, psychological and physical aspects. Growth in the wider aspects of education may impact positively on engagement with learning and ultimately educational achievement. Attention by the school community to these areas of the wider school

curriculum are therefore beneficial to the school as a whole and the pupils it serves. For care-experienced children, including those adopted from care, the psycho-social demands of a school environment may prove an extra challenge that requires additional support from adults in the setting to encourage positive development and maximise learning opportunities.

Socialisation is the transition from child to responsible adult as influenced by society (Berridge, 2017). *Socialisation of adoption* is the process by which society shapes adopted children, through its understanding, attitudes, and values of adoption across multiple contexts. Socialisation of adoption is a useful lens through which to view how an adopted child resolves adoptive identity issues and dilemmas in cultures that view adoption in a certain way, or at least how it is perceived to be by adoptees. It is an emerging field of study and is linked with the idea of *lived experience* as suggested by Brodzinsky et al (2021), i.e. investigating adoptees' experiences of how resolution of an adoptive identity is perceived by adoptees themselves.

Kyle & Farr (2020) refer to socialisation of adoption as part of 'identity-based socialisation': any form of socialisation related to identity, e.g. race, adoptive status, sexual orientation. Outcomes related to identity-based socialisation include children's understanding of adoption, communication about adoption (especially openness). Of particular interest to this thesis is the contribution to identity-based socialisation occurring in the school context and the role played by peers, school staff and systems (e.g., curriculum, school admissions policies, behaviour policies, school climate). Positive socialisation has been related to positive youth outcomes, including increased psychological well-being and self-esteem (Kyle & Farr, 2020). *Adoptive communicative openness* (Brodzinsky, 2014) is talk about adoptive status especially in developmentally appropriate ways. Acknowledgement of a dual identity (birth and adoptive) and displaying empathy about fluctuating feelings concerning adoption forms a critical part of adoptive communication openness. The ability for adults to engage meaningfully in these conversations is integral to helping children understand adoptive identity and alleviate future concerns. The role of the school community in the socialisation of adolescents becomes more pertinent for adoptees.

Fisher (2015) reviewed the needs of care-experienced children and highlighted difficulties in unpicking beliefs about looked after and adopted children, not only in the general public but also for associated professionals and policy makers. Extending misconceptions surrounding adoption into professional domains is concerning when considering the effectiveness of approaches and initiatives devised and delivered by

associated professionals. It might not be unreasonable to further suggest that, in the school setting, misunderstandings of the needs of adopted children might contribute to some extent to the marked differences seen in educational experience and attainment.

Despite a growing acceptance of adoption as way of forming a family, negative sociocultural interactions still occur for adopted individuals and families (Garber, 2020), and may contribute to misunderstandings and misperceptions of adoption. The microaggressions framework has recently been used to explore experiences of prejudice related to adoptive family construction and composition (Baker, 2007). Adoption microaggressions are:

> common slights, insults, and indignities that can occur almost daily that may be intentional or unintentional but that communicate adoption-related and biology-related judgments, slights, or criticisms about adoption, foster care, or relinquishing care for a child. (Baden, 2016; pp6-7).

Societal attitudes towards adoption, and awareness of its idiosyncrasies, have been shaped by changing cultural contexts and its clandestine history (Wegar, 2000; Zamostny, O'Brien, Baden, & Wiley, 2003). All members of the adoption triad (adoptees, birth parents and adoptive parents) are susceptible to the effects of stigmatized values and attitudes towards adoption. Garber and Grotevant (2015) outlined narratives for each party; the rejecting nature of birth parents, adoptive parents as not *real* parents and adoptees as being inferior. Current societal perception of adoption and adoptive families is rooted in historical and cultural contexts, and microaggressions may be the instrument through which historically oppressive prejudices are veiled (Garber 2020).

Though research into microaggressions as they pertain to adoption is still in its infancy (Garber 2020), several studies have classified a range of themes and categories that typify microaggressive behaviour in the realm of adoption (e.g. Baden, 2016; Farr, Crain, Oakley, Cashen, & Garber, 2016; Garber & Grotevant, 2015). A detailed critical analysis is out of scope for this chapter, but some warrant attention as relevant to the aims of this thesis. For example, *Silence about Adoption* and *Unacknowledged Identity Status* (Garber & Grotevant, 2015) show how adoption may not be validated or recognised through lack of awareness of the nature of adoption. A salient example in a school context would be curriculum topics exploring family history: an adopted pupil may find engagement in tasks emotionally challenging, notwithstanding likely difficulties in recounting family history narratives or providing artefacts such as infant photographs. Greater awareness of familial diversity in schools might reduce the

frequency of microaggressive instances that adoptees must negotiate and provide opportunities for realistic adoption narratives to be shared (Garber, 2020).

Identity

The term identity refers to the 'organisation of self-understandings that define one's place in the world' (Schwartz, Montgomery, & Briones, 2006; p5). A consistent and meaningful understanding of one's identity is essential for individuals to successfully manage their lives (Berzonsky, Cieciuch, Duriez, & Soenens, 2011). Identity provides a reliable set of standards on which to call when encountering situations that require decision making or problem solving. Identity formation is theorised to be a particular task for adolescents (Erikson, 1968) as they develop autobiographical reasoning and abstract thought (Habermas & Bluck, 2000) which challenges current perceptions of self. At this time, young people are theorised to begin to ask, and are being asked, questions about themselves such as *Who am I?*, *What am I doing in my life?*, *What do I want to be?*; resolution of these questions may involve conflict with existing family or societal belief systems (Grotevant & Von Korff, 2011; Kroger, Martinussen, & Marcia, 2010; Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013).

The concept of *identity statuses* (Marcia, 1966, 2002) operationalise the processes and outcomes of identity formation. Marcia (2002) describes the journey to successful identity formation (*identity achievement*), where choices and commitments are finalised, as passing through a *psychosocial moratorium*, characterised by the exploration of possible life options. A clearer sense of self is achieved through intimate interactions with others, including forming and maintaining relationships outside the family. The moratorium phase is seen as a beneficial process, whereby adolescents experiment with several possible identities before settling into an informed and stable identity. The moratorium process could also be ideological in nature, e.g. exploring the attitudes and values of different religions or sets of beliefs (Marcia 2002).

Where exploration does not occur and no commitments are made, the individual may be in a state of *identity confusion* which may manifest as apathy and lack of direction. Individuals who are in a state of *identity foreclosure*, on the other hand, have a sense of direction and have made commitments but, crucially, these are made without exploration and often assume the values of others without question. Each identity status therefore involves a different combination of exploration and commitment:

Figure 1

Exploration and Commitment in Relation to Identity Status (Marcia, 2002)

		COMMITMENT	
		YES	NO
EXPLORATION	YES	Achievement	Moratorium
	NO	Foreclosure	Diffusion

Exploration of the negotiated discourse (or narrative) within adolescents' social contexts may shed light on the processes underlying identity formation. Assessment of an achieved identity in the adolescent stage may thus be premature (Clarke 2009, Trent 2010). A process oriented conceptualisation of identity, based on Marcia's identity statuses, has been developed by Berzonsky (1989). According to Berzonsky (1989), individuals process identity related information (i.e. the method of solving dilemmas and making personal decisions) differently according to their identity status. Three *identity styles* were proposed to further understand the processes involved in identity formation. Identity styles are the social and cognitive processes used to *engage* or *avoid* essential tasks in identity formation (e.g. constructing, maintaining and re-formulating views and beliefs; Berzonsky, 2011).

Individuals that use an *information orientation* (p.269) style are pro-active in their pursuit of an identity, taking time and cognitive effort to evaluate and process received information before decisions are made. Subscribers to this style also demonstrate a certain level of meta-cognition in that they are willing to modify their views in light of dissonant information. A *normative orientation* (p.269) is characterised by adherence to prescribed normative standards, with little or no evaluation, from significant others, e.g. parents, teachers, peers. The final identity processing style (*diffuse/ avoidant orientation* p.269), describes individuals that avoid dealing with dissonant information and often delay until options are limited and a certain course of action is inevitable (Berzonsky, 1990). Those who use a diffuse processing style are associated with maladaptive ways of thinking and behaving (Berzonsky, 1989). Decisions made by those in the diffuse style tend to be short-term acts of compliance

rather than long term modifications to identity, suggesting a strategic approach to evade or obscure potentially negative self-relevant feedback (Berzonsky et al., 2011).

Identity styles have been found to map on to Marcia's identity statuses (Schwartz et al., 2013; White, Wampler, & Winn, 1998):

Figure 2

Mapping Identity Style to Identity Status

<u>Berzonsky</u>   <u>Marcia</u>

Diffuse/ avoidant ⟷ Diffusion

Normative ⟷ Foreclosed

Information ⟷ Achieved/ Moratorium
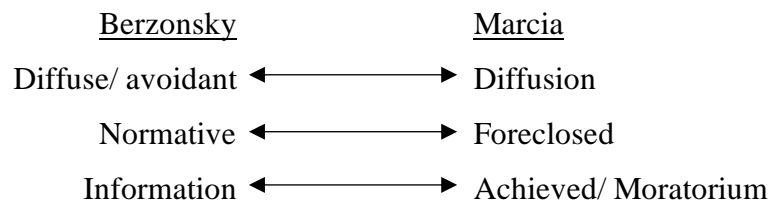
For *adopted* adolescents, the processes of identity formation, emotional development, academic experience and aspiration (both educational and occupational) are potentially challenging because their notion of family and the past contains additional layers that may not be fully formed, known or understood. Further, all adopted children have in common the loss of birth family and heritage. Adopted children and young people are also more likely to have experienced abuse and/ or neglect than other care-experienced children and young people (Selwyn et al., 2014), increasing the risk for poorer mental health. The impact of adoptees' early experiences may lead to a complex identity formation process during adolescence, with subsequent impact on education experience and performance. There is scant literature concerning how identity styles may be represented in adopted adolescents, further exploration of which may yield insights to understanding social and educational vulnerability at this stage of the life course.

Attachment

An oft used lens with which to view the impact of early adversity is attachment theory (Bowlby, 1969, 1979, 1988). Attachment theorists contend that humans are biologically programmed to seek safety in the company of others through the making of strong emotional bonds (Geddes, 2006). Usually, this attachment process is gradually developed through one significant figure who provides a secure base (Bowlby, 1988), but multiple positive attachments can occur, and are beneficial (Forslund et al., 2021). The growing infant uses this safe base to explore the wider world reassured that when

needed, the significant figure provides appropriate responses to their needs – for example when tired, hungry or afraid (Harlow, 2021).

Children who receive appropriate care and attention will, generally, develop a secure attachment not only with the primary caregiver but also be able to form appropriate relationships with others that they meet (Ainsworth, Blehar, Waters, & Wall, 1978). These attachment relationships start to form at birth (though some postulate that it begins in utero e.g. Phillips, 2004) and the quality of the relationship even at this early age has a significant impact on later development (Alink, Cicchetti, Kim, & Rogosch, 2009; Belsky & Fearon, 2002). Where care is inadequate, however, the attachment process is disrupted and *insecure* attachment patterns may form, indicated by behaviours such as (but not exclusively) physical and emotional avoidance (Behrens, Hesse, & Main, 2007), hyperactivity (Bergin & Bergin, 2009) or control and anxiety (Stevenson-Hinde & Verschueren, 2002). The importance of this distinction is the enduring connection between types of attachment pattern formed in the early stages of development, and later behaviour (Harlow, 2021).

Two other concepts that are integral to attachment theory and pertinent for this thesis are those of attunement and Internal Working Models (IWM). Attunement is the primary caregiver's translation of the infant's signals to an appropriate response that satiates the child's need (Geddes, 2006). A reciprocal relationship develops where the primary caregiver becomes more adept at reading the signals and the infant develops a sense of empathy from being understood by another. An IWM refers to the template of expectation for future relationships that is developed from experience of early relationships (Hillman, Cross, & Anderson, 2020). A secure attachment will lead to an internal representation of relationships and attachment figures that is wholly positive; where the care is inadequate, however, the attachment process is disrupted and insecure attachments may form (Ainsworth et al., 1978). Internal working models are activated particularly during stressful situations. Children of preschool age may display their internal working model as controlling, punitive or solicitous behavior toward the parent, this is synonymous with the *insecure* attachment pattern described earlier. How this relates to the school context, where a daily stressful situation may provoke employment of an atypical internal working model, is worthy of further investigation.

Children exposed to early adversities are at risk of poorer emotional and behavioural outcomes in later childhood, with this elevated risk partly mediated by disorganised attachment patterns and self-regulation difficulties (Dozier & Bernard, 2017). In contrast, secure attachment patterns promote current and future pro-social

skills (Barone, Lionetti, & Green, 2017). Quality of attachment relationship is regarded as a key factor in development of emotional competencies (regulation and understanding) and are closely linked (Holmgren, 2020); the quality of the relationship between child and carer therefore becomes paramount in emotional development. IWMs are malleable and may develop after infancy as the child develops cognitively and social experiences widen (Harlow, 2021). Other significant attachment type relationships are crucial in the continuing emotional development of the child: the teacher-pupil dyad and peer group influences, for example.

Application of attachment theory to explain care experienced children's behaviour has been scrutinized in recent years. There may be a tendency to over-generalise from theories of attachment in attributing causality to challenging behaviour, leading to possible misdiagnosis of children's needs (Harlow, 2021). Indeed, the term 'attachment disorder' is pervasive amongst children's services, including schools, yet often applied without scientific or diagnostic integrity (Woolgar & Scott, 2014). The confusion lies within the range of terms associated with attachment theory (e.g. attachment patterns, attachment difficulties, insecure attachment), the conflation of the meaning of the term 'attachment' (relationships versus pathology) and the readily accessible 'diagnostic' checklists found online (Woolgar & Scott, 2014). Consequently, the pseudo-identification of 'attachment disorder' may mask more common conditions and associated needs, which may be adequately met within a school's SEND provision or other evidenced based intervention (Woolgar & Baldock, 2015).

Relationships

Institutions of formal schooling are fundamentally based on a teacher-pupil dyad, placing a strong emphasis on relationships with adults. Schools are often a site of educational and social stress where pupils are required to react to novel situations, whilst effectively regulating their emotions to meet behavioural norms. Children's school experience can be enhanced by positive teacher-pupil relationships that consist of warmth, nurturance and low-negativity (Hughes, Wu, Kwok, Villarreal, & Johnson, 2012). Beneficial impact on mental health, school engagement and academic achievement has also been observed (Bosman, Roorda, van der Veen, & Koomen, 2018; Miller-Lewis et al., 2014).

Social adjustment, i.e. the behavioural modifications made by the individual according to their immediate environment, may be helped by better friendships with peers through interpersonal trust (Betts, Rotenberg, & Trueman, 2013). It is not

necessarily the size, but quality, of the peer relationships that are important; a network of three close friends is deemed as high (Sheikh, 2018). Children's positive social adjustment is also facilitated by better teacher-pupil relationships built on a higher level of interpersonal trust (Baker, Grant, & Morlock, 2008; Dong, Wang, Luan, Li, & Cheng, 2021). Positive social relationships may act as a buffer during childhood and adolescence to the detrimental effects of early adversity (Ban & Oh, 2016; Zhang et al., 2021). Thus, teachers and school staff may, by proxy, provide a safe base from the vicissitudes of social and peer relationships.

A child with experience of early adversity and fractured early relationships might therefore experience difficulties in managing school related stress, emotions relationships and safety, which may impact learning. In the school climate, this can manifest into behaviours such as hypervigilance, defiance, aggression, controlling behaviour, lack of organisation, impaired attention and empathy, inability to form and maintain friendships, and dissociation (Comfort, 2007; Dann, 2011; Howe, 2009; Phillips, 2007; van den Dries, Juffer, van IJzendoorn, & Bakermans-Kranenburg, 2009). In the classroom, these residual behaviours add often insurmountable challenge for a child to conform to a school's expectations. School for such children then becomes a highly stressful environment, where self-preservation consumes the vast majority of the child's attentional resources; engagement with academic work becomes less of a priority and progress in learning may suffer (Moss, Cyr, Bureau, Tarabulsy, & Dubois-Comtois, 2005; Moss & St-Laurent, 2001).

Home-school relationships are also important as they serve as a model of social engagement for children to observe and follow (Szcześniak, Colaço, & Rondón, 2012), children's trust in the teacher-pupil relationship is reinforced by observed parent-teacher trust (Clarke, Sheridan, & Woods, 2010). Parents' display of trust towards a school increases their engagement and commitment to their child's learning and indirectly builds confidence in the parent-child relationship (Szcześniak et al., 2012).

Emotional and behavioural adjustment

Overall, adoption is a beneficial plan for children unable to live with their birth parents, but risk factors for atypical emotional and behavioural development exist. Whilst there is a distinction between internalizing and externalizing behavior in developmental psychological research (Goodman, Lamping, & Ploubidis, 2010; Mannarini, Balottin, Palmieri, & Carotenuto, 2018; Perry & Price, 2018), overlap is inevitable in the day-to-day display of behaviour (Holmgren, Raaska, Elovainio, &

Lapinleimu, 2020). It is well documented that the emotional and behavioral adjustment of adopted children is one of the most prominent and persistent challenges for adoptive parents (Foli, Hebdon, Lim, & South, 2017; Paine et al., 2020; Santos-Nunes, Narciso, & Vieira-Santos, 2020; Santos-Nunes, Narciso, Vieira-Santos, & Roberto, 2018a).

Mixed findings from research highlights the complex nature of behavioural and emotional adjustment to adoptive life. On the one hand, there is evidence suggesting that most adopted children are behaviourally and emotionally well adjusted (e.g. Casonato, Muntean, & Molina, 2020; Finet, Vermeer, Juffer, Bijttebier, & Bosmans, 2019). On the other hand, when compared with non-adopted peers, adopted children show an increase in psychological difficulties and are over-represented in referrals to child and adolescent mental health services (Askeland et al., 2017). Propensity for referral to mental health services may be explained by adoptive parents' sensitivity to children's psychological problems, socioeconomic and demographic related factors and a lower threshold in seeking support from available services (Holmgren et al., 2020; Santos-Nunes, Narciso, Vieira-Santos, & Roberto, 2018b). Nonetheless, van IJzendoorn, Juffer, and Poelhuis (2005) demonstrated through a series of meta- analyses that internationally adopted children have higher rates of emotional and behavioral disturbance than non-adopted controls. Which suggests that adoptive parents and those supporting them are also adept at identifying the emotional symptoms and behavioural problems displayed by children adopted from care.

It is well established that children who have experienced multiple adverse experiences in early life are at greater risk for unfavourable developmental outcomes, as well as elevated emotional symptoms and behavioral problems that can persist or get worse over time (Brodzinsky et al., 2021; van IJzendoorn et al., 2005). These risks also apply to adopted children because they have often faced similar early adversities to children who were not placed for adoption. The effects of exposure to early life stress can be enduring for both children looked after and adoptees (Gunnar & Bowen, 2021). Some children, however, show successful outcomes in terms of emotional and behavioural adjustment indicating a level of resilience post-placement, and possibly before (Gilligan, 2000; Oldfield, Stevenson, Ortiz, & Haley, 2018). Examination of these factors may yield insights into the benefits of adoption. It might also suggest that an adoptive placement offers opportunities, not seen in other placement types, for emotional and behavioural recovery and to partly resolve prior experiences with the support of the adoptive family. Degree of initial impairment and severity of experience of deprivation are likely to be key factors that engender recovery opportunities.

Several concepts have been suggested as important when understanding emotional and behavioral adjustment for adopted children, e.g. parenting style, relationships, interactions and attachment patterns within the adoptive family, children's understanding of adoption, the interaction between genetics and the rearing environment, children's understanding of adoption and adoption communication (Anthony et al., 2019; Blake et al., 2021; Brodzinsky, 2014; Holmgren et al., 2020; Lewis, Asbury, & Plomin, 2017). Recent research has also demonstrated variability in adjustment among adoptees, further highlighting the complex nature of recovery after adversity (Palacios &Brodzinsky, 2010). Of the underlying processes proposed as possible mediators in the interaction between early adversities and later adjustment, emotion regulation and executive function are pertinent to this thesis and are outlined below.

Emotion Regulation

Regulation of one's emotions facilitates successful coping of a given situation, the capacity to manage control and adjust emotional responses are components of emotion regulation. Successful emotion regulation occurs when the opportunity to appropriately engage with the environment arises as a result of controlling one's emotional state in order to do so (Kim & Cicchetti, 2010). For children who have experienced early adversity, this regulatory ability is often lacking, and its absence has been linked to both internalizing and externalizing symptoms. However, Soares, Barbosa-Ducharne, Palacios, and Pacheco (2017) suggest that the role of a supportive adoptive family environment may well mitigate these effects and promote emotion regulation skills. Soares et al. (2017) suggest that adoptive parents' coherent, flexible and organised style in recognising their own emotions may benefit development in adopted children. Adoptive parents, in most adoption systems, undergo an amount of pre-placement awareness training and preparation and this may contribute to the benefits seen in adopted families. Through its influence on peer relations, emotion regulation has been suggested as a risk or protective factor in the association between early adversity and later psychopathology (Kim & Cicchetti, 2010). The notion of skills passed across generations has also been applied to attachment security, discussed later.

The ability to understand and interpret emotions of others is strongly linked to the subsequent regulation of one's own emotional arousal. Research indicates that adopted children's skills in this area may lag behind their non-adopted peers (Paine, van Goozen, Burley, Anthony, & Shelton, 2021). As more emotionally sophisticated

contexts are encountered (such as school) the demand may be too great for the existing level of competency, resulting in impaired socio-emotional functioning. Reading social cues and emotions is an extremely complex skill. For a child entering school, unfamiliar social rules and personalities (both peers and school staff) increase the demand on the emotion understanding system. A salient example is the use of sarcasm. Young children in general are confounded by the intended meaning of a sarcastic utterance, none more so than those disposed to find understanding emotions a challenge. Attempts by teachers and school staff to engage or motivate children using sarcasm may well counter the intended effect and compound an already stressful situation (Lee, Sidhu, & Pexman, 2021).

Executive Function

Executive function (EF) refers to higher order cognitive skills such as planning, flexibility, abstract thought, activation and inhibition of actions (Peñarrubia, Palacios, & Román, 2020). Pre- and perinatal factors such as genetic traits, toxins (e.g. alcohol), poor nutrition and poor psycho-social environment compound the risk for difficulties in executive function (Bick, Zeanah, Fox, & Nelson, 2018; Carrera, Jiménez-Morago, Román, & León, 2019). Proficiency in executive skills promotes better regulation and control of stress and emotion, as well as improved social and academic adjustment (Brodzinsky et al., 2021). Better EF has been shown to be an important protective factor against maladjustment for children experienced of early adversity (Peñarrubia et al., 2020). Difficulties in behavioral and emotional control are likely to impact in a classroom setting in terms of attention and social interaction; key requisites for engaging in the classroom dynamic. Recent research into the impact of early adversity on neurobiological development shows that a stable and responsive caregiving environment leads to normative brain development, particularly in early life which is a crucial time for the brain to establish connections that may well serve as a template for future emotional and behavioural responses (Brodzinsky et al., 2021; Tottenham, 2020).

There is overwhelming evidence (e.g. Nadeem et al., 2017; Palacios, Román, & Camacho, 2011; Rushton & Dance, 2006; Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017) that pre-adoption experiences are important factors when attempting to understand the impact of early adversity on cognitive development. Research suggests that recovery from early adversity is possible, several reviews and meta-analyses demonstrate that significant catch up, in several domains, can be made (van IJzendoorn et al., 2005; van IJzendoorn, Bakermans-Kranenburg, Coughlan, & Reijman, 2019; van

IJzendoorn, Bakermans-Kranenburg, & Juffer, 2007). Outcomes in terms of behavioural adjustment appear to depend on severity of early adversity and age at adoption.

Ecological systems perspective

The ecological theory of human development (Bronfenbrenner, 2005) extended existing models to include more than the immediate environment (e.g. mother-child relationship) as a key factor in the growth of the child (Arnett & Hughes, 2012). Bronfenbrenner's theory introduced the importance of the broader cultural environment and how different systems interact both in the moment and over time. Thus, the ecological perspective may be characterised as a Process-Person-Context-Time model (Bronfenbrenner, 2005; Palacios, 2009) emphasizing the centrality of enduring interactions between actors, in different contexts, over the life-course of the developing person. Figure 3 illustrates the five systems that make up the ecology within which people develop. Importantly, Bronfenbrenner viewed the developing person not as a passive figure, but as an active agent who makes sense of their world, and their place in it by engaging in social activities and interactions (Tudge, Mokrova, Hatfield, & Karnik, 2009).

Though seldom used in adoptive family research (Verbovaya, 2016), the ecological model provides a useful opportunity to better understand the impact of adoption for the developing person. In considering the interconnectedness of contexts over time, Palacios (2009) proposes that this approach moves past individual characteristics (e.g. age, sex, race), or details directly related to adoption (e.g. age at placement, type of adoption), to consider the processes and interactions between people and *multiple* contexts in the lives of an adopted person. The many environments (e.g. family, school, peer groups) in which adoptees spend a large proportion of their time are termed *microsystems;* the surrounding community of associated professionals that may indirectly affect an adopted child (e.g. post-adoption social worker, Child And Adolescent Mental Health Services (CAMHS), parent support groups/ forums) form the *exosystem*; the *mesosystem* reflects the inter-relationships between the settings (e.g. transitions between contexts and the quality of the connection, such as home-school communication); the broad attitudes and ideologies that constitute the society or culture within which the adoption occurred, form the *macrosystem* – by adding in the *chronosystem* (changes that occur in developmental circumstances over time), historical aspects of adoption can also be included in this model (Palacios, 2009).

Figure 3

Bronfenbrenner's Ecological Model of Human Development
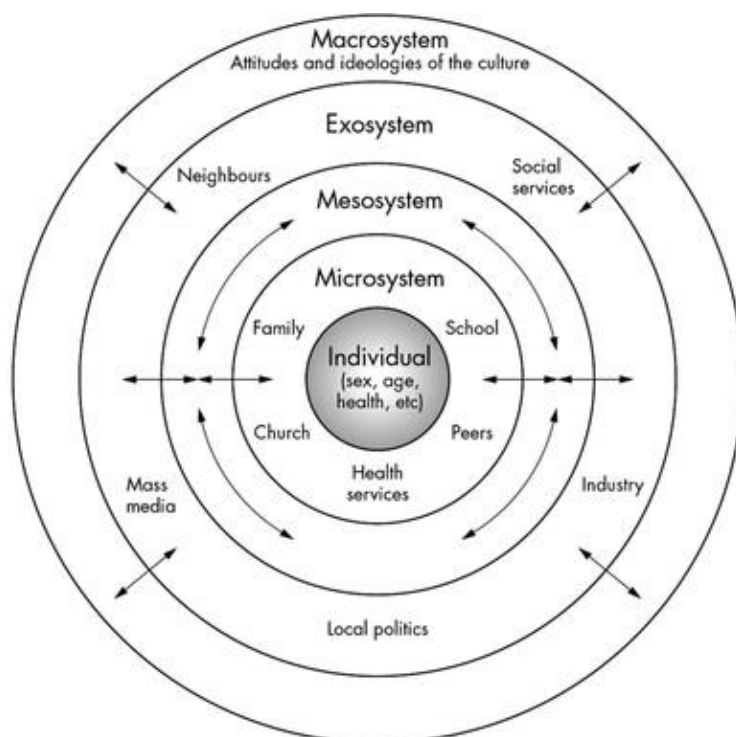
Image source: intascprinciple2.weebly.com/bronfenbrennerrsquos-ecological-systems-model.html

It is important to note that the multitude of contextual factors that may influence a particular adopted child's development are mediated by their psycho-social development (which is likely to be atypical in certain aspects and at certain times), through which they assign meaning to their adoption experience (Brodzinsky et al., 2021). The advantages of using this model to understand adoption experience lie in its ability to accommodate complex changes and growth over time – the importance of each system varies between people, contexts and over time. Risks and protective factors specifically related to adoption (e.g. neurological impact of early adversity, sensitive parenting approaches) occur at each level and will differentially influence individual development (Brodzinsky et al., 2021). However, if alternative, supportive contexts can be found (e.g. school), such risks, may be reduced (Bronfenbrenner, 2005).

Summary

The educational challenges faced by adopted children and young people are complex, persistent and enduring. They should be viewed as an interaction between many factors, including, but not exclusively so: intergenerational transmission of learning difficulties, teaching strategy, parenting style and investment, resolution of

identity status, social competence (including forming and maintaining relationships) and cognitive development.

Ontology and epistemology

It is at this point that a brief explanation of my own subjectivities as they pertain to the construction of this doctoral thesis is presented. I am an adoptive parent and as such have experienced many of the trials and tribulations described in the research used to justify and exemplify the thesis aims and objectives. I identify with some of the experiences recounted by adoptive families in the Wales Adoption Cohort Study and the responses from the adoptees in the final empirical chapter. It is feasible that analysis and interpretation of existing research and novel data may well be influenced by my own phenomenological experiences and as such may obfuscate alternative explanations or criticisms. However, I am also a scientist and educator, indeed these identities preceded adoptive parenthood. My academic predispositions are grounded in systematic, rigorous, objective and evidence-based examination of data and theory. I align with a constructionist approach to the acquisition and development of knowledge, particularly regarding teaching and learning. As a researcher, I take a mixed methods approach and see quantitative and qualitative methodologies as complementary, rather than oppositional.

To ignore my own experiences as an adoptive parent may be considered naïve as an informed insight and understanding may well lead to alternative reasoning and explanations. To this end, I have been acutely aware that my own subjectivities are likely to affect my academic interpretation of the research and data before me. Consequently, I have taken care to ensure a balanced and objective presentation of the data by using my own experiences in productive way, without undermining the approach to hypothesis testing used in this thesis.

Thesis overview and aims

Despite an ongoing interest in the use of adoption to secure permanence for vulnerable children, the available evidence suggests that adopted children's educational experience and outcomes in the UK are not fully understood. Centrally collated data of national educational assessments illustrate the persistency of the attainment gap that exists for children adopted in the UK. Adoption is a relatively unique experience and adds a layer of complexity and difference not experienced by the majority of their peers

(Brodzinsky, 1987). Research noting the effects of early trauma experienced by children adopted from public care suggests detrimental impact across a wide range of developmental outcomes. The enduring effects of early adversities can persist for many years post adoption. Consequently, adopted children and young people form a vulnerable group in the education system.

The broad aim of this thesis was to explore the educational experiences and behavioural and emotional adjustment of adopted children, young people and their families. Two main areas of investigation were identified in order to meet this aim. Firstly, I explored the possibilities to establish a robust and comprehensive quantitative illustration of attainment for adopted children and young people, at a national level. It was my contention that such a picture, in much the same way as for children looked after, can be ascertained by linking existing national datasets, held centrally by the DfE. The idea was to place adopted pupils on an equal footing with children looked after in conversations of support and guidance in education. Following this, I aimed to provide an up-to-date systematic review of contemporary research literature of adopted children's attainment and school experience. This initial *scene-setting* comprises the content of Chapter 2.

Secondly, I aimed to build on the extant body of research by further investigating areas of emotional and behavioural adjustment, well-being and career aspiration as it applies to a UK population. Examination of a nationally representative dataset (Chapter 4; Understanding Society; UKDataService, 2020) that includes a small sample of adoptive families, explored if scores on measures of emotional symptoms and behavioural problems, current school experience and career aspiration differed for adopted adolescents and the general population. The adolescent perspective on well-being, school experience and career aspiration permitted an initial examination of these relationships.

Recognising the importance of the transition to formal schooling as setting the foundations of future school experiences I investigated the support needs for adopted children as they begin school, from the adoptive family perspective. Thematic analysis of parent report data from Waves three and four of the Wales Adoption Cohort Study was complemented by quantitative measures of children's emotional symptoms and behavioural problems (Chapter 3). By exploring adoptive parents' perspectives, I aimed to contribute to a holistic view of school experience for adopted children in the UK as framed by the ecological systems approach described earlier in this chapter.

In this thesis I aimed to widen the scope of previous work on adopted children by introducing novel concepts that encompass wider school experiences (e.g. relationships, socialisation, home-school relationship) and individual developmental challenges (e.g. identity development) known to affect learning, as they pertain for adopted children in school. Though the concept of identity is well-documented in adoption research, it is seldom applied in an education context to explain and understand challenges faced by adoptees as they navigate the complex social and cognitive milieu of school. As adolescents re-frame their adoption narrative they begin to integrate a revised version into their larger sense of self. To fully understand the contribution of adoptive identity as a key part of wider psycho-social development, influence of the range of social contexts (e.g., home, school, peers, virtual relationships) needs to be acknowledged and understood.

A fundamental contention running throughout the thesis is that healthy psychological adjustment to adoptive life occurs when a coherent and meaningful sense of identity is formed congruently with the social and cultural environment (Grotevant & von Korff, 2011; Luyckx & Robitschek, 2014), in this case, school. Where this does not occur, however, it is reasonable to expect the residual effects be manifested in those same environments, with potentially detrimental consequences. In this thesis I investigated whether adopted pupils' educational performance and experience is affected by an incongruence between identity development and school. The final empirical chapter (Chapter 5) therefore aimed to investigate this by introducing identity development and school belonging in the exploration of adoptees' school experience and career aspirations, with new data collection from an online survey of young people in mainstream education.

Chapter 6 synthesises the findings of each chapter and considers the novel contributions of this work to the current research literature, contemporary policy and practice landscapes through the lens of the ecological systems model.

Ethical Considerations

This thesis refers to the ethics framework set out by the British Psychological Society (BPS, 2021a, 2021b) when considering ethical implications in study design. Ethical questions raised by each study in this thesis are given due regard in the method section of each chapter. Overall, the ethical issues that warranted consideration were:

informed consent; access; right to withdraw; use of incentive; privacy and anonymity; disclosure; possible distress and detriment.

Ethical approval from the School of Psychology Ethics Board at Cardiff University was obtained before commencing each study; reference numbers are given in each chapter. Participant information sheets explained the ethical issues raised and presented at the outset of each study. Each participant information sheet outlined the overall aims of the study, rights to withdraw, details of any effect participating in the study may have, use of an incentive (if applicable) and a data protection statement in line with Cardiff University guidelines. When obtaining informed consent, it was indicated that final copies of the thesis would be held electronically in the university library and also made available, in full, to the participants should they wish to see it.

Chapter 2: A systematic review of school performance and behavioural and emotional problems for adopted children.

Introduction

In a series of landmark articles, published over a decade ago, van IJzendoorn, Juffer and colleagues reviewed and synthesised data from a range of studies exploring aspects of development for adopted children (Juffer & van IJzendoorn, 2005, 2007; van IJzendoorn & F. Juffer, 2006b). In 2005, van IJzendoorn, Juffer, and Poelhuis (2005) conducted a series of meta-analyses using data drawn from 62 studies spanning North and South America, Europe and Australasia, representing a total of 17,767 adopted children. A wide range of school outcomes were scrutinised as part of the review including school results, language problems, school failure, IQ and prevalence of special educational needs. Results indicated that adopted children performed as well as peers on measures of IQ but less well in terms of school performance and language development. van IJzendoorn and colleagues described this as an *adoption décalage* (van IJzendoorn et al., 2005, p. 312) or, the gap between competence (potential) and school performance (measured outcome). These findings suggest that the interplay between factors related to the social context of school and cognitive ability may be important for understanding outcomes for vulnerable young people.

What is striking about the content of van IJzendoorn and colleagues', as well as other reviews (e.g. Christoffersen, 2012; Fisher, 2015; Juffer, Palacios, et al., 2011), is the paucity of UK based studies. Whilst it is important to understand how political and cultural ideologies shape social work policy and practice across borders (Thoburn, 2009), it is equally important to appreciate the development and impact of policies and practice in the UK. Creating a family through adoption has continued to change substantially over the last 50 years (Cohen, 2002). Currently, adoption is seen as an intervention for children whose birth family are unable or deemed unfit to provide an appropriate level of care (Palacios et al., 2019). Children for whom alternative care is sought are likely to have a range of complex needs.

Collectively, UK studies that have been included in recent reviews (e.g. Beckett et al., 2006; Castle, Beckett, & Groothues, 2000; Maughan, Collishaw, & Pickles, 1998; Selwyn, Frazer, & Quinton, 2006; Tizard & Hodges, 1978; JP Triseliotis & Russell, 1984) represent valuable contributions to knowledge about adoption but education policy and practice in recent years has been particularly volatile and politically

influenced. Because empirical enquiry is compelled, by definition, to respond and reflect dynamic contexts to remain relevant, regular reviews of current research pertaining to the needs of adopted children are necessary to place findings in context and inform current debates affecting adoption policy and practice.

A considerable amount of the extant literature on adopted children is based on US samples (e.g. Bramlett & Radel, 2016; Brodzinsky, 2011; Wadsworth, Corley, Hewitt, Plomin, & DeFries, 2002). However, several European studies have emerged in recent years covering a wide range of adoption related matters, though much of this literature pays limited attention to education as a primary focus, instead concentrating on psycho-social development (e.g. Molina, Casonato, Ongari, & Decarli, 2015; Pace, Cavanna, Velotti, & Cesare Zavattini, 2014; Soares, Barbosa-Ducharne, Palacios, & Pacheco, 2017), policy implications (e.g. Rees & Selwyn, 2009), or solely sampling children placed through Inter-Country Adoption (ICA; e.g. Beckett, Castle, Rutter, & Sonuga-Barke, 2010; van der Voort et al., 2014).

It is well established that the poor school performance of children in out-of-home care is consistent, enduring and widespread (Berridge, 2007; Berridge et al., 2020; Liabo, Gray, & Mulcahy, 2013; O'Higgins, Sebba, & Luke, 2015; see also Chapter 1). Further, very few young people (5%) from a care background go on to higher education, compared to 49% of the general school population (DfE, 2016c). Whilst there is a legal duty for Local Authorities in England and Wales to collate and monitor Looked After Children's (LAC) academic attainment and achievement, these outcomes are not routinely scrutinised for adopted children specifically. Thus, there is a major knowledge gap about the school performance outcomes of UK children domestically adopted from public care (Howe, 2009). This is concerning because adopted children experience the same levels of pre-care adversity as LAC (Triseliotis, 2002), which may have implications for subsequent school performance, including behavioural adjustment following adoption placement, and academic attainment.

Recently available, albeit partial, data (estimated 66% of adopted pupils at 11 years old and 30% at 16 years old) have shed some light on the relative attainment of adopted children in England (DfE, 2016d). The PLASC is returned by individual schools to the Department for Education (DfE) and contains various demographic and attainment data as well as an option for parents to 'flag' children as adopted, which serves to release additional school level funding, known as *pupil premium plus*. Whilst the data show that adoptees perform marginally better than LAC, a substantial gap appears to exist between the general pupil population and adoptees when achievement

of expected levels of attainment is considered. This gap is evident at both age 11 (80% general population and 68% adoptees) and 16 (53% general population and 23% adoptees) (DfE, 2016d).

Though these figures are based on incomplete data it does at least suggest that detailed, thorough, and reliable investigation of school performance outcomes for children adopted from public care is justified. In the absence of complete, centrally collated quantitative data, attention turns to the extant empirical body of literature to identify what is currently known about adopted children's school performance. To extend previous research, only studies published since the review conducted by van IJzendoorn and colleagues (van IJzendoorn et al., 2005) were included in the analysis.

The overarching aim of this chapter was to provide an updated review of the empirical literature since van IJzendoorn et al (2005) in the following ways:

i. To establish domestic adoptees' educational performance;

ii. To review the psychological health, in terms of behavioural outcomes, of domestic adoptees.

Method

This review sought to address these aims by synthesizing results of studies that have investigated school performance outcomes for domestically adopted children, that is, children adopted from out-of-home care within their country of origin. It was thought that whilst pre-adoption experiences of internationally and domestically adopted children bear some similarities, the differences may be a source of heterogeneity and confound interpretation of outcomes (Paniagua et al., 2020). In addition, there is scant literature that focusses solely on domestic adoption in the UK.

In the absence of a standardised, generic measure of school performance and in line with previous reviews, I adopted a broad definition to encompass not only academic attainment as measured by summative assessment (e.g. national tests, school tests, teacher assessment) but also ratings of performance/ competence by pupils, parents and teachers and other indicators of success at school (e.g. attendance rates). To increase quality through transparency and standardisation in the reporting of systematic reviews, the PRISMA (Preferred Reporting Items for Systematic reviews and Meta-analysis) statement was developed (Liberati, Altman, Tetzlaff, & Mulrow, 2009). The PRISMA framework provides an evidence based minimum set of standards for reporting systematic reviews and is widely used in reviews in this field (e.g. Chodura et

al., 2021; Degener et al., 2022; Luyt et al., 2021); PRISMA was therefore used as a framework for the present review.

In all, seventeen electronic databases of journal articles and conference papers were searched in the last week of February 2016 (see Appendix I for example search strategy). The van IJzendoorn et al (2005) review informed the current review and the following terms were adapted to search all registers and databases: "adopted children/ pupil" OR "adopted from care" AND adopt* AND school* OR educat* AND perform* OR achieve* OR attain* OR "academic attainment/ achievement/ outcome OR "educational attainment/ achievement outcome" OR competen* OR "competence" OR "learning" OR learn*. Some minor adjustments were required depending on the level of detail the database interface would allow. To further capture research that addressed the aims of the present review, a search of prominent authors in the field was also conducted (Boland, Cherry, & Dickson, 2013) in both the published and grey databases.

In addition, the contents of relevant journals (Adoption & Fostering, Adoption Quarterly, Child & Adolescent Mental Health; Child & Family Studies, Children & Youth Services Review, Journal of Child Psychology & Psychiatry) were hand searched to counter database registration errors (Liberati et al., 2009) and reference lists of included studies were also examined. Prominent authors in the field were consulted via email regarding ongoing or recently submitted research not yet appearing on databases. Many of the larger databases enable an update function where the search strategy is saved and re-run automatically at a user determined frequency; this update function was selected at weekly intervals for the NCBI, OVID and PROQUEST databases until the week before the manuscript was submitted for peer review (27/02/2017). A full strategy and list of authors searched is available from the first author.

Studies were included in this review if: (a) the participants were domestically adopted and of school age; (b) IQ was assessed using a standardised scale, and/or an indication of school performance was recorded and/or levels of behavioural problems in school were determined; (c) a non-adopted comparison group was included (this may have been a group from the general population or a group of children in the care system), or a norm-referenced test was used; (d) quantifiable outcomes of assessments were reported – this was more straightforward for the IQ tests and behavioural measures, but for school performance this could include grades, attendance rates, grade retention (repeating a year) or scores from teacher or parent reported measures and (e) the study design was primary research, a cohort study or secondary analysis of a large data set.

Studies that did not meet these criteria were excluded, particularly if the sample was comprised exclusively of LAC, ICA, or a mixed sample was used where more than 50% of children were not domestically adopted. To reduce the risk of bias, the effect of further confounds were limited by the exclusion of studies that reported on: adoption by other family members (e.g. kinship adoption, adoption of step children); children who had been, or were in the process of, clinical referral; reports of therapeutic interventions; qualitative studies; single case reports; and literature reviews.

To establish the level of rigor and relevance for each included study a modified version of the Newcastle-Ottawa Quality Assessment Scale (NOS, Wells et al., 2012) was used. Quality assessment is an integral part of the systematic review process (Greenhalgh & Brown, 2014) and provides a basis on which to ascertain strength of evidence presented in each study, thus lending weight to the overall review. It is important to note that the studies rated as high quality included in this review do not represent the entirety of research related to this thesis. Studies used to support arguments in following chapters were critically analysed and judiciously selected, based on their methodological and reporting rigour. The NOS uses a star rating system to appraise a study in three main areas: group selection, group comparability and determination of the exposure (case-control designs) or outcome (cohort studies). The scale was modified to reflect the present research questions and can be found in Appendix II. Two researchers carried out the quality assessment process independently and agreed on 80% of judgments. Inter-rater reliability was determined by Cohen's Kappa (κ=0.747, p<0.0005, 95% CI 0.504 – 0.99) and was deemed to be good (Altman, 1999). Differences were resolved by discussion until consensus was reached.

Results

The search yielded 11,569 articles and, after duplicates were removed, 9649 articles were screened by title and abstract for eligibility. Consequently, 237 articles were subjected to full text scrutiny. Excluded articles were grouped according to reasons for omission. A total of 15 articles were selected for review. Figure 4 details the screening and selection process. Overall, methodological quality of the included studies was good: most studies received over half of the available stars and three were rated as excellent (Lloyd & Barth, 2011; McClelland, Acock, Piccinin, Rhea, & Stallings, 2013; Vinnerljung & Hjern, 2011). Outcomes of the quality assessment process are detailed in Appendix III. Most studies were representative and gave clear definitions of control

groups. Whilst a broad definition of adoption was presented, further demarcation into type of adoption was less so (e.g. between private, international and adoption from care).

Figure 4

PRISMA Flow Diagram for Screening and Selection

Stage		
Identification	Records identified through database searching (*k* = 9205)	Additional records identified through other sources (*k* =2364)
Screening	Records after duplicates (1920) removed (*k* = 9649)	
	Records screened (*k* = 9649) → Records excluded (*k* = 9413)	
Eligibility	Full-text articles assessed for eligibility (*k* = 237) → Articles excluded: • Clinical sample *k*=4 • Design *k*=32 • Duplicates *k*=18 • Full text unavailable *k*=7 • Incorrect age group *k*=13 • Institutional sample *k*=4 • International adoptees only *k*=25 • Literature review *k*=13 • No comparison group *k*=17 • Non-adopted children *k*=15 • Non-appropriate measures *k*=14 • Past cut-off date *k*=60	
Included	Studies included in qualitative synthesis Total *k*=15 IQ *k*=1 School performance *k*=12 Behavioural challenges *k*=7	

Only five studies (Bramlett, 2011; McClelland et al., 2013; Raleigh & Kao, 2013; Thomas, 2016; Vinnerljung & Hjern, 2011) explored education as the primary

variable of interest and all but four (Howard, Smith, & Ryan, 2004; Lewis, Dozier, Ackerman, & Sepulveda-Kozakowski, 2007; Sanchez-Sandoval & Palacios, 2012; Weinberg, Waldman, van Dulmen, & Scarr, 2004) used existing longitudinal datasets or national registers (Vinnerljung & Hjern, 2011). A variety of measures were used to assess each area of interest from established, standardised assessments to parent or pupil reports. Most studies used children in the early adolescent (10-14)/ late adolescent (15-18) age range (Arnett & Hughes, 2012). Studies were either conducted in the US (n=12) or Europe (n=3). Whilst a US bias is to be expected given the relative volume of adoptions, the overall number of included studies is surprisingly small both in and outside of the US.

Sample sizes varied substantially across studies, partly because several made use of national registers or large cohort datasets. Sample sizes for adopted children ranged between 31 and 41,189. Comparison group size ranged between 27 and 1,287,856. The upper values for each group originate from the same study (Thomas, 2016) and the precise definition of adoption used is unclear. This is potentially confounding as it may refer to a variety of adoption types outside the remit of this review; the importance of distinguishing between type of adoption when analysing outcome data has been demonstrated by Bramlett (2011). The ages of the children included in the studies also varied. Whereas all studies were able to report the age at assessment (4.4 years to 19 years), five were unable to report the age at adoption. This was either because of secondary analysis of datasets that did not seek to address issues surrounding adoption as its primary focus, official records were incomplete or inconclusive, or respondents were children who may not be able to provide a precise report of age of adoption. Studies assessing at the upper age range asked respondents to recall school experiences. Range of reported age at adoption was between 29 days and 17 years.

Of the 15 included studies published since 2005 over two-thirds (*n*=11) were secondary analysis of longitudinal cohort studies or used pooled data from the Colorado Adoption Project (CAP; DeFries, Plomin, & Fulker, 1994; Plomin & DeFries, 1983; Plomin, DeFries, & Fulker, 2006; Rhea, Bricker, Corley, DeFries, & Wadsworth, 2013), four were primary research and one used national registers. Most comparison groups were formed from a non-adopted sample from the general population, in the case of secondary analysis of large cohort studies these were from the remaining study participants and mostly unmatched.

In terms of domains, only one examined IQ, 12 scrutinised school performance and seven explored behavioural outcomes. One study (Lewis et al., 2007) investigated

both IQ and behavioural outcomes, a further four studies (Howard et al., 2004; Lloyd & Barth, 2011; Weinberg et al., 2004; Zill & Bramlett, 2014) examined both school performance and behavioural outcomes. Key characteristics for each study can be found in Table 4 and are summarised below. Overall, the studies revealed the general use of validated, standardised measures for assessing IQ and behavioural problems, but non-validated measures to give an indication of school performance. This may reflect the absence of an established, validated, and standardised measure of school performance or a lack of consensus about what is fundamental to this construct. The outlook for adopted children in terms of IQ and school performance, as reported in the included studies, was overwhelmingly less favourable than the general population. However, when comparisons with children in public care were made, adopted children tended to fare better; this was true across the sampled age range and the measures used.

Outcomes for adopted children's emotional symptoms and behavioural problems were as expected, insofar as none of the seven included studies reported more favourable outcomes for adopted children than the comparison group. These findings are summarised in Table 5. Using a range of measures, five studies (Howard et al., 2004; Lewis et al., 2007; Sanchez-Sandoval & Palacios, 2012; Weinberg et al., 2004; Zill & Bramlett, 2014) demonstrated more behavioural problems for adopted children than the non-adopted comparison groups whilst the remaining two (Lloyd & Barth, 2011; Nilsson et al., 2011) reported no significant differences, though the comparison groups were heterogeneous. Whilst no discernible causal pattern is apparent, it seems that, when compared to non-adopted children, domestically adopted children are prone to experience more behavioural problems of a nature that may impede progress at school or make successful outcomes challenging to attain.

Table 4

Characteristics and Key Findings of Included Studies Measuring IQ and School Performance

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
				IQ				
Lewis et al (2007)	Primary	Multiple placements (*n*=33)	Gen. pop. (*n*=27); Single placement (*n*=42)	7.6mo	5.4yrs	Neglect (52%); physical abuse (12%) parental substance abuse (67%)	WPPSI-R; PPVT-III	Adopted groups significantly lower scores (single placement M=96; multiple placement M=95.9) on VIQ tests at 5-6yo than comparison group (M=106.4).
				School Performance – US studies				
Bramlett (2011)	NSAP	*n*=2089	Sub-group of NCHS sample (*n*=2022)	<1: 14.4% 1: 13.9% 2-5: 42.1% 6-10: 20% 11-17: 9.6%	6-17yrs	Not reported	Parent report of performance	Children adopted from care significantly more likely to be rated as poor than all children on English and Maths performance. Also, significantly less likely to be rated as excellent in both subjects.
Burrow et al (2004)	NLSAH	*n*=420	*n*=8536	Not reported	12-19yrs	Not reported	Combined Average Grade (English, maths, history/ social studies, science)	Adoptees awarded significantly lower average grades on self-reported scales. Female adoptees significantly higher grades and less behaviour problems than males.
Howard et al (2004)	Primary	Child welfare adoptions (*n*=1340)	Gen. pop. (*n*=175); Domestic Infant Adoption (*n*=481)	Infant <12mo Child Welfare - 3.6yrs ICA – 1.5yrs	Gen. pop. – 13.2yrs ; Infant Adoption – 12.5yrs ; Child Welfare - 12.1yrs; ICA – 10.9yrs	Neglect 63%; pre-natal substance exposure 60%; 2+ moves 37%; physical abuse 33%	Grade retention; low grades	Children adopted from care more likely to receive SEN services, repeat 1 or more grades and have average grades lower than D. Significantly lower scores on grade retention and grade level than international and infant adoptees.

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
Iervolino (2003)	CAP	*n*=142-200	*n*=170-223	29 days	9-12yrs; 13-15yrs	Infant	Teacher rated grade and class performance in reading and maths	Adopted children rated significantly lower than non-adopted on grade and class performance in both English and maths.
Lloyd & Barth (2011)	NSCAW	*n*=191	Foster care (*n*=99)	<5.5 years	5yrs	48% severe maltreatment (physical/ emotional abuse – 16%; neglect – 56%)	WJ	Adopted group significantly higher scores than LAC. Both groups scored around the mean.
McClelland et al (2013)	CAP	*n*=209	*n*=221	29 days	7yrs	Infant	PIAT (reading); WISC-R (maths)	Being adopted was significantly related to lower maths scores at ages 7, but not reading scores.
Raleigh & Kao (2013)	ECLS-K	*n*=156	*n*=10,477	<5yrs	8-9yrs (US third grade)	Not reported	NCES	Adopted children showed lower reading and maths scores. There was significant variation among adoptive families by race and health. A higher proportion of special needs in the adopted group was seen.
Thomas (2016)	ACS	*n*=41,189	*n*=1,287,856	2.87yrs	13.5yrs	Not reported	Grade for age; grade retention	Adopted children more likely to fall behind compared to comparison group. Stable across each grade 10-17yo. Adopted children fare better than LAC.

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
Weinberg et al (2004)	TRA	*n*=125	*n*=133	23.37mo	19yrs	Not reported	Parent report on composite scales	Adoptees more likely to be perceived as having experienced adjustment problems Inter-racial adoptees 3.6 times, black adoptees 3.36 times, Asian 3.87 times more likely to have school problems as compared to non-adopted siblings in adoptive placement.
Zill & Bramlett (2014)	NSCH	*n*=1076	*n*=63,766	Not reported	M=10.7yrs (adopted); M=8yrs comparison	Not reported	Grade retention; school engagement	Rate of grade retention for adopted children (aged 6-17) 3 times higher than non-adopted. No difference to LAC group. Adoptees significantly less engaged in schoolwork than non-adopted even after adjustment for demographic, parent education and income disparities.

European Studies

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
Vinnerljung & Hjern (2011)	National registers	*n*=899	Gen. pop. (*n*=900,418); Foster Care (*n*=3062)	6mo	16yrs	Not reported	Final year grade	Adoptees achieve significantly higher average grades than those in foster care but less well than general population comparison group. Differences remain after adjusting for birth parent characteristics.
Wijedasa & Selwyn (2011)	LSYPE	*n*=31	*n*=12,388	Not reported	15-16yrs	Not reported	Statutory test (GCSE)	Most adopted children achieved expected level of progress in Key Stage 3 in all 3 core subjects – more than general population, fostered and children in need. For GCSE most achieved the 5A*-CEM benchmark, significantly more than fostered and children in need; similar to general population.

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Note. CAP=Colorado Adoption Project; NLSAH=National Longitudinal Study of Adolescent Health; ICA=Intercountry Adoption; SEN=Special Educational Need; NSAP=National Survey Adopted Parents; NCHS=National Centre for Health Statistics; NSCAW=National Survey Child and Adolescent Wellbeing; WJ=Woodcock Johnson III Tests of Achievement; LSYPE=Longitudinal Study of Young People in England; GCSE=General Certificate Secondary Education; 5A*-CEM=Benchmark achievement level commonly used in UK educational statistics for expected level of achievement in Statutory test at KS4 (age 16) – 5 GCSE grades at A*-C, two of which are English and Maths; PIAT=Peabody Individual Achievement Test; WISC-R=Weschler Intelligence Scales for Children- Revised; ECLS-K=Early Childhood Longitudinal Study - Kindergarten; NCES=National Center for Educational Statistics; NSCH=National Survey of Children's Health; LAC=Looked After Children; ACS=American Community Survey; TRA=Minnesota Trans-racial Adoption Study; WPPSI-R=Wechsler Preschool and Primary Scale of Intelligence - Revised; PPVT-III=Peabody Picture Vocabulary Test – 3rd Edition; VIQ=Verbal Intelligence Quotient.

Table 5

Characteristics and Key Findings of Included Studies Measuring Emotional Symptoms and Behavioural Problems

Study	Data source	Groups			Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison 1	Comparison 2	Adoption	Assessment			
					US Studies				
Howard et al (2004)	Primary	Child welfare adoptions (*n*=1340)	Gen. pop. (*n*=175)	Domestic Infant Adoption (*n*=481)	Infant <12mo Child Welfare - 3.6yrs ICA – 1.5yrs	Gen. pop. – 13.2yrs; Infant Adoption – 12.5yrs ; Child Welfare - 12.1yrs; ICA – 10.9yrs	Neglect 63%; pre-natal substance exposure 60%; 2+ moves 37%; physical abuse 33%	BPI	Children adopted from care significantly higher incidence of behaviour problems than non-adopted. Child welfare adoptions 3.4 times more likely (ICA 2.4 times) to be in upper quartile of BPI than children not in those groups.
Lewis et al (2007)	Primary	Multiple placements (*n*=33)	General population (*n*=27)	Single placement (*n*=42)	7.6mo	5.4yrs	Neglect (52%); physical abuse (12%) parental substance abuse (67%)	CBCL	Children with experience of multiple placements scored significantly higher on total, externalising, oppositional and aggressive behaviour sub-scales than both other groups. No significant differences were found between all three groups on sub-scales of attention and internalising behaviour.
Lloyd & Barth (2011)	NSCAW	*n*=191	Foster care (*n*=99)	Returned home (*n*=63)	Not reported	0-14yrs	48% severe maltreatment (physical/ emotional abuse – 16%; neglect – 56%)	CBCL	No significant differences between all three groups. On the Internalising scale all three groups had more than 90% in the non-clinical range.On the Externalising scale all three groups had about 80% in the non-clinical range.

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Study	Data source	Groups			Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison 1	Comparison 2	Adoption	Assessment			
Nilsson et al (2011)	CAP	*n*=202	Matched general population (*n*=215)	n/a	<6mo	17yrs	Infant adoption average 29 days in foster care from birth (range 2-172 days)	DISC	No significant differences between adopted and non-adopted children on all conduct measures. Female adoptees showed higher levels of conduct problems than female non-adoptees but no differences between adopted and non-adopted males were found.
Weinberg et al (2004)	TRA	*n=125*	Non-adopted siblings *(n=133)*	n/a	23.37mo	19yrs	Not reported	Parent report on composite scales	Inter-racial adoptees 3.25 times, black adoptees 7.85 times, Asian 3.14 times more likely to have school problems as compared to non-adopted siblings in adoptive placement.
Zill & Bramlett (2014)	NSCH	*n*=1076	General population (*n*=63,766)	Foster Care (*n*=481)	Not reported	M=10.7yrs (adopted); M=8yrs comparison	Not reported	Parent report of official diagnosis	More than a third adoptees diagnosed with ADD/ ADHD, significantly more than LAC (22%) and non-adopted (5%). No differences between adopted and LAC groups for diagnosis of conduct disorder (20% and 18% respectively). Both groups significantly more than 1% of non-adopted children diagnosed with conduct disorder.

Study	Data source	Groups			Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison 1	Comparison 2	Adoption	Assessment			
					European Studies				
Sanchez-Sandoval & Palacios (2012)*	Primary	*n*=80	Classmates (*n*=140)	Residential foster care (*n*=92)	Not reported	7-11yrs 12-16yrs	Not reported	RRTS	Compared to current classmates adopted children showed significantly higher levels of emotional and behaviour problems Compared to children in residential foster care, adopted children showed fewer problems, especially in primary education.

Note. ICA=Intercountry Adoption; BPI=Behaviour Problem Index; CBCL=Child Behaviour Checklist; NSCAW=National Survey Child and Adolescent Wellbeing; CAP=Colorado Adoption Project; DISC=Diagnostic Interview Schedule for Children – Child Version; RRTS=Revised Rutter Teacher Scale; ADD/ADHD=Attention Deficit Disorder/ Attention Deficit/ Hyperactivity Disorder; NSCH=National Survey of Children's Health; LAC=Looked After Children; TRA=Minnesota Transracial Adoption Study.

Discussion

This systematic review aimed to establish domestic adoptees' school performance outcomes in terms of IQ, academic performance, emotional symptoms and behavioural problems by synthesising evidence from the recent empirical body of adoption literature. A comprehensive search strategy yielded 15 studies that met specific search criteria. Most (*n*=12) of the studies in the present review did not report pre-placement experiences such as age at adoption, adversity or number of pre-adoptive placements. The nature, scale and timing of pre-placement experiences is likely to have been highly variable both within and between samples. The absence of reporting for these theoretically important background variables is attributable to several factors including: the study availed itself of secondary analysis of longitudinal cohort studies (e.g. Wijedasa & Selwyn, 2011), surveys (e.g. Bramlett, 2011; Thomas, 2016) or national databases (e.g. Vinnerljung & Hjern, 2011); the exploration of adoption-related issues were not the primary research focus, or pre-placement adversity was not measured or included as a covariate as part of the analytic approach. There is overwhelming evidence (e.g. Nadeem et al., 2016; Palacios et al., 2011; Rushton & Dance, 2006; Soares, Barbosa-Ducharne, Palacios, & Pacheco, 2017) that pre-adoption experiences are important factors when attempting to understand the impact of early adversity on development. It is unclear from the included studies, however, how these indices of adversity contributed to the outcomes of interest. Three studies used participants from the Colorado Adoption Project where infants were relinquished at birth and placed in foster care for an average 29 days until adoption, thus potentially limiting effects of pre-placement adversity (Harwood, Feng, & Yu, 2013). Three studies (Howard et al., 2004; Lewis et al., 2007; Lloyd & Barth, 2011) were able to report on levels of pre-placement adversity and these were comparable to recent figures for LAC in England (DfE, 2016a).

The included studies that did include pre-placement adversity in their analysis were able to do so because the study was of a primary research design whereby sampling and data collection methods were specifically chosen to address this. Data from the National Survey of Child and Adolescent Wellbeing (NSCAW – a federally funded study monitoring children's pathways through child welfare services) explored by Lloyd and Barth (2011) included levels of pre-placement adversity as the sample were drawn from children in foster care who were then later placed for adoption. Whilst

the adoptees scored significantly higher on a test of educational outcomes than children in foster care, both groups scored close to the mean.

Despite an ongoing interest in the use of adoption as a means to secure permanence for vulnerable children (DfE, 2016a, 2016d), the overall number of included studies was low. This may reflect an underlying underestimation regarding the effects of early adversity for children adopted from care as they pertain in an educational context. This is particularly concerning for the UK, as only one UK study with a small sample of adopted children met the inclusion criteria. Of the 222 studies that were excluded, only 10% were from the UK (US – 53%; Europe – 18.6%; other – 18.6%); further substantiating the claim made here and elsewhere (e.g. Howe, 2009) that research into processes and outcomes for domestically adopted children in the UK is notable by its scarcity. Confidence in the assumption that all relevant research was included in this review and that the conclusions are grounded in all available evidence comes from the comprehensive, continually updated search strategy that addressed issues of bias, and the quality assessment process.

Previous research has indicated that performance on IQ tasks for adopted children is generally better than for non-adopted birth siblings and LAC, but on a par with the general population (Juffer, van IJzendoorn, Wrobel, & Neil, 2009; van IJzendoorn et al., 2005). Adopted children scored significantly lower than a general population comparison group, but mean scores for all groups were within one standard deviation of the standardised mean (Lewis et al., 2007). The results suggest that while the IQ scores of adopted and non-adopted groups differ, the differences are slight when compared to the general population. Lewis et al. (2007) reported considerable levels of adversity as reasons for entry into care and placement instability, which may partially explain this finding. The modest sample size and the non-matched, opportunity sampling of the comparison group also suggests a cautious interpretation is needed. These differences may manifest in the test scores because higher levels of privation have been previously reported to affect outcomes (e.g. Julian, 2013).

The inclusion of only one study investigating IQ was an unexpected outcome for this review; almost half of the included studies in the van IJzendoorn et al. (2005) review used a measure of IQ. An explanation for this may be in the longer selection window in the van IJzendoorn study, but also may reflect shifting trends in adoption research whereby the field has moved from identifying differences in psychological and cognitive adjustment, to understanding processes and the role of contextual factors (Palacios & Brodzinsky, 2010). It may also be the case that psychological research has

moved away from a deficit model of the impact of early adversity. The imbalance created by deficit-based approaches to research may bias perceptions of children's capacities to recover from early adversity (Ellis et al., 2022). Conventional tests of 'intelligence' that yield an IQ score are beset with inherent biases and oversimplification of cognitive abilities (Reynolds, Altmann & Allen, 2021). With regard to the effect of schooling, formal education boosts IQ scores (Ritchie & Tucker-Drob, 2018). However, young people experienced of early adversity are more likely to disengage from school, or be given fewer opportunities for learning (Ellis et al., 2022), thereby creating further bias in IQ tests. Education outcomes for adopted children and young people appears to better explained through exploring the nuances of school experience, rather than reliance on blunt instruments limited to specific domains.

In terms of school performance, adopted children fared less well, or similarly to, non-adopted comparison groups from the general population; however, compared to LAC, adopted children performed better. Of the 12 studies that examined school performance, none reported adopted children performing better than non-adopted, general population comparison groups. This is consistent with much of the adoption research to date (e.g. Scheeren, Das, & Liefbroer, 2017; van IJzendoorn et al., 2005; Vorria et al., 2015).

In contrast, Wijedasa & Selwyn (2011) found outcomes for adopted children to be more in line with their non-adopted peers. Details of attainment during adolescence were analysed by linking data from the Longitudinal Study of Young People in England (LSYPE) with the National Pupil Database (UK). Data linkage is a significant strength of this study as reliable data for academic attainment could be analysed that were not included in the original wave of data collection. At Key Stage 3 (UK Year 9, aged 13/14), adopted children outperformed all other groups on national tests in terms of expected progress. For GCSE, 55% of adopted children achieved 5 or more passes at grades A*-C. This was similar to pupils from the general population group (60%) and twice as high as that for LAC (27%). These results are contrary to the centrally released statistics described above (DfE, 2016a) and outcomes from studies included in this review. As the authors note, explanations may lie in the representativeness of the adopted group, particularly when considering the modest sample size (n=31) and rate of sample attrition.

In the absence of an established, standardised measure of school performance, a wide range of measures to capture academic attainment for adopted children was used. This heterogeneity made direct comparisons between studies challenging. Nonetheless,

it is clear from the evidence presented in this review that adopted children are less successful in their performance in school. This appears to hold true whether school performance outcomes are established through testing, analysis of national registers or perceptions of performance as reported by teachers, parents and pupils. The *adoption décalage* described by van IJzendoorn et al. (2005) may also account for the differences in school performance found here. Without additional measurement of IQ in these studies, this explanation remains tentative.

The relatively small sample sizes commonly found in adoption research is an oft-cited criticism of this field of research (Miller, Fan, & Grotevant, 2005; Palacios & Brodzinsky, 2010). One advantage of synthesising data through systematic review is that conclusions may be drawn from a large number of participants. This was the case here, as adopted children assessed for school performance numbered 47,925 across 12 studies (Table 4). This reflects the research designs whereby all but one study was based on large scale surveys or national datasets. Using data from national surveys does, however, raise methodological issues; in particular, the original question stimuli may not directly reflect the aims of the secondary analysis, and there is less control over sampling of participants and the accuracy of responses (Miller et al., 2005). This issue was highlighted in the exploration of adolescent adjustment by Burrow et al (2004) where average school grades of 420 adopted adolescents were compared with 8536 non-adopted peers using data from the National Longitudinal Study of Adolescent to Adult Health (Add Health; Harris et al., 2019). The adopted group appeared to fare less well, with lower grades than the comparison group, more learning problems and lower levels of school connectedness. Caution, however, should be taken with conclusions drawn from earlier versions of the Add Health data as Fan et al. (2002) demonstrated inconsistencies with participant responses, particularly in disclosure of adoption (some adolescents reported they were adopted when they were not and exaggerated incidences of delinquent behaviour). Likewise, academic grades were self-reported by the respondents but not verified, rather than being collected from high school transcripts (which occurred in subsequent waves of Add Health data collection).

Previous research (e.g. Radel, Bramlett, & Waters, 2010; Vandivere & McKlindon, 2010) has shown an effect of type of adoption (i.e. from foster care, private, intercountry or kinship care) on measured outcomes and this was supported by Bramlett (2011) in his analysis of data from the National Survey of Adopted Parents (NSAP), where the distinction between adoption types was used to further delineate school performance. In this case, all adopted children were less likely to be rated as

excellent for reading and maths and more likely to be rated as fair/ poor in these subjects when compared to all children. Further analysis revealed that much of this difference was accounted for by children adopted from public care; they received lower ratings for both subjects than all children and children adopted privately or internationally. Although private adoption is particular to US adoption policy and practice, this at least suggests that differences in type of adoption give rise to different perceptions of ability and the impact of pre-adoption experiences, thus requiring future research to take adoption type into account.

Focussing on reading and maths scores as an indication of school performance, Raleigh and Kao (2013) found, as an aggregate group, adopted children scored lower on tests of maths and reading than the non-adopted comparison group. A significant difference was only observed when variance (gender, race, ethnic background and identified special educational need) within adopted families was accounted for. Data was taken from the Early Childhood Longitudinal Study (ECLS-K), a large, representative, US based population study. Stratifying groups in this way clarifies how variation within adoptive families can affect interpretation of outcomes.

Analysing data from a later iteration of the NSCH, Zill and Bramlett (2014) compared life-circumstances and well-being of adopted children, children in care and children of never married, single mothers to children living with two biological parents. As in Bramlett (2011), parents reported on measures of school performance including questions about school engagement and grade retention. After adjusting for demographic, parental education and income, adoptees were significantly less engaged in schoolwork and were three times more likely to repeat a grade than non-adopted children; no differences between adoptees and LAC were found. As with all studies that explored rates of grade retention, adopted children were more likely to repeat a year than the general population. While grade retention is peculiar to the US education system and makes cross-country comparisons of school performance difficult, these findings add to the evidence that adopted children perform at lower levels than expected.

The pattern of evidence from studies that explored levels of emotional symptoms and behavioural problems were similar to those of academic attainment in that adopted children fared less well when compared to non-adopted children but marginally better than LAC. The evidence presented here for elevated levels of emotional symptoms and behavioural problems in adopted children corroborate findings from several recent studies (e.g. Juffer & van IJzendoorn, 2005; van IJzendoorn &

Juffer, 2006; Verhulst, Althaus, & Versluis-Den Bieman, 1990). Though much of these concentrated on ICA, this systematic review provides evidence that this is likely to be the case for domestically adopted children also.

Links between poor school performance and high levels of behaviour problems are well established and stable throughout the school age. For example, in a meta-analysis of 25 studies exploring academic performance of children with Emotional/ Behavioural Disturbance (EBD), Reid, Gonzalez, Nordness, Trout, and Epstein (2004), found a moderate to large difference when compared to age-matched peers without disabilities. Similarly, Nelson, Benner, Lane, and Smith (2004) concluded that children with EBD experienced large academic deficits across the 5-16 age range. This review (and others e.g. Keyes, Sharma, Elkins, Iacono, & McGue, 2008; Vandivere & McKlindon, 2010), points to an increased probability of elevated levels of emotional symptoms and behavioural problems in adopted children, the manifestation of which is likely to be detrimental to succeeding in a mainstream school environment. It follows that this may partly explain under-achievement of adopted children in school though more work on the direction of effects is needed.

In comparing behaviour of adopted and non-adopted children, Sanchez-Sandoval and Palacios (2012) used the Revised Rutter Teacher Scale (Hogg, Rutter, & Richman, 1997). Compared to current classmates, adopted children had higher levels of emotional symptoms and behavioural problems. Further analysis of the interaction between gender and group revealed that considerably larger adoption effect sizes for boys were seen in emotional problems; this accounted for most of the differences in male adjustment (Sanchez-Sandoval & Palacios, 2012). For behavioural and inattention/ over-activity problems, larger effect sizes were seen for girls than boys when compared to current classmates, leading these authors to concur with others (i.e. Bricker et al., 2006; Iervolino, 2003; Nilsson et al., 2011), in suggesting a disproportionate adoption effect for gender. Further investigation is warranted, however, as this is contrary to research with LAC (e.g. Newton, Litrownik, & Landsverk, 2000) and the cited supporting evidence used the same sample from the CAP. Consistent with the other included studies, when compared to children in residential foster care, adopted children showed fewer problems, especially in primary education. This difference is suggestive of adoption being a more favourable option than public care, at least in terms of behavioural adjustment.

Older age at adoption has been widely shown to be an important factor in development of later problems (e.g. Gunnar & van Dulmen, 2007; Sharma, McGue, &

Benson, 1998). To control for this effect, Nilsson et al. (2011) analysed behaviour outcomes in the CAP sample where the mean age at adoption was 29 days. Assessment was carried out at age 17 through the DISC. No significant differences in the number of DSM-IV symptoms between adopted and non-adopted children were found. There was, however, an effect of gender in that female adoptees showed more DSM-IV symptoms than female non-adoptees but no significant differences between adopted and non-adopted males were found.

Four included studies (Howard et al., 2004; Lloyd & Barth, 2011; Weinberg et al., 2004; Zill & Bramlett, 2014) examined both school performance and behavioural problems in their respective samples. In the Howard et al. (2004) study children adopted from care had significantly higher rates of repeating a year and lower grades than all other groups (non-adopted, ICA and infant adoption). Whilst it is difficult to disentangle these associations at an individual level, a tentative explanation may be made by considering that adoptive parents were more likely than parents of birth children to report un-met educational needs. Further research may explore variation in how parents advocate for their children's educational needs.

A similar pattern is evident in the Zill and Bramlett (2014) analysis, where adopted children were more likely than children living with two biological parents to be diagnosed with ADHD or conduct disorder and to display less engagement in school. Also, in Howard et al. (2004) above, adoptive parents received more complaints from teachers about children's behaviour than non-adoptive parents. Results from Weinberg et al. (2004) are unclear on this issue because the scales were collapsed to aid analysis. Children identified as having a 'school problem' may have faced varying challenges. Findings from Lloyd and Barth (2011) are also inconclusive as adopted children outperformed LAC in reading and maths tests but all groups had similar scores on behavioural measures; in addition, there was no non-adopted comparison group. Age at assessment was 66 months (about 5 ½ years) and this may be developmentally too early to identify differences.

Limitations

The findings of this review concur with previous analyses of adopted children's school performance, but some limitations are noted. The inclusion criteria were necessarily rigorous to meet the study aims and conceptual definitions; doing so, however, may render the systematic review less useful when the area under examination

has attracted little specific research, though this was not the impression from the initial scoping search. The heterogeneity in sampling and measurement made direct comparisons challenging. Many of the included studies were based on archival analysis of existing datasets. Whilst this may be advantageous in some respects (i.e. increased sample size, representativeness of target groups and availability of longitudinal data), it is balanced by restrictions of the original survey questions. Miller et al. (2005) identified several areas of particular concern including verification of adoption status and type. In addition, as was the case with several of the included studies in the present review, the original surveys were not designed to investigate adoption or education as a primary focus. Substantive questions were therefore ambiguous and often relied on subjective accounts of performance or diagnosis from parents and, occasionally, children. Further, through synthesising outcomes from a number of large scale surveys, a wide age range at both adoption and assessment was identified. This is problematic because it is difficult to disentangle stages of development from impact of adoption. While the large sample sizes can be advantageous, it can also be a drawback if the primary focus is not adoption. It is left to chance how many adopted children are captured in the sampling, further limiting the extent of generalisations. This suggests that secondary analysis of large cohort studies requires going beyond counting and grouping to make more meaningful use of the data available: this could potentially be achieved through collaboration with population survey designers to include relevant questions specifically addressing adoption-related issues. Finally, to isolate the impact of adoption, this review excluded studies that had only sampled children who received additional support in school because of an identified Special Educational Need. Given that adopted children are more likely to fall into this category (Berridge & Saunders, 2009), their absence may constrain generalisability.

Implications for practice and future research

Collectively, the studies included in this review reveal lower school performance for adopted children when compared to non-adopted peers. These findings support the argument that quantitative data be collected and monitored for adopted children's school performance in relation to both attainment and adjustment to establish a robust picture for this vulnerable group of children. This review also raises several questions that warrant further scrutiny: (1) What mechanisms underpin the apparent gap in school performance between adoptees and non-adopted children? (2) Are identified differences

uniform over the course of formal education? (3) How can adoption research inform education policy and practice to enable adoptees to achieve the best possible outcomes? (4) What current mechanisms (e.g. adoptive parents, Adoption Support Fund, Virtual Schools) are effective support for adopted children?

The recognition by the UK Government (DfE, 2016b), of similarity between LAC and adopted children, highlights a growing understanding that educational needs are unlikely to change significantly simply because children's care status has changed. In a bid to address the achievement gap, a variety of policy changes have been implemented since 2014 to raise the attainment of disadvantaged and vulnerable pupils (Higgins et al., 2016). For example, entitlements, such as the pupil premium in England and first choice of school, have been extended to include those children no longer in the care system, including those children who have been adopted. Future research should empirically evaluate the effectiveness of these initiatives.

Conclusion

Education systems are overlooking a vulnerable group of children who may be better helped by an increased awareness and understanding of the effects of early trauma and loss on development. Specifically, adopted children may be susceptible to indirect effects of policies and systems that reflect an incomplete understanding of transitions within care and securing permanence for children. For those tasked with supporting adopted children in school, the strong indication from this review is that such intervention needs to be continued and empirically evaluated. After almost a century of adoption research, an achievement gap persists. Perhaps this gap exists because of complex interactions between many factors including impact of early trauma and subsequent behavioural and emotional adjustment, teaching strategy, parenting style and investment, challenges of adolescent identity development and attachment security.

Addendum

The systematic review in this chapter was conducted in the initial stages of my doctoral research (2016). To present an up-to-date picture of the research landscape concerning the challenges faced by adopted children in school, it was prudent to repeat the process in the final stages of writing up. A summary of the method and findings follow.

Method

The original search strategy (with minor amendments according to individual database syntax) was repeated in 12 databases (APA PSYCHINFO, Cardiff University Full Text Journals, OVID MEDLINE, MEDLINE COMPLETE, BEI, ERIC, CINAHL with full text, Education Abstracts (H. W. Wilson), Education Administration Abstracts, Child Development and Adolescent Studies, Web of Science and ASSIA). A date limiter was set to each search strategy so that only articles published between 2017 and the end of 2021 were returned.

Results and summary of key outcomes

The total number of records identified was $k=6636$, duplicates ($k=327$) were removed leaving $k=6309$ for initial screening. Full texts of $k=124$ articles were sought for closer examination following screening of titles and abstracts. Articles were excluded for reasons related to design ($k=41$), age of sample ($k=4$), adoption status of sample ($k=23$), mostly internationally adopted children ($k=32$), absence of a comparison group ($k=8$) and one was a summary of a larger study. A final total of eight articles[1] were deemed to meet the original inclusion criteria and summarised in Table 6.

In terms of geographical location, four were based in the US (Anderman et al., 2021; Farr, 2017; Tan, Kim, Baggerly, Mahoney, & Rice, 2017; Werum, Davis, Cheng, & Browne, 2018), three from the UK (Chapter 4 - Brown, Waters, & Shelton, 2019; Paine, Burley, Anthony, van Goozen, & Shelton, 2020; Wretham & Woolgar, 2017), and one from Romania (Casonato et al., 2020).

The findings of the eight included studies from the most recent search corroborate the findings of the 15 studies included in the initial review, but some differences are noteworthy. As before, most adopted children appear to fare less well than non-adopted children on educational, emotional and behavioural outcomes. In two studies (Casonato et al., 2020; Farr, 2017) no differences were found on measures of emotional symptoms and behavioural problems. However, the comparisons in these studies were to national norms (both used CBCL/ TRF) and may highlight difficulties inherent when comparing to national norms (Rose, Koshman, Spreng, & Sheldon, 1999). Alternatively, both studies may have an interest in showing similarities for adopted children and the general population. The Casonato et al. (2020) study looked to highlight the benefits of domestic adoption in Romania. In contrast, the Farr (2017)

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[1] One of the included articles was the published version of the study that comprises chapter 4 and so will not be summarised in detail here.

study focussed on sexual orientation of adoptive parents, finding that adjustment among adopted children was not different according to parental sexual orientation (but was predicted by earlier child adjustment issues and parenting stress, regardless of family structure). Intriguingly, the two remaining studies that were of primary design (Paine et al., 2020; Wretham & Woolgar, 2017) also compared adopted children's outcomes (both used the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)) to national norms and found elevated levels of emotional symptoms and behavioural problems for adopted children. The measure used (CBCL or SDQ) is unlikely to contribute to the differences between the two groups of studies as scores from both measures are highly correlated (Stevens, Ho, Mason, & Chmelka, 2021). Further exploration of studies using national norms for comparison may be justified. Comparison to national norms in these four studies was necessary on practical grounds; the adopted participants in each study were recruited over a wide geographical area leaving recruiting a comparison group from the same population highly challenging. It is unlikely that a concentration of adoptive families in a small geographical area would be substantial enough to generate a sizeable pool from which to draw a comparison group, hence the attraction of secondary analysis of existing datasets.

Studies that explored existing datasets made use of the large pool of non-adopted respondents inherent in studies of this design. None of the groups were matched using propensity score matching, for example, despite available data to do so. The updated search yielded a higher proportion of studies (1 in 2) that were primary research with adoption as a focus – in the original review only 1 in 5 studies used adoption as a primary focus. One of the main shortcomings of the studies in the original review concerned reporting of pre-adoptive risk factors. Given that pre-placement experiences are important factors when attempting to understand the impact of early adversity on development (e.g. Nadeem et al., 2017; Palacios et al., 2011; Rushton & Dance, 2006; Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017), it would appear crucial to consider this information when exploring outcomes for adopted children and young people. One-third of the included studies in the update included pre-placement information as part of the research design. Unsurprisingly, these were all primary research design where adoption was one of the study aims. Studies that used existing data sets were constrained by the nature of the data collection and unable to report

Table 6

Characteristics and Key Findings of Studies Included in Updated Review

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
US Studies								
Anderman et al (2021)	HSLS	DAY (*n*=250)	NAY (*n*=7040); IAY (*n*=130)	Not reported	9th Grade (14/15yrs)	Not reported	GPA	DAY lower 12th Grade GPA; IAY less likely to enrol in postsecondary institutions
Farr (2017)	Primary	*n*=96	Norms	Infant (not specified)	8yrs	Private domestic adoption	CBCL; TRF; PSI; DAS; FAD;	Adopted children's mean scores on behavioural problem scale comparable to norms and below clinical levels; fewer behavioural problems when parents report less parenting stress
Tan et al (2017)	ECLS-K	Maths (*n*=181); Reading (*n*=184)	Maths (*n*=13,719); Reading (*n*=13,944)	Pre-Kindergarten (5yrs)	1st Grade (6/7yrs)	Not reported	Parent report on bespoke composite scales	Adoption status unrelated to kindergarten reading and maths scores or subsequent growth rate; parents beliefs of skills and educational expectations significant predictor of reading and maths scores
Werum et al (2018)	NSCH	Private (*n*=617); Foster adoptive (*n*=611); IAY (*n*=349)	*n*=60,844	Private – 1.9yrs; Foster adoptive – 2.5yrs; IAY-2.2yrs	6-17yrs	Not reported	Parent report on NSCH survey items	Parental investment mitigates association between adoption and educational outcomes. Children adopted from foster care experience greatest difficulties when compared to other adoption contexts and non-adopted children
European Studies								
Brown et al (2019)	UKHLS	*n*=22	*n*=110	Not reported	Adopted (M=12.34yrs); Non-adopted (M=12.59yrs)	Not reported	SDQ; Self-report on bespoke survey items	Adopted children report higher externalising and total difficulties than non-adopted group. Adopted children more likely to show intention to seek full time work at end of compulsory schooling

Study	Data source	Groups		Age		Pre-adoption experience	Measures	Key Findings
		Adopted	Comparison	Adoption	Assessment			
Casonato et al (2020)	Primary	n=52	Norms	0-51mo	13yrs	Placement changes (0-3); Institutional care (44.2%)	CBCL; PTSP; YSR	Adopted sample did not differ from normative population on all measures. Rate of participants at clinical scores was higher for adoptees. Behavioural problems not linked to pre-adoption risk factors.
Paine et al (2020)	WACS	n=45	Norms	M=22.14mo	M=75.96mo	Days with birth parents (M=263.73); Days in care (M=416.40); ACES (0-4+)	SDQ; Battery of validated neurocognitive tasks	Adopted children had more emotional and behavioural problems than general population and over 20% scored low on most neurocognitive tasks. Children who scored low on non-verbal reasoning tasks more likely to have more parent and teacher related behavioural problems
Wretham & Woolgar (2017)	Primary	n=30	Norms	M=3.9yrs	M=9.06yrs	88.9% known to have experienced at least one form of maltreatment	DAWBA; SDQ; WASI-II; BRIEF; CANTAB; SCQ	Adopted group showed elevated emotional and behavioural difficulties compared to children of similar age in general population. Strong negative correlation between age at adoption and BRIEF scores when ADHD controlled

Note: HSLS=High School Longitudinal Study; DAY=Domestically Adopted Youth; NAY=Non-adopted Youth; IAY=Internationally Adopted Youth; GPA=Grade Point Average; CBCL=Child Behaviour Checklist; TRF=Teacher Report Form; PSI=Parenting Stress Index; DAS=Dyadic Adjustment Scale; FAD=Family Assessment Device; ECLS-K=Early Childhood Longitudinal Study-Kindergarten; NSCH=National Survey of Children's Health; UKHLS=United Kingdom Household Longitudinal Survey; SDQ=Strengths and Difficulties Questionnaire; PTSP=Post-traumatic Stress Problems; YSR=Youth Self-report; WACS=Wales Adoption Cohort Study; DAWBA=Development and Well-Being Assessment; WASI-II=Wechsler Abbreviated Scale of Intelligence (2nd Version); BRIEF=Behaviour Rating Inventory of Executive Functioning; CANTAB=Cambridge Neuropsychological Test Automated Battery; SCQ=Social Communication Questionnaire;

pre-placement experiences, as was found in the original review. However, all the recently found studies using secondary analysis highlighted this as a limitation, indicating a growing awareness of the complexities involved in adoption research.

Recruitment of substantial numbers of adopted children, young people and their families to participate in meaningful research continues to be an issue, as was confirmed by the samples in the updated search. Of the eight included studies, samples of adopted children ranged from 30 to 96 for primary research designs. Adopted children identified in datasets used for secondary analysis ranged from 184 to 1577.

Two of the studies included (Paine et al., 2020; Wretham & Woolgar, 2017) warrant particular attention as both were based in the UK and sampled populations pertinent to this thesis. In Paine et al., (2020) adopted children from the Wales Adoption Cohort Study (WACS; Chapter 3), in addition to referrals to the Neurodevelopment Assessment Unit (NDAU: www.cardiff.ac.uk/research/explore/research-units/neurodevelopment-assessment-unit), were assessed on emotional symptoms and behavioural problems (including parent and teacher reports), as well as a battery of neurocognitive tests. Adopted children showed more emotional symptoms and behavioural problems than the general population, as rated by parents and teachers. Whilst over a fifth scored lower than expected for their age range on all but one of the neurocognitive tasks, on average children performed within the expected age range. Paine et al., (2020) suggest that an adoption décalage, as previously identified by van IJzendoorn et al. (2005), may also describe the gap between adopted children's emotional and behavioural adjustment and neurocognitive competence. Navigating the social and emotional milieu at school and home may exacerbate the gap by adding additional strain on already overburdened resources because of early adversity.

In the Wretham and Woolgar (2017) study, executive function and social communication abilities were assessed for 30 UK domestically adopted children (M_{age}=9.06 years), in addition to emotional symptoms and behavioural problems. Overall, adopted children displayed more difficulties on executive functioning tasks and elevated levels of emotional symptoms and behavioural problems. Conversely, no exceptional difficulties in communication or intellectual functioning were found. This study highlighted the complexities in adjustment for adopted children, particularly in how the duration and severity of pre-placement experience differentially affects cognitive and social domains of functioning that may impact on experience of school and education. As Wretham and Woolgar (2017) note, adoption research investigates

complex phenomena that may subsequently pose challenges translating the outcomes into accessible formats. But '…if we are to help adopted children, it is important to identify any special problems they might face without stigmatising them by making unjustified observations.' (ibid. p.342).

Conclusion

An updated search of studies that explores school performance and emotional and behavioural adjustment for adopted children confirms the outcomes of the systematic review conducted in the initial stages of this thesis: domestically adopted children continue to face significant challenges at school. The most recent research in this area re-defines the nature of the gap for adopted children and young people. Previously, differences between adopted children and their non-adopted peers pertained primarily to academic attainment, i.e. defined by performance in statutory examinations. Since its inception, adoption research has shifted in focus as new trends in research emerge (Palacios & Brodzinsky, 2010). The eight studies in this updated search shed light on the nuances of children's psychological and neurodevelopmental profiles, through consideration of executive function, social competence, neuro-cognition, parental investment and aspiration. Not only does the field of adoption research remain dynamic, it continues to challenge existing paradigms through innovative design for the better understanding of the lived experience of adoption. Despite awareness of their vulnerability, and any interventions that may be in place, adopted children, overall, still appear struggle to achieve their best possible outcomes in education.

Chapter 3: Understanding the support needs of adopted children and their families at school: the views of adoptive parents.

Introduction

The previous chapter presented a robust and comprehensive systematic review of recent literature concerning behavioural and emotional outcomes, as well as academic attainment, for children adopted from care. The synthesis of 23 eligible studies from an updated review, revealed that adoption was associated with lower academic attainment and elevated levels of behavioural problems across childhood, adolescence and emerging adulthood compared with non-adopted comparison groups. Collectively, the findings suggested that the school performance of adopted children should be routinely monitored. The review also highlighted a need to recognise the potential challenges faced by children adopted from care by working with families, schools, practitioners and researchers to identify the means through which children can achieve the best possible outcomes.

Despite an ongoing interest in the use of adoption as a means to secure permanence for vulnerable children (DfE, 2016a, 2016d), the overall number of included studies in the review was low. This is particularly concerning for the UK, as only four UK studies, with small samples, met the inclusion criteria; this further substantiates the claim made elsewhere that research into processes and outcomes for domestically adopted children and their families is notable by its scarcity (e.g. Howe, 2009).

Using a sample of families from the Wales Adoption Cohort Study (WACS; Meakings et al., 2018) who recently adopted in the UK, the present chapter seeks to partly address this gap by exploring educational experiences for adopted children, and their families, as they begin their school career. In doing so, this chapter will also contribute to the wider aims of the WACS: to understand the early support needs of adoptive families and to examine what helps families flourish.

Transition to school

Starting school for the majority of children will be a positive experience, facilitated through the support of the family and the early years setting or school (Dunlop & Fabian, 2007). Successful navigation of the transition to school is a critical factor in determining how children adjust and respond to learning the new social rules

and values of the educational setting and is integral to future progress (Ghaye & Pascal, 1988; Griebel & Niesel, 2000). However, beginning school may provoke anxiety that affects emotional well-being, long-term social adjustment (Kienig, 2002; Parent et al., 2019) and place additional demands on family dynamics (Farr, 2017). An increase in family stressors may itself induce further anxiety, leading to possible aggressive behaviour, fatigue and withdrawal; the cumulative effect of which has considerable impact on learning capacity and social interaction at school (Featherstone, 2004). Adopted children who are prone to emotional and behavioural difficulties because of their experiences of early adversity, may well be at a disadvantage at the very start of their school career. After placement, most school aged children attend their new school within one month, suggesting that education is prioritised over the psychosocial needs of establishing bonds with a new family (Quinton, 1998); school readiness may therefore affect transition to a new home. For children already of school age and older, depending on the timing of adoption placement, school entry may not coincide with the start of a new academic year. It is assumed that similar challenges will be faced by adopted children as they start a new school, regardless of the term in which they enter (Gore Langton, 2017).

Transition to adoptive parenting

For new parents, the creation of a family is a celebrated life event. Parenthood is a time of transformative change representing a period of 'sensitivity, risk and opportunity' (Saxbe, Rossin-Slater, & Goldenberg, 2018; p1190). Psychological adjustment following transition to parenthood may be problematic, however, and issues can arise in mental and physical health and in relationship quality (Knoester & Eggebeen, 2006; Matthey, Barnett, Ungerer, & Waters, 2000; Mitnick, Heyman, & Smith Slep, 2009; Reid & Taylor, 2015). Much of the extant research concerning transition to parenthood is primarily concerned with biological family formation (Canzi, Molgora, et al., 2019; Long, Jones, Jomeen, & Martin, 2021). It is envisaged that adjustment to *adoptive* parenthood may also be prone to comparable issues but with added layers of complexity (Syne, Green, & Dyer, 2012). Adoptive parents may wrestle with a variety of 'unique obstacles, emotions and transitions' (McKay et al., 2010: p127) including: possible experiences with infertility (Jennings, Mellish, Tasker, Lamb, & Golombok, 2014), higher probability of parenting children with emotional symptoms and behavioural problems (Glidden, 2000) and stigma associated with adoption (Wegar, 2000).

A seminal theory of new parents' adjustment to adoptive family life was proposed by Kirk (1964), which outlined the processes through which adoptive parents dealt with transition difficulties. Kirk's (1964) *shared fate* theory described adoptive parents' cognitions as either *rejecting* or *acknowledging* differences between adoptive and non-adoptive family formation. Subscription to an *acknowledgement-of-difference* strategy was characterised by open, pro-active engagement, at a family level, to differences associated with adoptive parenthood; this in turn enabled successful outcomes. Where differences were denied, however, parents were seen to take on a *rejection-of-difference* strategy in which parents emulated non-adoptive families. Such denial, according to Kirk (1964), may lead to less favourable outcomes in terms of adjustment to adoption. Extending Kirk's (1964) concept, Brodzinsky (1987) suggested a more complex interpretation of adoptive parents' strategies where an extreme position on the acknowledgement–rejection continuum was associated with adjustment difficulties. When the focal points of family life are the differences themselves, then an *insistence-of-difference* stance is taken (Brodzinsky, 1987). Focussing solely on the uniqueness of adoptive family life, at the expense of a broader perspective, leads to difficulties in adjustment where those differences may be regarded 'as explanations for family disconnectedness and disharmony' (Brodzinsky, 1987: p42). Understanding the uniqueness of, and adjustment to, adoptive parenthood may better inform teachers' identification of support needs for adopted children and their families in school. Further, it may also provide agency for teachers to integrate diverse family formations in the curriculum.

Whilst the influence of shared fate theory in adoption research is well-established, it was originally conceived at a time when the dominant zeitgeist around adoption was characterised by secrecy and so may not reflect the current context of openness and transparency (Lo & Cashen, 2020). Using a contemporary sample of adoptive mothers (*n*=190), Lo, Cashen, and Grotevant (2021) not only demonstrated the validity of the acknowledgement-of-differences strategy but also confirmed the uniqueness of adoptive parenthood in the current adoption landscape.

Shared fate theory has provided a springboard for the development of other theories in adoption research, for example communicative openness (Brodzinsky, 2005) and transracial adoption (Benson, Sharma, & Roehlkepartain, 1994; R. M. Lee, 2003). Central to the idea of communicative openness is the parent's empathic *attunement* to the child's emotional response to adoption (Brodzinsky, 2005). Openness in communication about complex and sensitive adoption related issues is thus not

restricted to passing on factual details, but also includes opportunities to discuss emotional responses amongst family members (Brodzinsky, 2005). Providing such opportunities to discuss adoption enables children to make sense of their pre-adoption experiences and present status (Soares et al., 2018). Communicative openness is beneficial to healthy emotional development of adopted children and young people (Aramburu Alegret et al., 2020; Pinderhughes & Brodzinsky, 2019; Ranieri et al., 2021). As such it could be extended into the school system to enable consistency of approach in meeting the psychological needs for adopted children.

Optimal family-school partnerships are an important factor in enhancing child and family well-being (Goldberg, Black, Manley, & Frost, 2017). Strong parent-teacher relationships, particularly in the early school years, are associated with positive family outcomes (Hornby & Blackwell, 2018; Hornby & Lafaele, 2011). Positive parent-teacher relationships not only act as a model for meaningful relationships with teachers, but also provide teachers with a deeper understanding of a child's developmental needs and strengths (Goldberg & Smith, 2014). Considering the complexities of families formed through adoption, and the inherent specialised knowledge associated with adoption, strong family-school links would appear to be an essential component of positive adjustment to adoptive family life, yet research in this area is limited (Iraklis, 2021).

Given that: (1) adoptive parents face additional layers of complexity in adjusting to parenthood; (2) that adopted children face challenges in terms of psycho-social development and school experience; (3) that emotional symptoms and behavioural problems are a critical factor for success in education and (4) that transitioning into education is a key life event, further exploration of these factors, as they pertain to families formed through adoption, is warranted.

The aims of the present study were threefold:
1. To profile emotional symptoms and behavioural problems of adopted children, three years after placement.
2. To describe and consider adoptive parents' experiences of, and school's response to, adopted children at school.
3. To identify and characterise early support needs of adopted children and their families at school.

Hypothesis:

1. Adopted children will score lower than the general population children of similar age on a measure of parent rated psychological well-being.

Method

The Wales Adoption Cohort Study

The Wales Adoption Cohort study is a prospective, longitudinal, mixed methods research study [PI: K. Shelton] designed to explore the characteristics and experiences of children (and their adoptive families) placed for adoption in Wales during the 13-month period between 1st July 2014 and 31st July 2015. The broader aims of the study were to establish the early support needs of adoptive families and to examine what helps adoptive families flourish.

Information pertaining to children's assessment prior to adoption were drawn from 374 case file records (Child Assessment Report for Adoption, CARA), which represented all children adopted in Wales in the specified time period (Anthony et al., 2016). The CARA files contain information regarding the child's needs and experiences within the domains of health, education, emotional symptoms and behavioural problems, self-care skills, identity, family and social presentation (Anthony et al., 2016). Characteristics and experiences of the birth parents and pre-adoption factors were also included in the CARA.

Social work teams acted as gatekeepers to contact eligible families on behalf of the WACS research team, those that wished to participate contacted the research team directly. Of the 118 adoptive families eligible to take part in the study, 96 returned a questionnaire at Wave 1 (81% response rate). Just over a third of all children adopted in Wales during the specified time period were represented as some adoptive families were formed by siblings placed together (*n*=128 children) (Meakings et al., 2018). Subsequent waves occurred at 21, 36 and 48 months post placement (rates of attrition across all four waves are shown in Table 6).

In the original case file sample (*n*=374), just under half the children were female (45%); the majority white British (95%). Most children had no recorded religious orientation; those who did mainly identified as Christian. English was the first language for nearly all the children. Most children (92%) had been removed from their birth home on one occasion and the average age of children on entry into care (final entry

Table 7

Rate of Attrition, Wales Adoption Cohort Study

	Wave			
	1	2	3	4
Months post placement	5	21	36	48
n	96	81	73	68
% of original sample	100	84.38	76.04	70.83

if removed more than once) was one year and two months (range: 0 months to 6.5 years). A third of children in the sample were placed for adoption as part of a sibling group (Anthony et al., 2016).

Ethics

Ethical permission for this study was granted by the Research Ethics Committee at Cardiff University, School of Social Sciences (EC.15.07.14.4178A). Permission to access the local authority data was initially provided by the Welsh Assembly Government. Heads of Children's Services Group and Senior Adoption managers were consulted to gain approval to contact social work teams and access case files. A multi-disciplinary advisory group was established to provide guidance for best practice, safeguarding and data protection. Informed consent was obtained from all participants.

Present sample

The present study is based on 58 families who responded to education related items at the third *and* fourth waves of data collection, representing 60.42% of the original Wave 1 questionnaire sample. To profile the sample, key characteristics at Wave 3 are shown in Table 8. Analysis showed that the present study sample (*n*=58) did not differ from the Wave 1 respondents lost due to attrition (*n*=38) on child age, gender, ACES score, SDQ total difficulties score, gross annual family income, adopter status (single, couple, same sex couple), adoption as a sibling group, parental depression score or perceived family support. A difference was found in parental anxiety measured at Wave 1: the attrition group (*n*=38; M=7.11, SD=3.82) scored higher on a scale of perceived parental anxiety (The Hospital Anxiety and Depression Scale (HADS); Zigmond & Snaith, 1983) than the present study sample group (*n*=58, M=5.45,

SD=3.10; $t_{(94)}$=2.334, p=0.022, Hedges' g=0.488). The potential implications of this difference will be considered when interpreting results.

Table 8

WACS: Sample Characteristics of parents responding to education related questions at Wave 3 and Wave 4 (n=58)

Adopted children		
	n	%
Female	30	51.7
Male	28	48.3
	M	*SD*
Age at Wave 3 (years)	5.34	1.95
Age at Wave 4 (years)	6.74	1.94
Age at adoption (years)	2.69	1.92
Adoptive Parents (Responding)		
	n	%
Female	51	87.9
Male	7	12.1
	M	*SD*
Age	44.26	7.62
Gross Annual Family Income		
<£10,000	1	1.7
£10,000 - £19,999	3	5.2
£20,000 - £29,999	10	17.2
£30,000 - £49,999	23	39.7
£50,000 - £74,999	13	22.4
£75,000+	8	13.8
Family Structure		
Adopted Children	*n*	*%*
1	38	69.1
2	12	21.8
3	5	9.1
Adopted as part of sibling group		
Yes	12	23.5
No	39	76.5

Measures

Emotional symptoms and behavioural problems

The parent version of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997; Appendix IV; Goodman, Ford, Simmons, Gatward, & Meltzer, 2000),

an established and validated screening tool for emotional symptoms and behavioural problems in children and young people (Niclasen, Skovgaard, Andersen, Sømhovd, & Obel, 2013) was used to profile the sample at Wave 3. The SDQ comprises responses to 25 attributes on a three – point Likert scale (*Not true, Somewhat true* and *Certainly true*). The 25 items are divided between five subscales: Emotional symptoms, Conduct problems, Hyperactivity/ inattention, Peer relationship problems and Prosocial behaviour. Each subscale therefore has a possible range of scores from 0-10. A Total Difficulties score is obtained by summing subscale scores on all but the Prosocial subscale, yielding scores that range from 0 – 40. The exclusion of the Prosocial subscale is conceptual; absence of prosocial behaviour does not equate to the presence of psychological difficulties (Hartas, 2016). In the present study, 98.6% (*n* = 72) of Wave 3 respondents completed the SDQ for their adopted child. Internal consistency coefficients for each subscale were as follows: Emotional $\alpha = 0.749$; Conduct $\alpha = 0.669$; Hyperactivity/ inattention $\alpha = 0.822$; Peer problems $\alpha = 0.575$ and Prosocial $\alpha = 0.720$.

Child's school experience

A mixed-methods approach was used to explore adoptive parents' perception of their children's educational experience, as they transition to primary school. I asked adoptive parents about their child's needs in terms of education, how the school has responded to those needs (including nature and levels of support) and how their child is performing academically. To provide a snapshot of children's current needs in school or nursery I asked parents if their adopted child was in receipt of one of the following types of educational support: School Action, School Action Plus, School Action with statement of Special Educational Need (SEN), Education and Health Care Plan (EHCP) or Personal Education Plan. These support packages are above and beyond what a class teacher would provide in their daily responsibilities. Only School Action is considered support at school level (and this would likely involve additional classroom support, perhaps in a separate group with the teacher or Teaching Assistant); all other types involve appropriate outside agencies – educational psychologist, behavioural support team for example. A statement of Special Educational Need is comparable with the EHCP as the latter is replacing the former; the timetable of migration to the EHCP varies between Local Authorities. As the aims of this study were to explore if support needs had been identified, these questions were collapsed into a dichotomous variable: no support or school/ LA support.

I also asked adoptive parents about their views regarding the important characteristics for schools to have in relation to adopted children, the nature of their child's needs and how they have settled in to school, including the type of communication between school and parents. In addition, to ascertain how parents felt their child was performing academically, adoptive parents were also asked to rate their child's progress in two core curriculum areas (English & Maths) on a 5-point Likert scale (*significantly above average, somewhat above average, average or on target, somewhat below average or significantly below average*). These categories were collapsed into a three-point scale, *above average, average* or *below average*. A key question, adapted from Neil et al. (2018), about how the adoption placement was faring overall, was also included with the aim of providing an additional opportunity for adoptive parents to comment on educational aspects.

Missing data

Patterns of missing data in the SDQ scores were explored with Little's Missing Completely At Random (MCAR) test in SPSS (IBM, v26.0). Little's test showed random patterns of missing data for the SDQ scores ($\chi^2_{(166)}$=158.57, *p*=0.647). In total, nine values were missing (0.5%). Where scores were missing, values were imputed from SDQ responses from the previous wave (Bennett, 2001).

Qualitative information

Several free-response questions were included in the Wave 3 (36 months post placement) and Wave 4 (48 months post placement) survey alongside demographic and validated scales. The development of the Wave 4 questionnaire was an iterative process. The decision to include new questions or remove existing ones at Wave 4 was informed by responses at Wave 3 and aligned with the present study aims (Appendix V). Some further opportunities for free-responses were available where elaboration or clarification was required. A full set of questions can be found in Appendix VI.

Following analysis of Wave 3 educational responses, several questions were added to Wave 4 to further explore how adopted children and their parents have adapted to school life. These were, *How has your child settled in since starting their current school? What three characteristics would you consider most important for schools to have for adopted children? Do you think your child's needs at school have changed since the last questionnaire? What does the school do well in terms of meeting your*

child's educational and/ or emotional needs? and *What could the school do better in terms of meeting your child's educational and/ or emotional needs*? All adopted children in the WACS had reached school age by Wave 4.

Qualitative analysis

Responses to the free-response questions were transferred to NVivo 10 and analysed thematically drawing on the constant comparison process as outlined by Thomas (2017) and Thematic Analysis outlined by Braun and Clarke (2006). Themes are drawn from the constant comparison carried out by the researcher, and as such is an open process that allows for creative interpretation (Thomas & James, 2006). On initial reading, elements were highlighted that were deemed important to the aims and research questions of this study. These elements could take the form of words, phrases or sentences. The highlighted elements were summarised as *nodes* in NVivo and formed a list of *temporary constructs* (Thomas, 2017).

Once this list had been compiled, the reading of the responses was repeated comparing the temporary constructs against the rest of the data (Braun & Clarke, 2013; Punch & Oancea, 2014). Any constructs that were not supported were either eliminated or reframed in terms of existing constructs. The remaining constructs formed the *second order constructs* (Thomas, 2017) that were used to as a framework to summarise important themes in the data. To ensure trustworthiness of the coding process, two independent qualitative researchers matched a random selection of illustrative quotes to the themes. Initial agreement between researchers was 91.67%. Inter-rater reliability was determined by Cohen's Kappa (κ=0.818, p<0.0005, 95% CI 0.589 – 1.047) and was deemed to be very good (Altman, 1999). Consensus was reached between researchers after discussion.

Results

Emotional Symptoms and Behavioural Problems

For each SDQ subscale and the total difficulties score, a one-sample *t*-test was used to determine whether scores for adopted children were different to normative values (www.sdqinfo.org/norms). Adopted children's scores (Table 9) were significantly higher from norms on all scales ($p < 0.002$) except for the peer problems

and emotional symptoms subscales (effect sizes ranging from 0.39 to 0.65, representing a medium effect (Cohen, 1988)).

Table 9

Parent SDQ Comparison, Wave 3 and Norm Values

Subscale	Wave 3[a]		Norm[b]		$t_{(71)}$	p^b	ES (*d*)	95% CI
	M	*SD*	*M*	*SD*				
Emotional	2.04	2.19	1.9	2.0	.550	.584	.07	-.37 – .66
Conduct	2.46	2.03	1.6	1.7	3.58	.001	.42	.38 – 1.34
Hyp/ Inatt.	4.6	2.59	3.6	2.7	3.27	.002	.39	.39 – 1.61
Peer problems	1.79	1.73	1.4	1.7	1.92	.058	.23	-.01 – .80
Pro-social	7.44	1.96	8.6	1.6	-4.99	<.0005	-.59	-1.62 – -.69
TD	10.89	5.72	8.6	5.7	3.394	.001	.4	.94 – 3.63

Note. [a]*n*=58; [b]British norms for parent rated subscales; *n*=5855, 5-10 years old – www.sdqinfo.org; [b]significance set at *p*<.008 – Bonferroni correction; ES=Effect Size (Cohen's *d*); Hyp/ Inatt.=Hyperactivity/ Inattention subscale; TD=Total Difficulties

School Experience

Responses to questions asked about the child's school experience in both Wave three and Wave four were analysed using exact McNemar's tests of change to determine significance of any difference; the results are shown in Table 10. It appears that parents were initiating communication with schools more than in Wave 3; the qualitative analysis indicates that the nature of this interaction is largely connected with parents passing on adoption related knowledge (e.g. behaviours typically associated with disrupted attachment patterns) pertaining to their child's perceived needs, including discussion of specific behaviours observed either at home or school. The direction of communication traffic between school and home remained similar, despite more children in the sample attending school at Wave 4. In terms of children's educational needs, the proportion of children receiving additional support in school is higher at Wave 4 than Wave 3 (indicated by increased SENCo involvement and level of support) but the level of higher intervention (e.g. Educational Psychologist) was like Wave 3. This may explain the change in parents perceiving their children to have additional needs, what is not clear is which came first, i.e. do parents believe their children to require additional support because the school has identified it and, in line with statutory requirements, have communicated this to parents, or *vice versa*? Overall, adoptive parents in our sample reported that their children had settled into school as expected or better (*n*=52, 91.2%) and almost two thirds reporting similar needs as the last wave

($n=35$, 61.4%). In terms of academic performance, each of the core subjects was rated similarly – most parents perceived their child's performance to be average or above,

Table 10

Child's School Experience Wave 3 to Wave 4 Comparisons

Question	Wave 3		Wave 4		
	n^a	%	n	%	p^b
Over the past 12 months have you needed to contact your child's teacher with concerns about your child's behaviour/ progress in school?	27	50.94	37	69.81	.031*
Over the past 12 months has your child's teacher needed to contact you with concerns about your child's behaviour/ progress in school?	23	44.23	30	57.69	.143
Has your child had any involvement with a SENCo[c]?	12	22.64	25	47.17	.004*
Has your child had any involvement with an educational psychologist?	6	11.76	10	19.61	.289
At this point in time, does your child have, or do you think he/ she may have, any additional[d] educational needs?	13	24.53	23	43.40	.002*
	School/ LA		School/ LA		
Level of educational support	9	16.98	25	47.17	<.0005*

Note. [a]n='yes' responses; [b]McNemar's Tests of Change; [c]SENCo - Special Educational Needs Coordinator; [d]in Wave three *special* educational needs was used – change reflects current usage

details are shown in Table 11. The responses to the question asking for three characteristics deemed important for schools to possess for adopted children were

Table 11

Adoptive Parents' Rating of Child's Academic Performance

Subject	Above Average		Average		Below Average	
	n	%	n	%	n	%
English	14	24.6	24	42.1	19	33.3
Maths	14	25.0	25	44.6	17	30.4

analysed thematically. All parents (*n*=58) suggested at least one characteristic; a total of 144 characteristics were grouped around 4 distinct themes, arrived at inductively, and are presented in Table 12 with factors that exemplify their structure.

Table 12

Adoptive Parent Perception of Key School Qualities for Adopted Children - Themes and Exemplars

Theme	Example characteristics
Understanding	Understanding of attachment, triggers, developmental trauma; accessible training for teaching staff; inclusive; acknowledge that adopted children have difficulties
Supportive	Calm; caring; empathetic; openness; respect; support for parent and child; support from significant adult
Communicative	Communicating with parents; listen if things need to be put in place; regular, open dialogue with parents
Consistent	Consistency between year groups; stability with teacher; consistent adults as anchors for child

Most adoptive parents deemed a shared understanding of issues often associated with adoption to be a key quality for a school to possess (*n*=46, 79.31% of parents included at least one characteristic in the *Understanding* theme in their responses). Qualities associated with supportiveness also featured highly. Collectively, these key characteristics are consistent with adoptive parents' experiences of school as described in the thematic analysis below.

Qualitative analysis of responses to education questions

Further reading of the data yielded three themes that seemed to best represent the overall meaning of the data at Wave 3: *Individual characteristics*, *Family* and *Systems*. Responses were initially analysed following the Wave 3 data collection only and themes drawn from this corpus of data (Figure 5). Qualitative research is often described as an iterative process; subsequent data collection, analysis and interpretation is informed by earlier rounds of data gathering (Braun & Clarke, 2006, 2013). An opportunity arose after the Wave 3 analysis had been completed to add responses from the Wave 4 survey. Consequently, the themes were revised and refined in light of Wave

Figure 5

Themes and Sub-themes from Wales Adoption Cohort Study
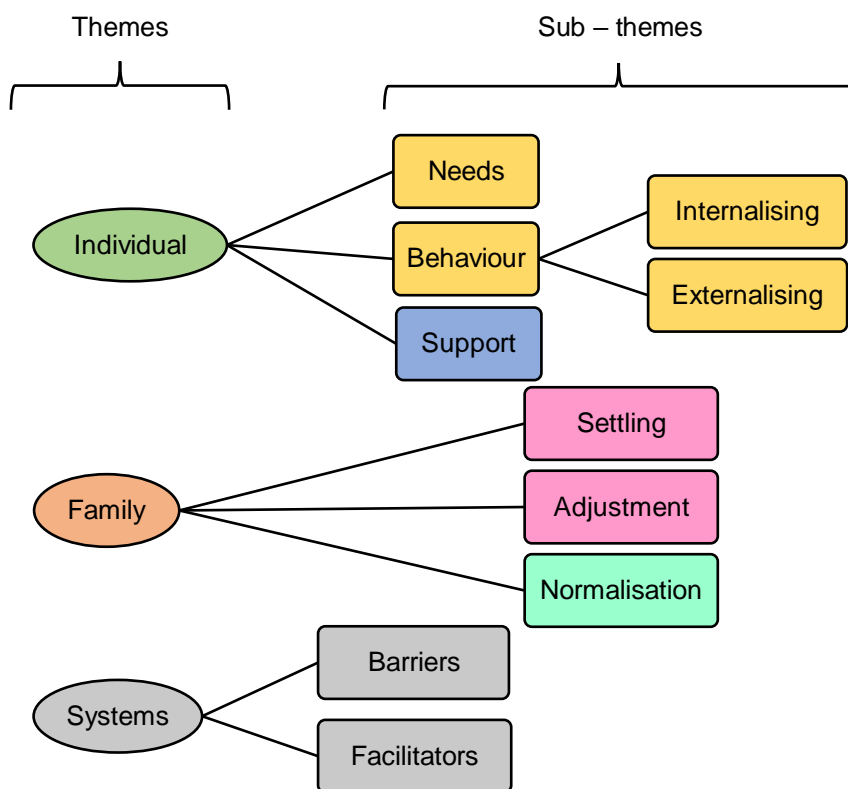
Figure 6

Revised Themes Taking Account of Wave 4 Data
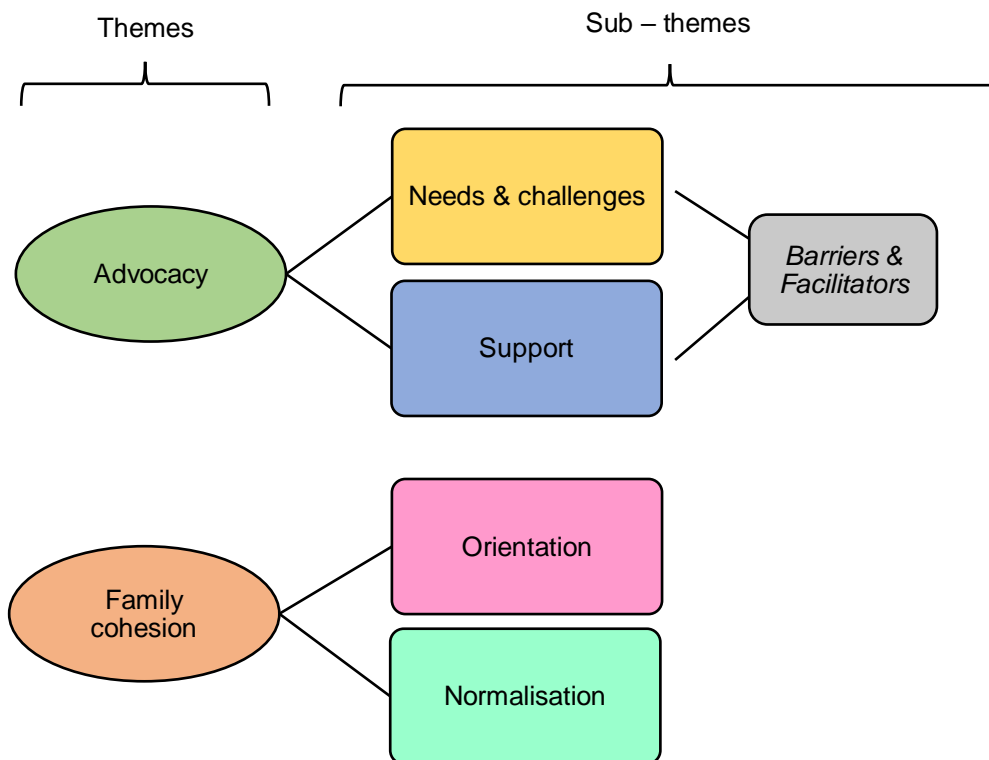
4 responses (Figure 6). Analysing Wave 4 data through the lens of Wave 3 themes and sub-themes, allowed development of themes that more accurately reflect the meanings evident in the data. This is argued to improve the merit and validity of the analysis (Braun & Clarke, 2006). In addition, a larger body of data enabled closer adherence to the research questions, particularly as most adopted children in the sample were now of school age.

The following results and discussion present the thematic analysis after revision at Wave 4. The main developments from the initial Wave 3 analysis were the renaming and reconceptualising of the *Individual* theme to better reflect *how* adoptive parents talked about their children in terms of needs, challenges and support in relation to the school setting; this was termed *Advocacy* because, as the later discussion bears out, there is persistence and determination in adoptive parents seeking the best possible outcomes for their children. The *behaviour* sub-theme was subsumed into the *needs and challenges* sub-theme as it added structure, rather than stand as a distinct sub-theme. The ideas that conceptualised the *systems* theme, including *barriers* and *facilitators*, were better placed within the Advocacy theme, not as a distinct sub-theme but as characteristics that underpin how and why adoptive parents talked about their experiences of advocating for their children. The *Family* theme retained much of its structure from Wave 3 but responses from Wave 4 clarified the idea of family *cohesion* to encapsulate parents' talk about their experiences of adoption. In addition, *Settling* and *Adjustment* were found to describe different parts of the same period, post-placement: I termed this *Orientation*.

Advocacy

The aims of the present study were to explore and identify early support needs of adoptive families as they move through the transition to education and into school years. Through the questionnaire responses, adoptive parents wrote about developmental and behavioural needs and the challenges that arise from these for the adoptive children, parents and schools. In parallel, the idea of *Support* also featured prominently, in terms of type and quality. These categories gave structure to an over-arching idea that enveloped how adoptive parents wrote about their educational experiences – that of *Advocacy*.

The theme of advocacy was characterised by parents driving the discourse for achieving appropriate provision, in this case educational provision, in a manner that was persistent and knowledgeable. A key component of this theme was the positioning of

parent-as-expert when communicating with school staff and associated educational and/or health professionals:

> I have contacted my child's school four or five times specifically about issues I consider to be connected to his life experiences/adoption. Nature of my concerns: 1) [child's name] high separation anxiety and how school could support him going in. 2) general anxiety and feel the need to explain attachment difficulties and the effects of trauma. 3) my child being unable to cope with certain school events such as concerts *W4.2.59*[2]

> I have been surprised by the amount of phone calls to contact school nurse/ speech therapist/ podiatrist/ O/T /physio/ SENCo officer that I have had to make to chase up referrals and prompt meeting times!!! *W4.2.91*

Parents being pro-active when advocating for their children is not uncommon and parents often feel the need to become advocates when suitable provision is not forthcoming, or to mitigate the effects of inadequate organisational processes (Wright & Taylor, 2014). For parents of children with disabilities, an *advocacy expectation* exists (Bacon & Causton-Theoharis, 2013: p693) and this may well extend to adoptive parents, if not at the outset, then later, as dealings with professional services increase (Duquette, Stodel, Fullarton, & Hagglund, 2012). Self-education is a key strategy for parents developing a strong sense of advocacy (Burke et al., 2018), this may give rise to the theme of advocacy in our sample of adoptive parents as, unlike non-adopted families, the pre-adoption preparation programme in the UK consists of learning about pertinent issues such as attachment, loss and effects of early adversity. In a sense, adoptive parents may already feel empowered and ready to act as strong advocates for their children. There also appeared to be a tension between parents and professional agencies when advocating for their child's needs to either be recognised, or given access to the appropriate support, often resulting in independent action:

> He is currently being assessed by SENCo as his speech is delayed. We have been waiting for over a year for his appointment as services so poorly funded so am chasing weekly! I have started using Makaton to help him communicate to help with him feeling frustrated. *W3.7.87*

Taking the initiative in relation to their child's (yet) unmet needs was typical of parents who displayed a strong sense of advocacy. This may have been through direct action or by repeated representations to professional bodies. The vast majority (Wave 4: 96.5%; *n*=55) of parents had informed the school of their child's adoptive status and reported that the school's response was good. The support from nurseries and schools experienced by adoptive parents appears to be empathetic and collaborative –

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[2] Anonymised participant code: Wave.random participant ID number

characterised by open, two-way communication and additional training undertaken by at least one member of staff. For example:

> Absolutely professional, and with a considerable level of understanding. Head has been on a course re Attachment which makes a huge difference. On a practical level they are fully aware of need to avoid pics on social media; also need to deal with any behavioural problems sensitively & carefully – in consultation with us. *W3.1.31*

Awareness and understanding of adoption related issues on the part of associated professionals (including teachers) is a key component; a perception that largely permeated parents' responses. The wider community of support encompasses both professional and personal domains and it appears that communal appreciation of the challenges faced by adoptive families leads to positive experiences of support.

Needs and challenges

Some difficulties in the formation of a new family were anticipated by adoptive parents but where these experiences were protracted, it was felt that manoeuvring through established systems and protocols often hindered progress. These barriers may be summarised by access, awareness and communication. For example:

> Both our older adopted children would have benefitted from going back a year – academically and socially they were delayed. We, the school and social services all recommended this…BUT, the LEA would not consider it. Our daughter's best year was when school numbers dropped so they lost a teacher & had to combine 4 classes into 3. We requested our daughter be kept down – she thrived socially, academically & consequently emotionally. Now they are back to 4 classes she is struggling more socially & academically. We feel that many of the problems she (& more so her younger brother) faced in school, could have been reduced if only they had been allowed to repeat a year when they moved to us. *W3.4.48*

> No joined-up help between the school, social services & NHS *W3.5.36*

The idea that successful learning and effective teaching is affected by children's needs and behaviour (in and around school but particularly in the classroom) is well documented (Metsäpelto et al., 2017; Moilanen, Shaw, & Maxwell, 2010). It was no surprise then, that parents' reports of needs included internal, emotional needs and overt behaviour:

> …[he] struggles with controlling any strong emotion *W3.5.52*

> Significant attachment disorder and sensory processing difficulties resulting in behaviours that challenge, especially in school environment (e.g. physical behaviour, shouting, irritability) *W4.7.83*

> Defiant behaviour on isolated days (about 3 days during the term); complete failure to comply with requests/ instructions *W3.1.31*

These instances of behaviour in school or early years setting are not unusual for adopted children or for children who have experienced early adversity and fit descriptions highlighted in the research literature (van den Dries et al., 2009). In a broad sense, such behaviour might appear to be usual for non-adopted children also, particularly as they negotiate the new rules and expectations of school. However, it is the intensity and duration of the behavioural instances that suggests an added layer of complexity.

> …her level and frequency of "meltdowns" has increased in the last 3 to 4 months W3.*7.5*

> When she is in the 'temper tantrum' mode which could be an hour > a few months, she isn't herself at all. No-one can rationalise with her, help her express emotions or help her self-regulate. W3.*1.94*

> …frequent physical outburst towards staff and children and shouting and creating chaos in classroom. Since moving to new school for reception…contacted once when son hit teacher
> *W4.7.83*

The results from the analysis of SDQ scores concurs with the idea that challenging externalising behaviour may comprise a particular issue for adopted children and one that may need an informed and tailored response.

Parents reported the over-riding developmental need at Wave 3 (75.3% of children at Wave 3 were in the foundation phase (3-7 years old)) was in speech and language development, a theme that was also identified in the Wave 1 questionnaire data (5 months post placement) and discussed by Meakings et al. (2016). These aspects of children's development appeared to be a key feature of parents' responses two years after initial placement and of considerable concern for the immediate impact of delayed speech acquisition, but also how it may affect later socialisation:

> She has struggled with her concentration and her speech over past year. We have been working with the nursery and health visitors to improve this and she has developed fantastic vocabulary but is still struggling with her sounds so I have recently been in touch with speech and language therapist and she is being seen next month. W3.*3.36*

> Only concern is how speech ability will affect my child in nursery + relationship with other children W3.*2.45*

Three years later, however, there was much less discourse about features of children's speech and language development. The emphasis appeared to shift toward the view that school staff should take more responsibility for meeting the needs of adoptive children:

It would be nice if all staff were trauma informed and had the ability to help recognise a child who is dysregulated and have the skills to calm that child. *W4.3.74*

The idea of growth or recovery following adoption placement runs in parallel to meta-analysis outcomes identified by van IJzendoorn and colleagues (e.g. van IJzendoorn & Juffer, 2006; van IJzendoorn & Juffer, 2005) as illustrated here:

He does struggle with certain things – concentration, handwriting – but is managing to reach his milestones W3.*5.88*

…he has developed hugely with regards his physical confidence/ independence and emotional and social skills. W3.*2.59*

His behaviour has improved dramatically and only rarely is he hitting, biting, throwing furniture and hitting staff! W3.*7.87*

Overall, parents' comments on progress were framed positively and often considered the effects of early adversity experienced by their newly adopted children. Following identification of needs, either from parent observation or professional diagnosis, how these needs are to be addressed forms the second sub-theme in this category.

Support

The act of adoption itself may not necessarily be enough to overcome the complex difficulties experienced by children following adversity in early life and additional support is often required (Meakings et al., 2016). In their responses to the questions, parents wrote about support in two distinct ways. The first could be categorised as informal, where friends, family and other parents (adoptive or non-adoptive) provided reassurance and contextualisation. This informal network appears to be understanding of the issues adopters face and may reflect the value of being open about adoption.

My best friend is a clinical psychologist and has given me lots of tips to help with his communication both at home and at nursery…which have been implemented. *W3.7.87*

Friends we met on the pre-adoption course have been very helpful. They adopted at the same time and their son has similar difficulties – this has been a supportive friendship. *W3.7.85*

Connecting with other parents that have similar experience who talk openly has been really necessary. *W3.5.81*

He is quite disobedient and often ignores what I say to him. However, this appears to be quite normal for his age on speaking to other parents. *W4.1.97*

I have a good group of friends but practical help to allow me an hour or two to do something alone is very limited because I have no family living locally. *W3.7.83*

Through the open-ended questions, adoptive parents indicated a second type of support that could be categorised as that received from formal or professional teams. Professional support not only included social work/ medical teams but also, as most of the children in this sample transitioned into a formal educational setting, from school or nursery. When parents included references to, and examples of, professional support they encountered, it was done so in two main ways – those where the inherent systems seemed to hinder progress and development as a family unit, and those aspects of professional support that were perceived to be a catalyst to successful adjustment. It was apparent, after considering Wave 4 qualitative responses, that this discourse gave structure to how parents talked about needs, challenges and support, rather than forming a distinct theme.

In addition, when describing supportive systems, it was usually in terms of particular people (most notably in nursery or school setting) and could be considered *Facilitators*; negative reports of support were characterised by teams or departments, the systems involved and access to appropriate support, these may be categorised as *Barriers*. The following excerpts are illustrative:

> No help from child development unit. Promises to help with training etc from social services (but never happens). W3.*5.36*
> Accessing therapeutic service – has been hard to secure funding from the LA, despite an agreed need. W3.*1.28*
> I believe they [school] keep an extra eye on him and are quick to discuss any issues with us and have an open dialogue. W3.*6.90*

Effective and well-received support is seemingly built on shared knowledge and thus a greater level of enjoyment and family cohesion. The following excerpts exemplify this idea:

> Her current teacher is very nurturing and understanding and has caused a massive increase in confidence which has in turn increased learning abilities. *W4.3.74*

Though this was not always the case it appears that educational settings were at least receptive to key information regarding the children's behavioural and learning needs:

> He was a looked after child when he started the school. School have not understood the effect this has on him his behaviour and learning and the implications of lesson planning on his emotional well-being. I have had to discuss issues with every member of teaching staff every year. Staff have mostly taken some time to realise what his adoption means to him. W3.*2.33*

Whereas most negative views of support were linked to professional agencies, there were instances of favourable evaluation of the support available. Further scrutiny of these remarks seems to indicate that these were again related to particular people

located within the organisations or where they were directly linked to an educational setting:

> CAMHS has been brilliant from the first moment we had a session with them. With support and parenting courses, they have turned our lives around. I cannot rate then highly enough. W3.*3.74*

Communication played a vital role in the way adoptive parents viewed support. Positive reports described open, empathic and efficient lines of communication. Conversely, less favourable views of support included frustrations with apparent lack of knowledge in professional teams or access to consistent members of staff; timing of response was also a factor in viewing support from professional agencies where slow response times increased the negative views. The following responses were typical:

> Pretty easy to speak to teachers. E.g. yesterday I warned of restless night, + got feedback at end of day. Head-teacher proactive in telling birth son's teacher about our family situation – which may have impacts on him. W3.*7.76*

> …due [to] health + immaturities I tried to delay school start…this was refused [by LA], he only managed a few full days in reception, I have removed him as school showed no understanding of this W3.*2.67*

> …our social worker left (twice this happened) and we do not even have our own social worker we can ask for advice from. The team are terrible and do not respond to messages. Solutions to our issues have been reached by personal research and CAMHS help. W3.*3.74*

Family cohesion

The second main theme encapsulated adoptive parents' reporting of *Family*. This often took the form of descriptions of unity or completeness, some spoke of the temporal aspect of adoption, suggesting a journey that started before the children were placed but not ending at placement, but rather taking a different turn as they moved forwards together as a family unit. Many parents commented on the intensity and effort required for adoptive parenting but accepted this as a necessary and worthwhile venture. For example:

> Settled and feel like a complete family now. CHILD feels like she has always been here. W3.*2.91*

> We feel as though we – and our boys – are on an epic adventure together. Who know what's to come – but each day is enough in itself – full of surprises (good & bad), challenges (plenty), exhaustion and huge amounts of fun, affection and love. It's a wonderful intense experience. W3.*1.31*

The idea of coming together as a family unit also involved extending relationships to the wider family (grandparents, cousins etc.) and finding a place in the community – usually through nursery or school.

Adoptive parents retrospectively described the early parts of the journey after the children had been placed in terms of *Settling in*, perhaps suggesting an expected period of uncertainty where the relationship between adopted child and adoptive parent, undergoes a high level of adjustment.

> Loving, bonded, settled. We're a unit. Our boys have certainly bonded well – first six months were easy and loving then became more antagonistic and now we see a real mix between support, mutual play, rudeness, bugging each other, hurting each other. Non-adoptive friends see this as pretty usual sibling behaviour – mostly. Adoptive son certainly sees us as his place of safety W3.*7.76*

Most instances of *settling* were in the past tense, giving rise to the idea that, even for families who had not long been placed, this period of turbulence may be relatively short lived, and families then move on together as they develop a new family identity.

> …becoming used to each other spending time with each other bad behaviour – hitting/ kicking/ spitting lessened he now completely adores her [sibling] and they play together all the time. W3.*2.14*

> …[child] has really settled well in school and we have no problems regarding anger/ control while she is there. The sibling relationship is improving and both are reacting better to each other. They will play, almost happily, for longer periods of time. The violence has also lessened and anger issues are reducing. W3.*3.74*

> Since adoption order granted, children generally more settled. Both doing pretty well in school and seem quite settled there also. As growing up seem more socially aware, perhaps greater empathy…and reasonably happy – all have an impact on home atmosphere. W3.*3.96*

Closely linked to the idea of *settling* were parents' responses about *adjustment* and it may be that this forms the essence of the next period of orientation of the family unit. Adjustment in this sense is characterised by reference to beneficial, if not essential, aspects of consistent routine for children and parents alike:

> …good routines, developing an understanding of being here W3.*4.33*

> …our child seems more confident and it's easier to communicate. We all enjoy ourselves when together, we have our routines, we enjoy our home & have friends with children of similar age & this is progressing. Having support from other parents helps. Our child is involved in all kinds of everyday tasks; we know each other better. W3.*5.81*

Adoptive parents were also reflective of this period of adjustment in that difficulties were sometimes resolved through seeking support or additional training, or at least identifying the need for self-improvement. This may be closely related to the

other main theme of Advocacy where self-education is a key aspect. The reflectiveness of adoptive parents also looked towards the future with some being cautious about adolescence and transition to secondary school. It could be that this represents acknowledgement of another period of intense adjustment in the family.

Normalisation

When writing about orientation to new family life, some adoptive parents described the outcome or aim of the process as one of *normality*. Kirk's (1964) shared fate theory is reflected here as normalisation may be a manifestation of the *rejection-of-difference* strategy, for example:

> Life soon settles down and starts to become normal and then you can relax, have fun and finally be a family… I would rather my daughter not have a adoption lable [sic], she's just my daughter – nothing else. W3.*3.36*

> An adoptive parent isn't any different from a birth parent although there may be more issues to deal with the principles are the same, 'listen to your child, invest in their needs', help them feel supported and loved. W3.*7.44*

> LO appears to be attached to me & we have a lot of fun together. I feel like a 'real' mum now! W3.*7.83*

Here, parents identify that after an accepted or expected period of orientation any differences from biological family formation are diminished. Perhaps there is an inherent desire for conformity to a societal norm where differences are not defining features or celebrated. The nature of this sub-theme runs counter to the earlier theme of Advocacy, in that there is little requirement to campaign for adoptive children's particular needs if they are not recognised as such. This may reflect different parenting typologies that are driven by the strategy subscribed to – those that adhere to the *acknowledgement-of-differences* strategy may well have stronger motivation for advocacy.

Indeed, it appears that the *rejection-of-differences* strategy is not restricted to parents but reported in attitudes of some professional agencies:

> [school]…lack of understanding about educational impact of her history. Frequently telling us we "are just like a normal family" W3.*1.28*

> …we have found that our LA dept have been very unhelpful + have dismissed all his SEN + Adoption status + resulting difficulties they repeatedly state that his needs are the same as any other child. currently not in school – waiting for a place in a more understanding school. W3.*2.67*

The implications for this are substantial, giving further rise to the sense of advocacy in many adoptive parents or increasing the advocacy expectation. If some professional bodies normalise the needs of children who have experienced early adversity, then it is likely that those needs are not being addressed as they ultimately retain the means of access to supportive resources. This may result in added pressure for the family pursuing access to resources, or, for those families that reject differences, confirm their stance of normalisation – in either case adoptive children's needs are unmet.

Discussion

The aims of the chapter were threefold: to profile emotional symptoms and behavioural problems of adopted children three years after placement; to describe and consider adoptive parents' experiences of, and school's response to, adopted children at school and to identify and characterise early support needs of adopted children and their families at school. Previous research has demonstrated that adopted children, particularly those adopted from a care system, face substantial challenges in terms of emotional and behavioural development (Juffer, Poelhuis, & van IJzendoorn, 2005; Petrenko et al., 2012; Wiley, 2017) but also that placement in an adoptive family is restorative and conducive to growth and development (Palacios & Brodzinsky, 2010; van IJzendoorn & Juffer, 2006a). The present findings corroborate these earlier outcomes in two ways: Firstly, the analysis of the parent SDQ revealed significantly elevated scores in most areas, compared to non-adopted children of similar age. For this cohort of adopted children, age at placement does not predict emotional symptoms or behavioural problems at Wave 3 (Anthony et al., 2019). Children placed for adoption over the age of four are likely to experience more emotional symptoms and behavioural problems than those placed younger (Nadeem et al., 2017). As the majority of children in the WACS cohort were placed before three years old, age at placement may not fully explain elevated SDQ scores; a more nuanced approach may yield a clearer picture of post-adoption adjustment. Secondly, in response to the open-ended questions, parents freely described not only the behaviour itself, but also the impact on family and school life. However, parents also celebrated the progress made by their children despite the difficulties they face.

In the first wave of the Wales Adoption Cohort Study, Meakings et al. (2016) described the anxiety adoptive parents experienced in relation to their child's physical

development and in particular the domain of speech and language. At Waves three and four, these anxieties remained when parents were asked to outline concerns about their child's development. The effects of early adversity on speech and language development are well documented (e.g. Croft et al., 2007; Glennen, 2005, 2009; Paine et al., 2020; van IJzendoorn et al., 2005) and this effect is corroborated here. Whilst parents were still concerned about the impact this may have on their child's socialisation and ability to learn in school there was much discourse about how, through starting nursery or school, progress was being made. Adoptive parents were also pro-active in seeking out professional support (in line with existing research, e.g. Holmgren et al., 2020; Santos-Nunes et al., 2018b), or, where that was not forthcoming, providing alternatives to aid communication themselves.

The Curriculum for Wales: Foundation Phase Framework (Welsh Assembly Government, 2015) sets out the statutory requirements for schools for children aged 3 to 7 years old. Language, literacy and communication is central to this curriculum, taught discretely and embedded across the curriculum. As, at the time of Wave 3, 70.8% (n=51) of the sample fell within this age range and it is reasonable to assume that they will experience the benefits of the communication and language focus, as set out in the Foundation Phase Framework; acting as a proxy intervention in speech and language development. The findings of the thematic analysis of Wave 4 information may well reflect the impact of increased opportunities for formal language and communication development, as issues around speech did not feature so prominently in parents' later discourse.

Interpretive analysis of questionnaire responses also suggested that the experience of adoption is largely positive and parents felt schools were generally responsive to the particular needs of their children. Further analysis indicated that individuals, with an informed understanding of the nature of adoption, working within professional agencies who engage with adoptive families were key to providing effective support; this was especially the case when lines of communication were open and reciprocal. A strong sense of family identity was prominent – for some families this identity centred on adoption whereas others sought to align the family's identity with non-adoptive family constitution.

The strong sense of advocacy that was drawn out of the thematic analysis was also seen when parents responded to questions about their wider school experiences. Since Wave 3, more parents were communicating with schools – this may be as a direct result of higher proportions of children having an identified additional educational need,

thus requiring greater volume of information sharing. If this were solely the case, however, then the frequency and direction of communication traffic between school and home would be similar for both parties. Analysis of the parental responses highlighted that parents were initiating communication with schools more than the opposite. Adoption specific issues dominated the nature of this communication and the idea of *parent-as-expert* may explain this. Outcomes of the parents' efforts in advocacy suggest a worthwhile activity – the majority of parents not only reported that their child had settled well into school, but also that their performance in English and maths was better than average and that schools on the whole had responded well to their child's adoptive status. How much of the children's apparent success at school can be explained by parental advocacy, has yet to be explored.

This is not to diminish, however, the psychological and physical resources required for successful advocacy and the inevitable strain placed on family functioning and cohesion (Wright & Taylor, 2014). Should it be incumbent on adoptive families to campaign for better outcomes for their children, or does the responsibility lie first with professional agencies and policy? Adoptive parents, in our survey were clear about key characteristics for schools to have to support adopted children: understanding, supportiveness, communication and consistency. The responses in our sample concur with previous research that counselled adoptive parents with regard to desirable elements for successful school experience (Syne et al., 2012). Whereas previous research (Phillips, 2007) also highlighted frustration and disappointment felt by adoptive parents in relation to communication, this study indicates an improvement in contact with school staff, as most of the parents felt schools had responded well (most likely through reciprocal interaction). Absence of these qualities may lead parents to feel the weight of an *advocacy expectation* and an obligation to fulfil it. This then becomes problematic if parents are unable to fulfil this role, placing all children, including adopted children and families, at a disadvantage.

The idea of *normalisation* permeated the responses, and it may be suggested that the outcome for these families was an overt identification with the concept of *family* and the assumptions that come with it. The *rejection-of-difference* strategy may act as an explanatory mechanism for this. It is theorised rejection-of-difference leads to problems in adjustment by constricting open, constructive communication about adoption (Brodzinsky, 1987). It is unclear from our analysis if any adjustment problems seen in our sample were linked to adherence to this pattern of coping specifically, or what role it plays in adjustment of adopted children.

Open, non-defensive communication and informed individuals appear to be key in helping families to flourish. This was especially so in the transition to school – a new stage of family life for many of our respondents. The adoptive parents in this study reported that support was effective when dialogue was reciprocal, i.e. that the adoptive parents felt their opinions and knowledge of their children were sought after and valued. This appeared especially so when the school was pro-active in demonstrating this understanding, often by undertaking additional training and/ or offering a consistent member of staff (usually the head-teacher) with which to consult. It may be that schools provided a welcome exception to the frustrations encountered by adoptive parents when dealing with teams or departments because the interaction was at a personal level and continuing positive relationships needed to be maintained. Though a causal interpretation of the effect of the *rejection-of-difference* pattern cannot be made here, there may well be implications for educational experiences of adopted children if this attitude permeates into schools and associated professional agencies. What our analysis is unable to demonstrate, however, is the pervasiveness of this attitude in the wider field.

Limitations

This analysis corroborates findings regarding adopted children's emotional and behavioural adjustment (Brown et al., 2019; Palacios, Moreno, & Roman, 2013; Zill & Bramlett, 2014) and adds to the current knowledge base of the nature of adoption and transition to education, but some limitations are noted. Future work should include a multi-informant SDQ: the questionnaire in this study used the parent version only and consequently behaviours were likely recorded as they pertain predominantly to home life. A multi-informant approach that includes the teacher version will allow a more comprehensive extrapolation of the analysis. Such a multi-informant approach is warranted because many parents described instances of challenging behaviour and emotional de-regulation in the educational setting, as reported by teachers.

The sample at Wave 4 scored lower on the parental anxiety scale (HADS) from those lost from Wave 1 due to attrition. It is possible that the higher scoring attrition group were less likely to return the questionnaires due to more difficult family circumstances. Consequently, caution should be taken regarding generalisability of findings, though it is difficult to determine the extent of the impact with regard to

school experience. Whilst both groups differed in HADS scores, they were both still in the 'mild cases' category as determined by Zigmond and Snaith (1983).

Navigating official systems, protocols and policy seems to be a source of frustration for adoptive parents; future work could explore how more efficient and systems could be developed and implemented, particularly in terms of stakeholder voice being valued. Interpretation of the open-ended comments was also restricted as a paper survey does not allow for clarification and elaboration of responses and as such subjectivity may well be more prominent than would be in an interview. The range of child age in this sample precluded elicitation of children's views and was out of scope for the study. A range of measures would have needed to be have been deployed, leading to issues of non-equivalence, particularly in smaller sample sizes. Future work may involve focus groups or interviews with adoptive parents and teachers and, most importantly, adopted children. Further research should also look to build on the concept of an adoptive family identity as suggested here, particularly as it develops in adolescence and its subsequent link with educational experience.

Conclusion

This chapter provides further support that adoption continues to be a positive intervention for children when alternative care and accommodation may be required. For adoptive families to flourish, access to support, awareness of the nature of adoption and related issues (including healthy development of an adoptive identity) and open, reciprocal lines of communication, between parents, school staff and associated professionals, may be key. Such elements act as a catalyst for successful adjustment after adoption. The findings from this chapter provide further evidence for the importance of an *adoption advocate* in schools and associated professional agencies; they also call for adoption awareness to be more prominent in teacher training and in continuing development for professionals directly involved in adoption.

Chapter 4: Education, aspiration and psychological well-being in UK adopted young people.

Introduction

Findings from the previous chapter highlighted the support needs for adoptive families as they begin school, from the parents' perspective. Adoptive parents felt that, despite challenges in emotional and behavioural development, their children had settled into school well and the majority were performing academically as expected. Adopted children's voice regarding educational experiences is notably absent from the research literature (Crowley, 2019). Research noting the effects of early adversities experienced by children adopted from public care suggests detrimental impact over a wide range of developmental areas (Barroso, Barbosa-Ducharne, Coelho, Costa, & Silva, 2017; Brodzinsky et al., 2021; Palacios & Brodzinsky, 2010; van IJzendoorn et al., 2005; Wretham & Woolgar, 2017). In the absence of complete, centrally collated quantitative data for adopted children's educational outcomes, and a paucity of recent and relevant UK empirical studies, focus turns to analysis of a large, nationally representative dataset to address this gap. Much is hypothesized but little is known about the effects on school experience, academic attainment and post education aspiration for this vulnerable group of children and young people. Increasing opportunities for social mobility is an important factor in addressing issues of inequality and social justice and continues to be a focus of policymakers, academia and commentators (Goodman, Gregg, & Washbrook, 2011; Taylor & Rampino, 2014). The publication of the Milburn Review (Milburn, 2012) highlighted a stalling of social mobility in the UK and indicated that an advantaged social background provides access to higher professions. Raising educational aspirations to improve social mobility has therefore received increased attention (Croll & Attwood, 2013; Wainwright & Watts, 2021). A YouGov survey of 4,723 adults in the UK (Gov.UK, 2017) confirmed that the decline of social mobility is a concern, particularly for young people (18-24 years old); 70% believe it is not becoming easier to 'move up' in society.

Explanations for social mobility include structural and deterministic beliefs where social standing is passed down through generations and educational disadvantage persists across generations, acting as a barrier to social mobility (Croll & Attwood, 2013; Taylor & Rampino, 2014). Many of the solutions to this problem have focussed on raising educational attainment of disadvantaged families solely by fostering positive

aspirations (e.g. through partnerships with institutions of higher education), as opposed to improving cognitive development (e.g. by improving reading skills), though there is scant evidence of the effectiveness of this approach (Taylor & Rampino, 2014).

In a large scale survey of nearly 4000 school children across the primary and secondary age range, Hay et al. (2015) identified five factors that influence the formation of educational aspirations: parent support, students' English ability, teacher support, students' level of confidence about school and students' mathematical ability. These factors were found to be compensatory, in that negative effects in one factor can be mitigated by positive effects in another. In addition, construction of educational aspirations was found to have a temporal element as formative ideas about future careers were established as early as the primary years. Hay et al. (2015) recommended that interventions aimed at raising aspirations should not be seen as a 'quick fix' but be of a multi-dimensional nature and implemented over time.

Adoption

Ascertaining educational aspirations and levels of psychological well-being may be useful for understanding variation in academic outcomes for disadvantaged and vulnerable groups. Those children whose developmental trajectory is skewed by the persistent and enduring effects of early trauma (e.g. abuse, neglect, family stress, loss, inter-parental violence) comprise such a vulnerable group; in particular children adopted from care by unrelated adults. Chapter 1 highlighted the benefits from placement into a stable and nurturing environment (Palacios & D. Brodzinsky, 2010). In addition, the 'astonishing' (van IJzendoorn & Juffer, 2006: p1233) catch-up in terms of physical growth and significant gains in terms of IQ, cognitive function, behaviour, language development and school performance (van IJzendoorn & Juffer, 2006) was outlined.

Psychological outcomes

Research literature typically categorises childhood psychological problems into two broad groups to encompass behavioural, emotional and social difficulties (Achenbach, Ivanova, Rescorla, Turner, & Althoff, 2016). *Internalising symptoms* include lack of emotional control, anxiety, low self-esteem and depression (APA, 2013; Perry & Price, 2018) whereas *externalising problems* often comprise aggression, attention deficit/ hyperactivity disorder (ADHD), conduct and oppositional disorders (Montgomery & Maunders, 2015). Many studies have demonstrated that higher levels of externalising problems (even at a young age) predict lower educational achievement

(Deighton et al., 2018; Hinshaw, 1992; Lewis et al., 2017; Metsäpelto et al., 2015; Owens & Hinshaw, 2016).

Metsäpelto et al. (2017) also link higher levels of externalising problem behaviours to lower levels of educational aspiration through development of reading skills. They suggest that disruptive behaviours exhibited in the classroom lead to poor development of basic academic skills (e.g. reading) and a steady process of disengagement from school, increasing the risk of school dropout. High levels of externalising problems at a young age may lead to *adjustment erosion* (Moilanen et al., 2010; p636) where lower academic competence later in life (leading to increased vulnerability in other domains) persists, despite a decrease in externalising behaviours with age. Positive educational aspiration may be seen as a component of academic success. As children progress through school, beliefs about the importance of schooling and ideas regarding future education are developed, largely in response to their experiences of the school context (Metsäpelto et al., 2017). Having higher values of learning and school subjects facilitates more positive educational aspiration (Eccles, 2005; Viljaranta, Nurmi, Aunola, & Salmela-Aro, 2009) suggesting that pupils' views of their school and schoolwork are important factors when considering educational outcomes.

Several studies have reported on differences between adopted and non-adopted children in relation to internalising symptoms and externalising behaviours, but with mixed results. Some earlier studies suggested adopted children showed more difficulties in total and externalising problems but not internalising symptoms (Brodzinsky, Smith, & Brodzinsky, 1998; Keyes et al., 2008; Miller, Chan, Tirella, & Perrin, 2009; Wierzbicki, 1993). More recent studies have used meta-analysis to demonstrate that adopted children fare less well in terms of total, externalising *and* internalising problems when compared to non-adoptive comparison groups (Juffer & van IJzendoorn, 2005; Wiley, 2017). These differences may be attributable, for example, to sample design (i.e. clinical sample) or comparisons made (between children adopted from domestic welfare systems or private adoption to those with extreme pre-adoption adversity).

Local authorities in England and Wales have a legal duty to report annually to central government on Looked After Children's psychological well-being (through the Strengths and Difficulties Questionnaire: SDQ, Goodman, 1997) and academic attainment; this specific jurisdiction ends when children are adopted. Thus, there is a gap in knowledge about current school performance, psychological outcomes and

awareness of how related issues manifest in the school setting for children and young people adopted from the public care system, both in the UK (Howe, 2009) and internationally (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017). Given that adopted children experience similar levels of pre-care adversity as LAC (Triseliotis, 2002) and that this adversity may have comparable implications for subsequent school performance (including behavioural adjustment and academic attainment), the lack of equivalent central monitoring is a serious concern.

The systematic review described in Chapter 2 showed that compared to non-adopted comparison groups, adoption was associated with higher levels of behaviour problems and lower academic attainment across childhood, adolescence and emerging adulthood. Most striking, however, was the paucity of studies examining education related outcomes for UK adopted children, strengthening the call for future research to address this major knowledge gap. The lack of attention in this area may be explained, in some part, by the difficulty in the UK to establish a robust and comprehensive national picture of adopted children's academic outcomes to the same level as Looked After Children.

On the one hand, if adopted children have higher levels of challenging externalising behaviour than general population peers (because of issues associated with the effects of early trauma) academic progress may be compromised and educational aspirations may be lower, with possible implications for social mobility. On the other hand, given that adoptive families tend to be economically and educationally advantaged (e.g. Zill & Bramlett, 2014), and that educational attitudes and aspiration are influenced by parents (Kintrea, St Clair, & Houston, 2011), it might be expected that this positive environment enables adopted children to flourish in school.

The aims of this chapter are to explore the differences between adopted and non-adopted children in self-rated internalising symptoms and externalising behaviours, perceptions of school life and educational and occupational aspiration, giving rise to the following hypotheses:

1. Adopted children will rate themselves as having more internalising symptoms and behaviour problems than non-adopted children.
2. Adopted children will rate their overall happiness with school and schoolwork lower than non-adopted children.

3. Adopted children will be less likely to continue education post-16 than non-adopted children.

4. Adopted children will aspire to lower ranking occupations compared to non-adopted children.

Method

Ethics

Ethical permission for this study was granted by the Research Ethics Committee at Cardiff University, School of Social Sciences (EC.17.01.10.4824R). Informed consent by each participant was given at the start of the survey. The individual USoc interview asked for consent to link to administrative databases, including current child educational attainment. The USoc dataset is held by the UK Data Service based at the University of Essex. Wave One of the data collection has been linked with the National Pupil Database and, as such, is able to provide academic data for its participants. The highly sensitive and confidential nature of this linkage requires access through a secure environment. All researchers involved in this project have undertaken and passed a rigorous application procedure including specific training from the UK Data Service. The USoc dataset is an anonymised, archival dataset that links to sensitive academic information, but important ethical consideration is the potential identification of individuals or groups from the linked dataset. The training provided by the UK Data Service ensures that the researchers involved in this project are aware of this responsibility. Any output generated from the analysis is rigorously checked by the UK data service for disclosure issues. Ethical considerations for the individual surveys were addressed by the USoc survey team prior to data collection. Both adults and children were asked for consent to link to health and educational administrative records at the point of survey administration.

Sample

Data were taken from Wave one of the United Kingdom Household Longitudinal Survey (UKHLS), also known as Understanding Society (USoc) (UKDataService, 2020). Commencing in 2009, the USoc survey collects data from over 30,000 households over a period of 24 months for each wave. The design of the USoc survey has four sample components (general population sample, ethnic minority boost

sample, innovation panel and participants from the British Household Panel Survey (BHPS; University of Essex, 2010)) and a complex weighting strategy that extends its research potential over traditional longitudinal cohort designs (Buck & McFall, 2011) and enables robust generalizations to the UK population.

Data were collected in households: an individual interview for every person over 16 years old covered a wide range of demographic, family, health, financial and employment topics, recorded by Computer Assisted Personal Interviewing; CAPI). In addition, a self-completion paper questionnaire comprising subjective and potentially sensitive questions dealing with attitudes, beliefs, general health, lifestyle satisfaction and relationship quality was also completed. For those who were unable to undertake the interview a proxy version was completed by another household member on their behalf. For young people aged 10-15 years, a self-completion questionnaire was completed including questions in areas such as computer use, family life, delinquent behaviour, aspiration and the SDQ. Basic demographic information only, was provided by parents for those aged under 10 years (CLOSER, 2017).

One of the drawbacks of using large scale survey data for secondary analysis is the potential for severely reduced sample sizes of groups when organising the dataset according to other demographic variables. The initial attraction to the USoc data was twofold: first, Wave 1 had been linked, depending on parental consent, to the National Pupil Database (NPD) to potentially yield centrally collected educational attainment data for children attending English schools. Second, the large sample of adoptees captured in the data collection was unusual for large cohort surveys of this nature (Raleigh & Kao, 2013; Wijedasa & Selwyn, 2011).

The full sample surveyed 39,802 households and interviewed 47,732 adults. Household members aged 10-15 were asked to participate in a youth questionnaire and 4899 were completed in Wave 1. In the main adult survey, several questions were asked in relation to adoption including: (1) *Have you ever had any adopted or step children living with you?* (2) *How many step/adopted children have you had in all?* (3) *Is [he/she/they] a step or adopted child?* The final question yielded 800 positive responses for adoption; an unusually large sample size for this type of survey. Further scrutiny of the Understanding Society dataset, however, revealed multiple respondents could be referring to the same child. For example, if both parents in a household participated in the adult survey then both would have been asked the adoption questions. After excluding such duplications, 142 potential adoptees and 544 potential adoptive parents were identified.

Because the main survey was asked of respondents aged 16 or over, the 142 potential adoptees could be a child or adult at the time of survey. Likewise, the 544 potential adoptive parents could refer to *historic* adoptions, i.e. parents of now adult adoptees who might have left the household. It also became apparent that the 'adopted' group could include children adopted by a step-parent (step adoption) or kinship adoption (adoption by a relative). In the interests of accuracy, these cases were cross-checked for authenticity of adoption status by considering data collected elsewhere in the survey, i.e. from files containing child demographic data for each child in the survey (a_child[3]); details of adoption (a_adopt); relationships for each pair of individuals in each household (a_egoalt); responses to the main adult questionnaire (a_indresp) and the index of each respondent ever included in the survey (xwaveid). Through this systematic identification process, three levels of filial relationship, including adoption status, were ascertained: adopted, step-adoption (i.e. children adopted by a step-parent after forming a new family), and non-adopted. For the purposes of the present analysis, step-adoptions were subsumed into the non-adopted category, this then served as the general population comparison group. The aims of this study pertain to children who had experienced the care system and who had been adopted by a single adult or two non-biologically related adults. Whilst the detrimental effect of parental separation on child psychological development is well documented (e.g. Amato & Anthony, 2014; Weaver & Schofield, 2015), their inclusion in this analysis falls beyond the scope of the present study. It is also possible that the adopted group could include Inter-Country Adoptions (ICA) as well as adoption from the public care system, because the original survey did not account for this difference in adoption type. However, it is envisaged that the proportion would be small as only 173 ICA were recorded in the UK in 2010 (Selman, 2016), compared to 3,200 adoptions from care in the same year (DfE, 2014b) .

Removal of historic adoptions, *step* households, children not currently living in the household and those deceased, resulted in 137 adoptive parents and 71 adopted children. Of the 137 adoptive parents, 129 completed the full interview, the remaining eight either refused or a proxy survey was taken. The adopted group consisted of 22 children who completed the youth survey, (eight adoptees refused and 41 were under 10 years old and were therefore excluded from the present study). Thus, for the purposes of the present analysis, two levels of filial relationship were ascertained: Adopted (n=22) and non-adopted (n=4877).

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[3] Variable names are included for transparency and to facilitate replication.

Matching

Random allocation of cases before treatment is considered the gold standard of research design, but this is rarely achieved outside of medicine (Davies et al., 2013) or when utilising a retrospective design, such as in the present study. Several techniques are available to create a comparison group that attempt to simulate randomisation of controls (e.g. 1:1 matching, weighting, subclassification; Stuart, 2010). One of the more commonly used statistical techniques is Propensity Score Matching (PSM; Rosenbaum & Rubin, 1983). The probability (or propensity) of group membership for a particular case is created through statistical modelling based on a specified number of co-variates and a score assigned (Rosenbaum & Rubin, 1983). PSM finds control cases for each treatment case (adopted children in the present study) with equal, or nearly equal, propensity score values (Beal & Kupzyk, 2014). Propensity scores can also be used for stratification, regression adjustment and weighting (Beal & Kupzyk, 2014; Rosenbaum & Rubin, 1983; Stuart, 2010). Forming a comparison group in this way yields similar distributions of the covariates without the need for exact matching on all the individual variables (Stuart, 2010), and also eliminates selection bias by controlling for differences between groups on these covariates (Davies et al., 2013). For the purposes of the present study, cases were matched on age, sex, ethnicity and country of residence.

Several decisions are required to create a comparison group through PSM: the number of matches for each treatment case, the matching algorithm used and the closeness (or distance) of the propensity score from the treatment case (Beal & Kupzyk, 2014). In the present study, one-to-many matching was employed with each case matched to five controls to maximise power and to counter the small sample size of the 'treatment' group (Holmes, 2014). It has also been argued that using more than six matches does not significantly affect the derived pattern of results (Austin, 2008). Controls were randomly selected without replacement using nearest neighbour matching with a calliper set to 0.025. The comparison group was created using the program 'psmatching' (Thoemmes, 2012), an R-plugin for SPSS version 23. Thus, the final sample consisted of an adopted group (*n*=22) and a matched general population comparison group (*n*=110).

Weighting

Large scale surveys seek to enable generalizations to the population under scrutiny by analysing a sample. For robust extrapolations to be made, the sample should reflect the constitution of the population in all areas but scale. Whilst an exact match

may be only theoretically possible, careful consideration of several factors in survey design will reduce the gap between theory and observation.

Firstly, differential non-response will introduce bias in terms of sample construction and consequent interpretation of analysis. If participant non-response is Missing Completely At Random (MCAR) then no bias is present as the data is not systematically affected. However, response to surveys has been found to differ across groups of interest, particularly minority ethnic groups and those in the 18-29 age bracket; this holds true for all western societies where surveys are conducted (Lavrakas, 2008). The effects of differential non-response may be ameliorated in survey design by sampling strategies such as offering differential incentives to increase participation from known low-response groups. Post-survey adjustments may also be made in the form of weighting where the effect of a respondent is increased or decreased according to certain characteristics (Franco, Malhotra, Simonovits, & Zigerell, 2017). Calculation of such weights is complex as it assumes similarity between responders and non-responders.

Differences are also seen across groups of interest in the probability of being selected into the sample. In Simple Random Sampling (SRS) the chance of being selected across the total population is equal (Aneshensel, 2012). In complex designs such as Understanding Society, however, differences occur at every stage of data collection and accumulate over time; the result of which is a raw sample that is not reflective of the population (Aneshensel, 2012). This difference can be compensated by oversampling known groups to boost their representation in the final sample. Sampling error accounts for the variability of results from sample-to-sample on population parameters (Losh, 2012); reducing this error increases reliability and therefore confidence in interpretation of subsequent analysis.

Design weights provided with the Understanding Society dataset account for differential non-response, unequal selection probability and sampling error thus enabling robust generalizations to the UK adolescent population (10-15 years old). The cross-sectional weight (a_ythscus_xw) was therefore applied in this instance (for naming conventions and details of weighting calculation see Knies, 2015).

Measures

Demographic information

The Understanding Society survey collects a wealth of demographic information including age (age at last birthday, derived from exact date of birth and date of interview), sex, geographical markers such as country of residence and government office region (derived from post code). The household, multi-informant design of the survey allows for verification of much of this information. Ethnicity is self-reported in the youth questionnaire from a choice of 22 categories. For the purposes of the present study, these categories were condensed into eight groups (White, Black Caribbean, Black African, Indian, Pakistani, Bangladeshi, Mixed and Other) following Berrington, Roberts, and Tammes (2016).

Linking to the National Pupil Database (NPD)

The National Pupil Database (NPD) holds data on educational attainment (including statutory tests) and characteristics of pupils and schools. A dataset linking the NPD to Wave one of Understanding Society is available, under secure access conditions, from the UK Data Service (UKDS). Utilising educational attainment data for survey respondents depended on whether parental consent to link had been given, the children attended English state schools, a match between both databases could be made and that the school submitted data to the NPD (Berrington et al., 2016). Of the 4899 Youth Questionnaire responses, 68.3% were given consent to link, but this only included 10 adopted children. Due to loss of statistical power from such a small sample, comparison of educational attainment was not pursued.

Emotional symptoms and behavioural problems

For the present chapter, emotional symptoms and behavioural problems were assessed using the youth self-completion version of the SDQ (Goodman, 1997; Goodman et al., 2000). The composition and validity of the SDQ was previously established in Chapter 3. There is, however, mixed empirical support for the five-factor structure of the SDQ particularly when used in *low-risk*, community samples (Goodman et al., 2010). An alternative factor structure that combines the emotional and peer scales into an *internalising symptoms* composite scale and an *externalising problems* scale from the conduct and hyperactivity scales can be used when exploring broader concepts of internalising and externalising problems (Goodman et al., 2010). Each composite

scale is a summation of the two sub-scales yielding a range of possible scores from 0-20. It was decided to use these composite scales because the Understanding Society dataset could be considered a low-risk community sample and the aims of the present study is to explore presence or absence of broader issues that have been shown to affect education experience and performance. The internal consistency estimates for the two scales were acceptable (Cronbach's α internalising = 0.736; externalising = 0.750). A Total Difficulties score is obtained by summing subscale scores on all but the Prosocial subscale, yielding scores that range from 0 – 40 (Cronbach's α = 0.773). In the present study, 98.9% (*n* = 4844) of 10-15 year olds who completed the youth survey also completed the SDQ.

School life

Two questions focussed on feelings about current school and school work, *How do you feel about schoolwork?* and *How do you feel about the school you go to?* Both questions were answered on a seven-point Likert scale (1 – *completely happy* to 7 – *not at all happy*), a higher score indicates more negative feelings about school. The perceived importance of performance in examinations at the end of compulsory education was ascertained using the question: *How important do you think it is for you to do well in your GCSE exams or Standard Grades?* and responded to on a four-point Likert scale: *Very important, Important, Not very important* and *Not at all important*, coded one to four, respectively.

Aspiration

Respondents were asked a series of questions relating to aspirational values, including: *What would you most like to do when you are 16?* with five options (*Get a full-time job, Study full time, Get a job and study, Do something else* or *Don't know*). Those that answered anything other than, *Get a full-time job* to this question were prompted to answer: *Would you like to go on to do further full time education at a college or university after you finish school?* (*Yes, No, Don't know*). For the purposes of this analysis, responses were recoded from the original categories to reflect either a desire to work full time or continue with education in some form (full time, part-time or part-time with working). Those cases who returned *don't know* or *something else* were collapsed into a *not known* category.

At the end of the questionnaire, respondents were also asked, *What job would you like to do once you leave school or finish full-time education?* as a free-response item. Answers were coded by the UKDS into one of 90 minor categories according to the Standard Occupation Classification (SOC2010; ONS, 2017). These categories were

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further re-coded into one of the nine major SOC2010 groups for the purposes of this study (e.g. Professional occupations, Skilled trades occupations; ONS, 2017).

Missing data

Patterns of missing data in the SDQ scores were explored with Little's Missing Completely At Random (MCAR) test in SPSS (IBM, v26.0). Little's test showed random patterns of missing data for the SDQ scores. ($\chi^2_{(188)}$=178.88, p=0.671). As the missing values represented only 0.37% of the total scale items, mean imputation was used (Widaman, 2006). Imputation was carried out prior to the weighting variable applied before analysis.

Results

Demographics for the Youth Questionnaire are presented in Table 13.

Table 13

Demographics of Youth Questionnaire Responses

Variable	Filial relationship			
	General population (weighted n=102)		Adopted (weighted n=24)	
	M	*SD*	*M*	*SD*
Age	12.59	1.5	12.34	1.67
	n	*%*	*n*	*%*
Sex				
Male	42	41.2	11	45.8
Female	60	58.8	13	54.2
Country				
England	92	90.2	20	83.3
Wales	1	1.0	1	4.2
Scotland	9	8.8	3	12.5
NI	0	0	0	0
Ethnicity[a]				
White	66	64.7	14	56.0
Black Caribbean	4	3.9	1	4.0
Mixed & Other	10	9.8	4	16.0
Not Known	22	21.6	6	24.0

Note. [a]adopted group weighted *n*=25

There were no differences between group membership by sex ($\chi^2_{(1)} = 0.173$, $p=0.678$), age ($t_{(124)} = 0.720$, $p=0.473$), ethnicity ($\chi^2_{(3)} = 0.995$, $p=0.84$[4]) or country of residence ($\chi^2_{(2)} = 1.621$, $p=0.411$[5]) as expected through the matching process.

Psychological well-being

Scores for each composite scale (internalising and externalising) and a total difficulties score were calculated and are presented in Table 14 and Figure 7. Hotelling's T^2 was used to determine the effect of filial relationship on psychological well-being and behaviour. Two composite scores were used to reflect levels of internalising (summed emotional and peer subscales) and externalising (summed conduct and

Table 14

Mean SDQ Scores by Filial Relationship

SDQ scale	General Population *(weighted n=101)*		Adopted *(weighted n=24)*	
	M	*SD*	*M*	*SD*
Internalising	4.74	3.56	5.11	2.86
Externalising	6.55*	3.17	8.69*	3.35
Total Difficulties	11.3**	5.19	13.80**	5.01

*Note. *$p < 0.025$; **$p < 0.05$.

hyperactivity subscales) problems (Goodman et al., 2010). Preliminary assumption checking revealed that data were normally distributed, as assessed by standardised skewness and kurtosis values ±2.58 (Tabachnick, Fidell, & Osterlind, 1996), on each scale for both groups with the exception of the internalising symptoms scale for the general population group. Tabachnick et al. (1996) suggests that for larger sample sizes transformation of non-normally distributed variables is not imperative, particularly if the non-normality is not caused by outliers. To that end the presence of univariate outliers was assessed on each dependent variable by *z*-scores ± 3.29. One case was identified but it had a minor impact on normality or overall results and so was included in all analyses. Multivariate outliers were identified through Mahalanobis distance;

---

[4] Fisher's exact (2 x c) test
[5] Fisher's exact (2 x c) test

Figure 7

Mean SDQ Scores by Filial Relationship
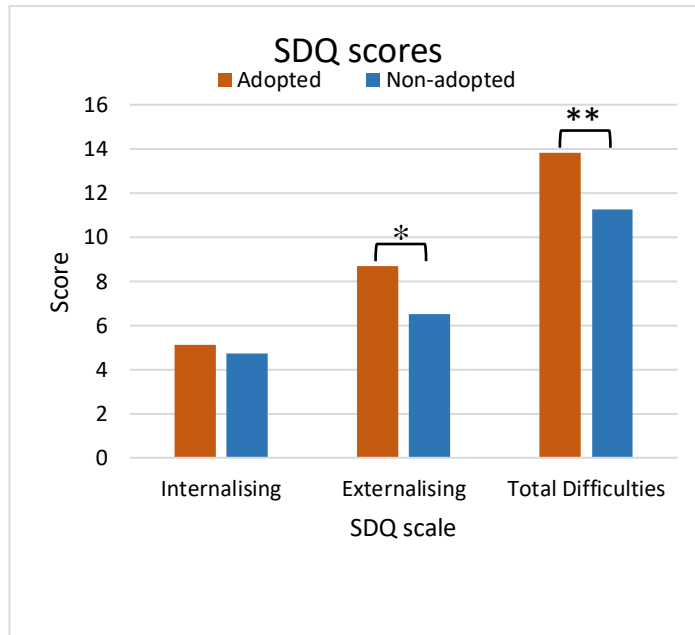
Note. *p< 0.025; **p< 0.05

one case was considered extreme but again had little impact on the overall results ($p <$ 0.001). There were approximate linear relationships as assessed by scatterplot, no multicollinearity ($\mid r \mid < 0.3$) and homogeneity of variance-covariance matrices, as assessed by Box's M test ($p = 0.557$). The assumption of homogeneity of variance is satisfied as it is incorporated in the Box's M test.

SDQ Composite subscale comparisons

The differences between the two types of filial relationship on the combined dependent variables (internalising and externalising composite scale) were statistically significant ($F_{(2,99)} = 3.287$, Pillai's Trace $= 0.062$, $p=0.041$, partial $\eta^2 = 0.062$). Pillai's Trace was used to compensate for unequal sample sizes (Laerd Statistics, 2017b). Post-hoc pairwise comparisons were used to identify differences between the composite scales. A Bonferroni adjusted α level of 0.025^6 was used. Adopted children scored significantly higher on the externalising problems scale than the general population comparison group ($F_{(1,100)} = 6.617$, $p=0.012$, partial $\eta^2=0.062$), but not on the internalising symptoms scale ($F_{(1,100)} = 0.232$, $p=0.631$, partial $\eta^2=0.002$).

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[6] Bonferroni adjustment $0.05/2 = 0.025$

Total difficulties scores

An independent samples *t*-test was used to determine if there were differences between total difficulties scores on the SDQ between adopted children and the matched general population sample. There were no univariate outliers as identified by standardised scores of ± 3.29, normality at each level of filial relationship was assessed by standardised skewness and kurtosis values ± 2.58. The distribution of scores for the general population group was approximately normally distributed ($z= 2.697$), the independent samples *t*-test is robust to violations of normality (Laerd Statistics, 2015) and this mild violation did not affect the overall outcome. There was homogeneity of variances as assessed by Levene's test ($p=0.689$). Adopted children scored higher (13.8 ± 5.03) than the matched comparison group (11.26 ± 5.24), a significant difference of 2.54 ($t_{(122)}=2.141$, $p= 0.034$, $d= 0.514$ [95% CI 0.192 to 4.89]).

School life and education

Responses to school related questions are presented in Table 15. Overall, in terms of school views, adopted children felt less happy about their school and schoolwork than non-adopted children, and rated success in GCSE/ Standard Grades as less important. Most respondents indicated a positive intention to continue education in some form; of those that did, university appeared to be the preferred destination.

Views of school life

To determine differences between filial relationship groups on views of school, Hotellings T^2 was used. To identify univariate outliers, standardised scores for each question were calculated; three were identified for the question *How do you feel about your school?* and one also for the *How do you feel about your schoolwork?* question. Removal of these outliers did not affect distribution or overall outcome so were included in the analysis. Distribution for each groups' responses were not normally distributed as assessed by standardised skewness and kurtosis scores ($z >2.58$); in the interest of consistency the approach earlier suggested by Tabachnick et al. (1996) was again adopted and analysis calculated using untransformed data. There was no multicollinearity as assessed by Pearson correlation ($r = 0.504$, $p<0.0005$). There was an approximately linear relationship between both questions for each group as assessed by scatterplot.

Table 15

Responses to School Questions in Youth Questionnaire*

School experience item	General Population (weighted n=101)		Adopted (weighted n=24)	
	M	*SD*	*M*	*SD*
How do you feel about schoolwork?	2.58	1.08	3.08	1.62
How do you feel about the school you go to?	2.45	1.33	2.59	1.51
	(weighted n=98)		*(weighted n=24)*	
How important do you think it is for you to do well in your GCSE exams or Standard Grades?	1.26	.44	1.35	.59

Note: *higher scores=less happy

Four multivariate outliers were identified by calculation of Mahalanobis distance but again their exclusion did not affect the overall outcome and so were left in the analysis. Homogeneity of variance – covariance matrices was not found as assessed by Box's M (*p*=0.0005); consequently, Pillai's Trace was used to counter this difference and unequal sample sizes (Laerd Statistics, 2017a). There was homogeneity of variances as assessed by Levene's test (*p*>0.05). The differences between the groups on the combined dependent variables was not statistically significant ($F_{(2,100)}$ = 1.448, *p* = 0.240, Pillai's Trace = 0.028, partial η^2 = 0.028).

Examination performance

An independent samples *t*-test was used to determine if there were differences in views between adopted and non-adopted children on the importance of doing well in end of compulsory school exams (Standard grades for Scotland and GCSE for the rest of the UK). Data are mean ± standard deviation unless otherwise stated. No outliers were identified by a standardised score of ± 3.29. Distributions of importance of GCSE performance were positively skewed as assessed by skewness and kurtosis standardised scores (*z*>3.29); it was decided to continue with the analysis without transformation because the *t*-test is considered robust to such violations. There was heterogeneity of variances (Levene's test; *p*=0.04), and consequently Welch's *t*-test was used. Adopted

children viewed performance as less important (1.35 ± 0.59) than the general population comparison group (1.26 ± 0.44) but this difference was not significant ($t_{(29)}$=0.721, p=0.477, [CI 95% -0.359 to 0.172]).

Aspiration

Fisher's Exact Test was used (due to an inadequate sample size for the chi-square test of homogeneity), to assess responses to the aspiration question, *What would you like to do when you are 16?* between adopted children and the non-adopted comparison group. The two multinomial probability distributions were not equal in the population, $\chi^2_{(2)}$=8.661, p=0.014, suggesting a difference between adopted and non-adopted on at least one of the categories.

Post-hoc analysis involved pairwise comparisons using multiple Fisher's Exact Tests (2 x 2) with a Bonferroni correction. Statistical significance was therefore accepted at p<0.0167. There was a significant difference in the proportion of adopted children expecting to work full-time at 16 years old compared to the general population (n=7, 29.2% versus n=8, 7.8%, p=0.009). There were no significant differences in the proportion of children looking to study at 16 (n=12, 50.0% versus n=72, 70.6%, p=0.09) or the proportion where information was not available or forthcoming (n=5, 20.8% versus n=22, 21.6%, p=1.0).

Continuing education

Respondents who answered anything other than, *Get a full-time job* to the question regarding post-16 aspirations were then prompted to respond to, *Would you like to go on to do further full time education at a college or university after you finish school?* Table 16 presents the proportions for each group. Fisher's Exact Test was used (due to an inadequate sample size for the chi-square test of homogeneity) to assess responses to this question. Responses were recoded from the original categories to reflect either a desire to attend college or university or not. Those cases who returned *don't know, something else* were collapsed into a *not known* category. The two multinomial probability distributions were not equal in the population, ($\chi^2_{(2)}$=7.296, p=0.05), suggesting a difference between adopted and non-adopted on at least one of the categories.

Table 16

Results for Continuing Education Items

Aspiration item		General population (*weighted n=102*)		Adopted (*weighted n=24*)	
		n	*%*	*n*	*%*
What would you most like to	Work full time	8	7.8	7	29.2
do when you are 16?	Study	72	70.6	12	50.0
	Not known	22	21.6	5	20.8
Would you like to go on to do	Yes	75	73.5	11	45.8
further full time education	No	1	1.0	1	4.2
at a college or university	Not known	26	25.5	12	50.0
after you finish school?					

Post-hoc analysis involved pairwise comparisons using multiple Fisher's Exact Tests (2 x 2) with a Bonferroni correction. Statistical significance was accepted at $p<0.0167$. There was a significant difference in the proportion of children from the non-adopted comparison group indicating an intention to attend college or university than adopted children ($n=75$, 73.5% versus $n=11$, 45.8%, $p=0.014$). There were no significant differences in proportions between the two groups of filial relationship not indicating college or university ($n=1$, 1.0% versus $n=1$, 4.3%, $p=0.335$) or the proportion where information was not available or forthcoming ($n=36$, 25.5% versus $n=12$, 50.0%, $p=0.026$).

Employment aspirations

The free response question eliciting employment desirability was answered by all respondents, Table 17 presents proportions for SOC2010 major groups according to filial relationship. Fisher's exact test was used due to inadequate sample size for chi-square, the two multinomial probability distributions were equal in the population ($\chi^2_{(7)}=6.538$, $p=0.481$) suggesting no differences in employment aspiration between the two groups.

Table 17

Employment Desirability

SOC2010 Major Group (Occupations)	Gen. Pop. (weighted n=103)		Adopted (weighted n=24)	
	n	*%*	*n*	*%*
Managers, directors and senior officials	4	3.9	0	0
Professional	30	29.1	5	20.8
Associate professional and technical	36	35.0	7	29.2
Administrative and secretarial	2	1.9	0	0
Skilled trades	7	6.8	4	16.7
Caring, leisure and other service	10	9.7	5	20.8
Sales and customer service	1	1.0	0	0
Process, plant and machine operatives	0	0	0	0
Elementary	0	0	0	0
Other	13	12.6	3	12.5

Discussion

Analysing data from a nationally representative, large cohort survey this study sought to elucidate differences in psychological well-being, views of school life and educational aspiration for adopted and non-care experienced young people in the UK. Levels of psychological well-being were ascertained using the self-report version of the SDQ. Adopted children reported significantly higher levels of externalising behaviour than the matched general population comparison group, but not internalising symptoms. Similar findings among previous studies exploring externalising behaviour in adopted children and adolescents have been found (e.g. Howard, Smith, & Ryan, 2004; Palacios et al., 2013; Sharma, McGue, & Benson, 1996; van der Vegt, Ende, Ferdinand, Verhulst, & Tiemeier, 2009; Zill & Bramlett, 2014).

The skewed developmental journey of care experienced children may explain these raised levels of externalising behaviour. Whilst adopted children may benefit from permanency, the persistent effects of early adverse care may be apparent in certain contexts. In school, experiences of adversity or trauma may manifest into behaviours including hypervigilance, defiance, aggression, controlling behaviour, lack of organisation, attention and empathy, dissociation and inability to form and maintain friendships (Cairns, 2002; Comfort, 2007; Dann, 2011; Phillips, 2007; van den Dries et

al., 2009), some of which is reflected in the findings of the present study. Such school-related behaviours characteristic of care experienced children may occur as a result of their hyper-vigilance and attempts to establish control in their social environment, though this may be compromised by difficulties in forming and maintaining friendships.

Unexpectedly, no differences in internalising symptoms were found between adopted and non-adopted adolescents. The SDQ is validated for use with both community and clinical samples (Goodman et al., 2000). Though it does not specifically address behaviours that manifest in children that have experienced early trauma and severe adversity (e.g. attachment-related difficulties, anxiety and dissociative responses to trauma, age-inappropriate sexual behaviour and self-harm; Tarren-Sweeney, 2013), several studies have reported elevated levels of internalising symptoms in the care-experienced population (e.g. Biehal, Ellison, Baker, & Sinclair, 2010; Sanchez-Sandoval & Palacios, 2012).

The timing of adoption placement rarely coincides with the usual entry points for school and may exacerbate children's feelings of being different as they try to fit in to new social groups (Peake & Golding, 2006). It may be that this inconsistency of educational provision has a detrimental effect on school performance. However, this point may be moot as the average age for adoption at the time of survey was 3 years and 11 months (DfE, 2014b), which is before the start of compulsory schooling in the UK; whether this affects socialisation at the pre-school level (particularly if the pre-school setting is attached to a primary school) has yet to be explored.

Responding to questions about school life, no differences across groups were found. Both groups reported similar levels of happiness with their school and schoolwork. Mean scores for each group were close to the mid-point on the Likert scale perhaps suggesting an ambivalence towards school, or the questionnaire. The youth questionnaire was completed by young people aged 10-15 years and adolescence is a pivotal time for forming aspirations (Metsäpelto et al., 2017), which are affected by prior academic achievement (particularly performance in key examinations), ability of current peer group, parental SES, ethnicity, levels of home enrichment and unemployment (Sammons, Toth, & Sylva, 2016). Adoptive parents provide 'richer' home environments and are more likely to have higher SES than non-adoptive families (Hamilton, Cheng, & Powell, 2007; Howe, 1997), however these effects did not appear to manifest in the outcomes of the present analysis as both groups placed similar importance on performing well in GCSE exams; perhaps suggesting a common sense of engagement and connectedness to education, or perhaps reproduction of a well-

rehearsed message. Absence of a difference between groups may also be explained by the sample size of the adopted group, though Wijedasa and Selwyn (2011) analysed responses from a similar sample (in terms of size and background characteristics) in the Longitudinal Study of Young People in England (LSYPE) and found similar outcomes in attitudes toward school. Further investigation of the interplay between occupational aspiration, educational achievement and academic self-concept is called for.

Adopted children were more likely to show an intention to seek full-time work at the end of compulsory schooling and they were less likely to choose to continue education in some form at this time. Without further investigation of the nature of adopted children's desired career path and possible links to educational aspiration, contributory factors leading to such differences are unclear, particularly as no significant differences were found in the type of employment aspired to, although the small sample size and resultant loss of power may account for this. For the most part, the nature of continuing education appears to involve university, although there is some ambiguity in how the item is constructed. It is unclear from the question wording how post-16 education was interpreted because *college* could mean A-levels or other courses leading to Higher Education (HE); alternatively, it could also represent vocational training. The questionnaire also did not provide enough scope to differentiate prospective HE students from those who wish to enter employment or apprenticeship after college.

Limitations

This study confirms previous research for psychological well-being of adopted children but limitations are noted. First, the Understanding Society dataset suffers similar problems as previous large cohort studies where adoption is not the primary focus of participant recruitment or analysis (Raleigh & Kao, 2013; Wijedasa & Selwyn, 2011). The resulting group sizes means that the loss of statistical power associated with small sample sizes should be considered when interpreting results. A further limitation rests in the formulation of concepts explored in the Understanding Society questionnaire. For example, it is unclear from the question wording how 'adoption' may be understood by respondents in the main adult survey. Without differentiating between adoption from the public care system, Inter-country adoption, kinship adoption and step adoption in the main survey, a nuanced analysis is impossible.

Goodman et al. (2000) recommend, due to the context-dependent nature of psychological problems and amelioration of inconsistent responses between informants (Vaz et al., 2016), a multi-informant approach when using the SDQ is preferable. Yet the Understanding Society survey only uses the youth self-report version. As Chapter 3 relied on parent reports to understand the school experiences of primary school children so this Chapter has relied on young people's survey responses to shed light on adopted adolescent's mental health and future aspiration. Future research would benefit from different reporters of the same constructs or phenomenon to draw firmer conclusions.

Conclusion

Research noting the effects of early trauma experienced by children adopted from public care suggests detrimental impact over a wide range of developmental areas. This study sought to explore differences between young people adopted from the public care system or living with biological parents on measures of psychological well-being, educational aspiration and school experience. Whilst these findings are consistent with conclusions drawn from previous research regarding the psychological well-being of adopted children, much still needs to be done to establish educational attainment status and school experience for adopted children in the UK. Future research could address these, and other methodological issues, when utilising largescale panel survey data, through purposeful research design appropriate for exploring outcomes for vulnerable groups of children.

Chapter 5: School belonging, educational attainment, identity and aspiration in adopted and non-adopted adolescents.

Introduction

Chapter 4 established that adopted adolescents in the UK face significant challenges in social, emotional and behavioural aspects of school life. Numerous questions remain, however, about how adopted children and young people experience school as an *adopted* person; i.e. how does their lived experience as an adopted member of a school community impact on their engagement with school, schoolwork and peer networks? The present chapter seeks to explore the relationships between school belonging, identity development, educational and occupational aspiration and educational attainment, for adopted and non-adopted adolescents in the UK.

It is hoped that the findings from this chapter will contribute to understanding the persistent attainment gap between adopted and non-adopted adolescents (see Chapter 1). The present chapter also aims to contribute to the growing body of research that encompasses wider school experiences and individual developmental challenges known to affect learning. Whilst existing research is scant and mainly uses national academic attainment outcome data and/or views from parents or teachers, the current research was purposively designed to capture the adolescent perspective. Existing evidence points to an attainment gap for all care-experienced children. Whilst there is robust, concrete evidence for lower attainment and progress for Children Looked After (CLA) and Children in Need (CIN) when compared to the general school population (Berridge et al., 2020; Sinclair, Luke, & Berridge, 2019; Sinclair et al., 2020), there is only partial data for children adopted in the UK (DfE, 2016d). The lifelong effects of early trauma, loss and separation on children's development are only recently being explored in the educational context as demonstrated by the groundswell of recent interventions concerning attachment and trauma informed school environments (Thomas, Crosby, & Vanderhaar, 2019). The enduring effects of early adversities persist after a care status has ended, in this case through adoption. Consequently, adopted children and young people form a vulnerable group and further research is required to understand their profile and support needs.

School belonging

A sense of belonging is an essential human need that underpins social and emotional development and endures throughout the lifespan (Allen & Kern, 2017). A sense of belonging has long been understood to fulfil the human desire for relatedness with others (Tillery, Varjas, Roach, Kuperminc, & Meyers, 2013), though it is not the proximity or frequency of the connections with others, but the perceived quality of the social interactions that determines the level of belonging and satiation of the drive (Allen & Kern, 2017). Belonging is largely described as an individual and personal construct that varies according to context and experience (Slaten, Ferguson, Allen, Brodrick, & Waters, 2016). A sense of belonging is integral to how the social environment influences a child's development as part of a complex system of group interactions and processes (Bronfenbrenner, 2005). The *belongingness hypothesis* (Baumeister & Leary, 1995) posits that a person's well-being is largely influenced by the need to belong by driving individuals to seek and engage socially, forming bonds in the process. Considerable benefits have been shown to result from a sense of belonging, including higher levels of self-esteem, self-efficacy, life satisfaction and stable transition to adulthood (Haslam, Jetten, Postmes, & Haslam, 2009; Iyer, Jetten, Tsivrikos, Postmes, & Haslam, 2009). Belonging is also shown to act as a protective factor against psychological disorders (e.g. depression, anxiety) through lower stress levels (Baumeister & Leary, 1995). Physical health is also improved in those with a higher sense of belonging, from lower risks of heart disease (Tay, Tan, Diener, & Gonzalez, 2013) to speedier recovery from illness (Cohen & Janicki-Deverts, 2009).

In early adolescence, as independence in thought and action develops, affirmation of a sense of belonging is sought in areas outside the home (Bowles & Scull, 2019). In adolescence, the family remains important, but relationships outside the home also increase in significance for the young person. In other words, the peer group does not replace the family, but the social network grows in complexity and depth. Potential challenges may arise for the young person and their family, related to accommodation of their needs for autonomy. One of the key arenas in which children and adolescents experience key relationships is at school; the school community forms a major part of the supportive systems described by Bronfenbrenner (2005) and as such the need to belong extends here also. Goodenow (1993) defined *school belonging* as 'the extent to which students feel personally accepted, respected, included and valued by others within the school social environment.' (ibid. p.80). It is important to note that 'others' in Goodenow's definition refers to both peers and school staff. The personal

aspect of school belonging is crucial to understanding how it pertains to adoptees as perceptions of acceptance and inclusion may be indirectly affected by the legacy of early adversity. Though definitions of school belonging are relatively stable and unchallenged, the wide range of research into school belonging has led to a myriad of terms to describe it, including school relatedness, school connectedness, school attachment, school bonding and school identification (Goemans, van Geel, Wilderjans, van Ginkel, & Vedder, 2018; Libbey, 2004). This study adopts Goodenow's (1993) definition of school belonging.

School belonging is described as a 'mind-set about how [pupils] fit in and are a part of the broader school community' (Wagle et al., 2018; p570). How a student perceives their sense of self, against their perception of each aspect of the school community, will affect their sense of school belonging. A student's wider experience of school, including academic outcomes, may be influenced. This sense of acceptance and belonging to school is an important aspect of the wider school experience as it is also positively associated with increased academic motivation, psychological well-being and involvement in the local community (Anderman, Koenka, Anderman, & Won, 2018; Duke, Skay, Pettingell, & Borowsky, 2009; Sharma & Malhotra, 2010). Teachers are a key component in the development of school belonging as they are well placed to create an environment that facilitates positive peer relationships. Mutual respect among peers is one mechanism by which pupils develop a greater sense of school belonging (Anderman, 2002). A positive pupil-teacher relationship is another means of influencing school belonging (Shochet, Smith, Furlong, & Homel, 2011; Waters, Cross, & Shaw, 2010); a poor relationship with a teacher can lead to a lower sense of school belonging as perceived by students, particularly for pupils with additional needs (Crouch, Keys, & McMahon, 2014). The quality of the pupil-teacher relationship is also important in developing a sense of belonging as it comprises not only social support, but also academic support (van Ryzin, Gravely, & Roseth, 2009). Where teachers' pedagogy emphasises learning and understanding over performance, a greater level of school belonging may be seen (Stevens, Hamman, & Olivarez Jr, 2007). Thus, teaching style may also indirectly influence school belonging through the pupil-teacher relationship. It is not only teaching staff who appear to have an important influence on school belonging, however. Recent research suggests that positive connections to school are dependent on the relationships with ancillary school staff, parents and peers (Slaten et al., 2016).

Whilst the importance of feeling a sense of belonging to one's school as a component to academic success is well established, little attention has been paid to students on the periphery of the education system and for whom establishing a sense of positive belonging to their school setting may be challenging (Slaten et al., 2016). Children who are care-experienced, including those later adopted, may form such a group.

Identity

Chapter 1 outlined theoretical underpinnings of general identity formation and development during adolescence. Grotevant and Von Korff (2011) developed a narrative perspective to identity development, which is concerned with meaning-making, for adopted children and young people. How the process of identity exploration results in a socially constructed story about oneself which is then presented (or tested) in interactions with important others (e.g. family and peers) is central to a narrative identity (Grotevant & Von Korff, 2011). Coherent narratives are likely to make it easier to negotiate change and new adoption related experiences, as young people progress through late adolescence and emerging adulthood. The coherence sought by an individual provides a sense of meaning or understanding of how the past, present and future is linked. As the social world of the adolescent grows wider and more complex, so to do opportunities for life-story conversation occurring outside of known family contexts. In the early stages of family life, adoptive parents and professionals provide the source for interpretation of the adoption narrative, i.e. parents translate the pre-adoption history through stories and sometimes artefacts such as *later-life letters* and *life-story work* (Watson, Hahn, & Staines, 2020; Watson, Latter, & Bellew, 2015). The level of comfort shown by the adoptive family in acknowledging that birth parents and adoptive parents are different, influences the adoption narrative (Lo et al., 2021). During adolescence, however, the growth of abstract reasoning, coupled with competing views of their existing narratives (e.g. from peers, social media) may cause adopted adolescents to reconsider the received narrative. For example, some information may be missing, or unknown to the adoptive parents, that may raise questions from the adolescent about their understanding of the adoption process as it pertains to them specifically.

Adolescents may re-frame their narrative as they begin to integrate the revised version into their larger sense of self. To fully understand the contribution of adoptive identity as a key part of wider psycho-social development, the influence of the range of

social contexts (e.g. home, school) needs to be acknowledged. Healthy psychological adjustment to adoptive life occurs when a coherent and meaningful sense of identity is formed congruently with the social and cultural environment (Grotevant & Von Korff, 2011).

Critical to narrative identity construction is the iterative process of exploration, perhaps more so for adoptees, as psychological and contextual factors influence the propensity to explore (Grotevant, Lo, Fiorenzo, & Dunbar, 2017). The cognitive and affective outcomes of exploration influences future orientation in terms of identity. An openly communicative adoptive family context, where emotionally meaningful social interactions are facilitated, is seen as beneficial for the development of a positive adoptive identity (Brodzinsky, 2014). An important mechanism to enable open communication is the recognition of emotional expression that leads to conversation sharing (e.g. about contact with birth family). The act of conversation provides opportunities to reconstruct and re-interpret past events, often repeatedly. Characteristics of adoptive parent-child communication influences the coherence of the adoption narrative and acts as a means to convey its meaning to self and others (von Korff & Grotevant, 2011). It is reasonable to extend the contribution of parent-child communication in identity development to the context of school. Open communication between members of the child-parent-school triad act as further opportunities to develop a positive adoptive identity and engender healthy adjustment to adoptive life (Chapter 3; D. Brodzinsky, personal communication, 2021).

Much of the general identity research is concerned with domains of identity over which the individual has a certain degree of choice, e.g. political, religious, occupation. An adoptive identity may be described as an *assigned identity*, i.e. one where the individual has little or no choice (e.g. gender, ethnicity; Grotevant & Von Korff, 2011). In this case, the question is not one of deciding to accept or reject an identity, but to ask, *What does this* adoptive *identity mean to me?* It is possible that the challenge of identity formation is heightened by the lack of control over the assigned identity, in this case an adoptive one. For adopted adolescents, the issues of assigned identity and the renegotiation of an adoption narrative, adds layers of complexity to the overall process of identity development not experienced by most of their peers.

Identity and education

How individuals deal with identity related information is a cognitive and social process (Berzonsky, 2011; Berzonsky et al., 2011) and so may reasonably be expected

to extend in to other forms of information-processing, including attitudes and expectations of learning. Hejazi, Shahraray, Farsinejad, and Asgary (2009) found that identity styles (Berzonsky, 1989; Chapter 1) impact on academic achievement: an informational style had a direct, positive impact, whereas the opposite was found for the diffuse style. In addition, academic self-efficacy was found to mediate the relationship between informative and normative identity styles and academic achievement. Explanations for this may be found in the motivational aspect of self-efficacy where individuals with high levels of self-efficacy expend greater effort to fulfil their goals and have a higher sense of self-belief that the goal is accomplishable. As both information and normative identity styles comprise clear and decisive goals (however determined) a high level of self-efficacy may well increase the likelihood of task completion. In a sample of college students, Berzonsky and Kuk (2005) found that those best prepared for an independent and motivated college life used an information processing style whereas students with diffuse/ avoidant or normative styles were at a distinct disadvantage.

Communication about adoption plays a vital role in how children think and feel about adoption (Brodzinsky, 2011), particularly with adoptive parents. Openness and comfortableness in communication are key to the development of positive attitudes towards the concept of adoption and for the adopted person individually. This applies to communication within the immediate family and the wider social network which inevitably includes the school community (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017). It appears that adopted children are themselves reticent about revealing their adoption status to peers (Barbosa-Ducharne, Ferreira, Soares, & Barroso, 2015; Neil, 2012). The reluctance on the part of adopted children to reveal their adoptive status may be due in part to the reaction of others following disclosure. Several studies have reported how negative reactions to adopted status manifest in peers' responses, including teasing, jokes, intrusive questioning and rejection (Baden, 2016; Neil, 2012; Reinoso, Pereda, van den Dries, & Forero, 2016). Perceptions of the social reaction to an adopted status may limit communication about adoption and hinder development of a positive adoption experience, including development of a healthy adoptive identity.

Few studies have examined the school experience of adopted children beyond academic attainment and fewer still have incorporated the voice of adopted young people as part of their research. Chapter 2 also highlighted the paucity of research into educational outcomes for adopted children. Attention to adoptees' lived experiences at

school and how these experiences relate to adolescent development is strikingly absent from the academic literature and warrants further investigation.

The aims of the present chapter were twofold:
1. To explore the relationship between school belonging, identity style, self-esteem and adoptive status as it pertains to academic attainment and occupational aspiration in a sample of adopted and non-adopted adolescents in the UK.
2. For adopted adolescents: to explore feelings about being adopted as they relate to school belonging, identity style and self-esteem.

Hypotheses:
1. Adolescents in the adopted group will be more likely to be categorised as diffuse/ avoidant identity style, compared to the non-adopted group.
2. Adopted adolescents will report a lower sense of school belonging and self-esteem compared to the non-adopted group.
3. Academic attainment will be mediated by identity style, school belonging and adoptive status.
4. Adopted children will aspire to lower ranking occupations compared the non-adopted group.
5. Adopted adolescents only
   a. Feelings and disclosure about adoption will be associated with school belonging, self-esteem and identity status.
   b. Adopted children will perceive the social reaction to their adoptive status as negative.

Method

Participants

Eighty-four adolescents, 66.1% female, aged 15-18 years (M=15.85; SD=1.25), currently in school years 10-13, participated in this study. The non-adopted group (*n*=62; 70.3% female, mean age 16.22 years; *SD*=1.18) were recruited from a large secondary academy (school roll *n*=1207) in the Southwest of England. The adopted group (*n*=22; 57.9% female, mean age 15.11 years; *SD*=1.08) were recruited through national adoption charities and organisations, local authorities, and social media. Of the

whole sample, 72.7% identified as white British, 3% Indian, 3% Chinese and 6.1% Mixed ethnicity.

Procedure & ethics

The study was approved by the University Ethics Committee (EC.19.03.12.5588R). Initially the issue of the right to withdraw was resolved by informing the participants at the outset of the interview that they reserve this right without question and at any stage. Considerations were taken with respect to the nature of the consent itself. Miller & Bell (2002) indicate that when consent is sought, the extent of the participation should be indicated as residual effects from answering questions regarding attitude and well-being may cause discomfort or distress. Consequently, the intention for the open responses to be triangulated was made clear in the participation information sheets. Issues of privacy, confidentiality and anonymity were also given due attention and the participants assured that the survey data would be kept securely and anonymised so that all personally identifying features were removed. A timescale for keeping the survey responses was also provided in line with GDPR guidelines.

For the non-adopted group, an alternative route to participants was required and consent was obtained *in loco parentis* from the school prior to data collection. In this sense, the school acted as 'gatekeepers' (King & Horrocks 2010, Lewis & Porter 2004) and therefore posed an ethical dilemma in that they may have a direct influence on who becomes participants (Miller & Bell 2002). This was resolved by briefing the point of contact in the school on matters of equitable access before dissemination of the survey.

Informed consent was also obtained from each participant at the start of the main survey. Example participant information sheets, consent forms and debrief sheets can be found in Appendix VII. Pupils in years 10-13 (15-18 years old) were targeted because they would be at the appropriate stage regarding adolescent development and would also have knowledge of either their target grades, or actual grades obtained, in the statutory assessments at the end of Key Stage 4 (16 years old). The link to the survey was emailed (via the school's virtual learning portal) to all pupils in years 10-13 and information about the survey was presented by school staff in year group assemblies.

The adopted sample required a different approach to recruitment: because they were a geographically disparate group, direct parental consent was required. This was achieved by creating a short parental consent survey in Qualtrics. Once parents had given informed consent and completed the consent survey, a link to the main survey

was automatically sent to a previously given email address. Recruitment for this group was therefore directed at adoptive parents through a broad range of channels. Leading UK adoption charities and organisations agreed to promote the survey to their membership through outward facing portals including websites, newsletters, quarterly magazines, social media and distribution of flyers at UK national conferences (2019). Several Local Authorities (geographically disparate to aid representativeness) were also invited to promote and distribute the survey to adoptive parents via adoption teams (23 in total were contacted; 13 did not reply, 7 declined and 3 gave positive action). Three virtual schools were also contacted but declined to assist. The link for the parent consent survey was also distributed though prominent adoption related social media accounts (Twitter and Facebook). Nine national UK charities were also contacted, all of which promoted the survey to a lesser or greater extent according to their capacity to do so (i.e., passing survey information directly to its members, posting on social media accounts and distributing flyers at conferences). Response to the social media aspect of recruitment was overall positive but the exact number of survey responses from social media alone was not possible to ascertain as an origin of survey item was not included in the survey questionnaire. All respondents in years 10-13 were eligible to participate in the survey.

The use of an incentive (a £10 Amazon voucher) was employed to maximise the response rate. A prize draw format was used which respondents chose to enter at the end of the main survey. The prize value and odds of winning were commensurate with the time and effort required to complete the survey as recommended by University Ethics committee guidelines. Anonymity was preserved by creating a separate prize draw survey, triggered by a positive consent response in the main survey – Qualtrics prevents linking the main survey to the prize draw survey. Winners were chosen at random by the research team and the prize sent to an email address given by the respondent in the prize draw survey. In the debriefing sheet presented at the end of the survey (either on completion or early withdrawal) contact details for the research team, school pastoral team and helplines were given.

Measures

An online survey was devised using the Qualtrics platform (www.qualtrics.com) and could be accessed on any connected device, the survey was optimised for completion on a mobile phone, as well as tablet or desktop. A digital mode of data

collection was preferred because it was thought to appeal to the target age of the sample and to facilitate data collection over a wide geographical area. To further appeal to the adolescent demographic, the survey was branded as the *Belonging and Educational Attainment National Survey* (BEANS), a range of materials and wording aligned with this theme was created, in consultation with a PR expert (Appendix VIII). In addition, Qualtrics allows for anonymised responses and survey optimisation for mobile devices. Responses to the survey instruments were automatically recorded in Qualtrics and then downloaded in the required format for analysis (SPSS version 25; IBM). The main survey contained a battery of validated measures that explored concepts related to the research aims and are outlined below. Several bespoke questions were also created to ascertain key demographic and academic attainment information.

School belonging

School belonging was assessed through the Psychological Sense of School Membership scale (PSSM; Goodenow, 1993). An 18-item self-report measure of adolescents' perceived belonging or psychological membership in the school environment. Example statements are *I feel like a real part of this school* and *I feel very different from most other students here.* A 5-point Likert scale is used to record responses (1 *completely true*, to 5 *Never true*), the mean score of all the items is the scale score (possible range from 1.0 – 5.0), a larger scale score indicates a greater sense of school membership. Internal consistency for both groups was high (adopted α=0.977; non-adopted α=0.930), and in line with measures of reliability in existing studies using the PSSM (Cowden, Govender, Oppong Asante, Reardon, & George, 2018; Oldfield et al., 2018).

Identity style

Identity style was assessed by the Identity Style Inventory (ISI; Berzonsky, 1989, 1992) a 40-item self-report instrument. The present study used a revision of the original scale that was accessible to respondents with a lower reading level; the ISI-6G (White et al., 1998). It was hoped that this version would also maximise the response rate through making the questionnaire accessible to a wider range of reading ability than the original scale. Respondents rate their level of agreement with statements associated with each identity style (*normative* – 9 items, *informational* – 11 items and *diffuse /avoidant* – 10 items) and level of commitment – 10 items, on a 5-point Likert scale (The reliability for each sub-scale for each group was as follows: Information scale –

adopted group α=0.539, non-adopted group α=0.772; Normative scale – adopted group α=0.399, non-adopted group α=0.539; Diffuse/ avoidant scale – adopted group α=0.633, non-adopted group α=0.776). The reliability scores were comparable to other studies using the ISI, although the Normative scale scores were lower for this sample, than reported elsewhere (Monacis, de Palo, Sinatra, & Berzonsky, 2016; Negru-Subtirica, Pop, & Crocetti, 2017). The commitment scale (included in the original scale for secondary analysis and not an identity style) was omitted as the primacy of the present study was to establish presence of identity style over strength of commitment to a particular style. Each respondent is assigned the dominant identity style according to greatest scale *z*-score.

Examples of items for the normative scale include, *I've known since I was young what I wanted to be* and *I like to deal with things the way my parents said I should*. The informational style scale items include, *I've spent a lot of time thinking about what I should do with my life and When I have a problem, I do a lot of thinking to understand it.* Items assessing the diffuse/avoidant style include, *I don't take life too serious. I just try to enjoy it* and *I like to think through my problems and deal with them on my own.*

Self-esteem

The 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) was used as a measure of self-esteem. Participants respond to items such as *I feel that I have a number of good qualities* and *At times I think I am no good at all* on a 4-point Likert scale. The mean of all items is the scale score (range from 1.0 – 4.0); higher scores indicate a higher sense of self-esteem. Internal consistency was high for both groups (Adopted α=0.971; non-adopted α=0.919).

Socio-economic status

As an indication of socio-economic status (SES) the validated Family Affluence Scale was used (FAS II; Currie et al., 2008; Hartley, Levin, & Currie, 2016; Hobza, Hamrik, Bucksch, & De Clercq, 2017). The FAS was selected as a good estimate of SES can be obtained from adolescents without requiring information from parents and so was a good fit for the current survey design. The FAS III (Hartley et al., 2016) was preferred, as items were revised to reflect understanding of early and mid-adolescents. Six questions that reflect current economic trends and cultural norms in consumption are used to establish a level of SES and include, *Do you have your own bedroom for yourself?* (*No = 0*; *Yes = 1*) and *Does your family own a car or another motorized vehicle*? (*No = 0*; *Yes*, *one = 1*; *Yes, two or more = 2*). An FAS index was created from

the sum of the six items, range from 0-13 – a higher score indicated a higher level of SES. The internal consistency for both groups was moderate to low (adopted α=0.513; non-adopted α=0.431).

Educational and occupational aspiration

In order to ascertain adolescents' intentions once compulsory schooling had ceased, three questions were posed, taken from Understanding Society (UKDataService, 2020), *What would you most like to do when you have completed your final GCSE year at school at around age 16?* with six options available *(Get a full-time job, Stay at school or college to do A-Levels, Get an apprenticeship, Do some form of other training, Do something else* and *Don't know)*. This question was only presented to those in Year 10 or Year 11.

Aspiration to higher education was measured by the dichotomous (yes, no) item, *Would you like to go on to higher education at a university after you finish school/ college?* A free text response was used to glean occupational desirability with the prompt, *What job would you most like to do once you leave school of finish full time education?* An open-ended response was used in the hope that respondents would be more likely to answer in their own words, rather than be daunted by a detailed list. In addition, respondents were asked to rate the likelihood of their aspirations to higher education and occupation on a 5-point Likert scale (1 – *extremely likely*, to 5 – *extremely unlikely*), for the purposes of analysis this was then collapsed into, 1 – *Likely*, 2 – *Neither likely or unlikely*, 3 – *Unlikely*.

Academic attainment

To examine differences in academic attainment between adopted and non-adopted young people, and to explore relationships between academic attainment and identity and school belonging, a grade point average (GPA) was to be calculated from respondents self-reported grades in recent English and Maths GCSE examinations. A higher score GPA score would indicate higher grades in these subjects. Due to the number of responses in each group (attained grades: *n*=6 adopted, *n*=15 non-adopted; target grades: *n*=10 adopted, *n*=19 non-adopted) insufficient data was collected to warrant purposeful analysis and so these scores are not considered as part of the overall data analysis; implications for the aims of the present study are outlined in the discussion.

School experience of being adopted

How adolescents experience school as an adopted young person was measured by items adapted from the Children's Interview about Adoption (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017). An 11-item scale assessed the child's school experience of being adopted and included three subscales – *Negative feelings towards the child's school experience of being adopted* (e.g. *Being adopted makes me feel sad*), *Positive feelings towards the child's school experience of being adopted* (e.g. *Being adopted makes me feel special*) and *Comfort in social communication about adoption* (e.g. *I think it is easy to talk about adoption*). Each item was answered on a five-point Likert scale. Internal consistency for each subscale was high (Cronbach's α= 0.927, 0.870, 0.689 respectively). After reverse coding negatively worded items, mean scores for each sub-scale were calculated – a higher score indicates greater presence of the sub-scale factor, i.e. a higher score indicates more positive feelings about adoption or more negative feelings about adoption or feeling more comfortable in talking socially about adoption, as appropriate. Further questions explored the social disclosure of adoption to ascertain the openness of adoption status within the child's social network. Seven items, such as, *All my extended family knows I am adopted* were answered on a four-point Likert scale (1 – *totally disagree* to 4 – *completely agree*). Internal consistency for this scale was moderate (Cronbach's α=0.55).

In the original article (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017), perceived social reaction to the adopted status was examined through three items: *I am teased about being adopted* was answered on a 5 point Likert scale (1 – *Not True* to 5 – *Always True*). The items, *Do you think you are treated differently when people know you are adopted?* and *Do you think that some people do not react well to adopted children?* were dichotomous (Yes, No). Soares, Barbosa-Ducharne, Palacios, and Fonseca (2017) used cluster analysis to identify groups of children with similar perceptions of reaction to their adoption status in a social context. The present study used these questions to characterise the adopted group. To aid comparison across items, the first question was recoded into a dichotomous scale indicating a presence or absence of being teased.

Missing data

The PSSM, ISI-6G and RSES measures each had one discrete value missing. Little's MCAR test (SPSS, v26) was used to explore patterns of missing data in each of the measures. In all measures, data were missing completely at random (PSSM:

$\chi^2_{(22)}$=7.341, p=0.998; ISI-6G: $\chi^2_{(29)}$=41.31, p=0.065; RSES: $\chi^2_{(18)}$=15.6, p=0.620).

Mean imputation was used to replace the missing values following Widaman (2006).

Results

Characteristics for the adopted and non-adopted groups are found in Table 18. The adopted group were slightly younger ($t_{(53)}$=-3.345, p=0.002) and more likely to have additional needs at school (p=0.003), but did not differ by gender ($\chi^2_{(1)}$=0.858, p=0.354), country of residence (p=0.111), self-reported ethnic group (χ^2=1.922, p=0.559), number of siblings living at home ($t_{(25)}$=1.737, p=0.095) or socio-economic status ($t_{(54)}$=-1.2, p=0.236).

Table 18

Sample Characteristics by Adoptive Status

Variable	Non-adopted (n=37)		Adopted (n=19)	
	M	*SD*	*M*	*SD*
Age (years)	16.22	1.18	15.11[a]	1.08
Socio-economic status	9.11	2.0	9.79	2.04
Sex	*n*	*%*	*n*	*%*
Female	26	70.3	11	57.9
Ethnicity				
White	33	89.2	15	78.9
Indian	1	2.7	1	5.3
Chinese	1	2.7	1	5.3
Mixed	2	5.4	2	10.5
Country of residence				
Wales	0	0	2	10.5
England	37	100	17	89.5
Additional educational needs				
Yes	0[b]	0	5	26.3
Siblings at home				
0	9	25.0	2	11.1
1	19	52.8	10	55.6
2+	8	22.2	6	33.4

Note. [a]*n*=18; [b]*n*=36

Psychological and school factors

The groups did not differ in levels of school belonging ($t_{(27)}=0.377$, $p=0.709$); self-esteem ($t_{(29)}=-0.211$, $p=0.835$) or identity style group ($\chi^2_{(2)}=3.874$, $p=0.144$; Table 19). Non-adopted adolescents reported larger social networks than adopted adolescents ($\chi^2_{\text{Fisher's}}=7.777$, $p=0.018$), Table 19. Correlations among variables are shown in Table 23. For both groups, a significant positive relationship between self-esteem and school membership was identified. In other words, higher self-esteem scores were positively associated with a greater sense of school belonging. It is also noteworthy that for the correlational analysis, raw, continuous scores for the identity scales were used, whereas assignment to a particular identity style depended on the largest z-score of the three sub-scales.

Table 19

Psychological and School Factors

Measure	Non-adopted		Adopted	
	M	*SD*	*M*	*SD*
School belonging[a]	3.38	.82	3.28	1.19
Self-esteem[b]	25.45	7.21	26.67	9.17
Identity style[c]	*n*	*%*	*n*	*%*
Information	16	40.0	3	15.0
Normative	9	22.5	6	30.0
Diffuse/ avoidant	15	37.5	11	55.0
Number of close friends[d]				
0	2	5.4	2	10.5
1-2	9	24.3	11	57.9
3+	26[**]	70.3	6[**]	31.6

Note. [a]non-adopted $n=62$; [b]non-adopted $n=60$; [c]non-adopted $n=40$, adopted $n=20$; [d]non-adopted $n=37$, adopted $n=19$; [**]$p=0.01$

Occupational and educational aspiration and expectation

For analytic clarity, the categories for intentions at age 16 were collapsed into 3 groups: *education*, *training* or *don't know*. Only one respondent across both groups selected *full-time work* as an option. I decided to exclude this case to facilitate meaningful analysis of the other responses.

Table 20 shows the number and proportions of each category. Fisher's (r x 2) exact test indicated a difference between the two groups (χ^2=7.36, p=0.023). Post-hoc analyses using Fisher's (2 x 2) exact tests[7] showed that significantly more non-adopted adolescents, than those adopted, intended to stay in education (p=0.010). Similar proportions of responses were seen in terms of training (p=0.041) and undecided (p=0.219). No differences between groups aspiring to higher education after schooling, were found ($\chi^2_{(2)}$=2.346, p=0.31).

Table 20

Responses to Aspiration Items by Adoptive Status

Aspiration item	Non-adopted		Adopted	
	n	%	*n*	%
What would you most like to do when you are 16?				
Education[a]	31	86.1	10	52.6
Training	2	5.6	5	26.3
Not known	3	8.3	4	21.1
Total	36	100	19	100
Would you like to go on to higher education at a university after you finish school/ college?				
Yes	21	56.8	7	36.8
No	5	13.5	5	26.3
Don't know	11	29.7	7	36.8
Total	37	100	19	100
What job would you most like to do once you leave school or finish full time education?				
Professional	23	69.7	12	63.2
Administrative and skilled	3	9.1	6	31.6
Undecided	7	21.2	1	5.3
Total	33	100	19	100

Note. [a]p=0.01

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[7] Bonferroni correction applied α=0.05/3 = 0.0167

In terms of occupational desirability, the responses were re-coded into one of the nine major SOC2010 groups (e.g. Professional occupations, Skilled trades occupations; ONS, 2017). Cell counts were low over the nine groups. To ensure meaningful analysis of the respondents' occupational desirability, the groups were collapsed into 3 main categories: *professional, administrative and skilled and undecided.* Table 20 shows the proportions for each category for adopted and non-adopted adolescents. Fisher's exact test indicated no significant differences between the two groups (p=0.082).

Those participants who responded positively to the questions on higher education and occupational aspiration were asked to rate the likelihood of the aspiration being realised (Table 21). At face value, the pattern of responses suggest that the non-adopted group were more certain about their continuing education aspiration, whereas the adopted group appeared more confident of their preferred career path.

Table 21

Likelihood of Aspiration by Adoption Status

Aspiration item	Non-adopted		Adopted	
	n	*%*	*n*	*%*
Would you like to go on to higher education at a university after you finish school/ college?				
Likely	19	95	4	57.1
Neither	1	5	1	14.3
Unlikely	0	0	2	28.6
Total	20	100	7	100
What job would you most like to do once you leave school of finish full time education?				
Likely	18	69.2	15	83.3
Neither	7	26.9	1	5.6
Unlikely	1	3.9	2	11.1
Total	26	100	18	100

School experience of being adopted

Adopted adolescents completed questions about their school experience of being adopted. Significant negative relationships existed between both school belonging and self-esteem and negative feelings of being adopted: a greater sense of school belonging

and higher self-esteem were associated with lower negative feelings about being adopted in the school context. Being more comfortable in talking about adoption at school was associated with more positive feelings about adoption (r=0.325) and lower negative feelings about adoption (r= -0.454). Just over half of the adopted young people in this sample, perceived the social reaction to their adopted status as negative. Table 22 shows the percentages for each question.

Table 22

Perceived Social Reaction to Adoption Status

Social reaction to adoption status item	Yes		No	
	n	*%*	*n*	*%*
I am teased about being adopted.	12	63.2	7	36.8
Do you think people are treated differently when people know you are adopted?	9	47.4	10	52.6
Do you think that some people do not react well to adopted children?	11	57.9	8	42.1

Table 23

Bivariate Correlations Between Variables Used in the BEANS Survey

	1	2	3	4	5	6	7					*M*	*SD*
1. Age	1	-.093	.199	.118	-.006	.137	-.035					16.22	1.18
2. Socio economic status	-.118	1	-.042	.235	.050	.105	.066					9.11	2.0
3. Information identity style	.471[*]	.295	1	.2	.024	.228	.447[**]					3.48	0.65
4. Normative identity style	-.240	-.252	-.265	1	.220	.099	.165					3.11	0.53
5. Diffuse identity style	-.063	-.189	-.142	-.096	1	-.390[**]	-.387[**]					3.06	0.77
6. School membership	-.423	.245	.112	.445	-.336	1	.624[**]					3.38	0.82
7. Self-esteem	-.339	.132	-.174	.599[**]	-.153	.746[**]	1					26.2	6.8
	Adopted group only							8	9	10	11		
8. Negative feelings about adoption	.402	-.229	.398	-.415	-.102	-.551[*]	-.761[**]	1					
9. Positive feelings about adoption	-.091	-.260	.012	.040	.502[*]	-.007	.312	-.350	1				
10. Comfort in social communication	-.052	-.346	-.020	.156	.046	.333	.182	-.454	.325	1			
11. Social disclosure	.031	-.440	-.096	.248	-.407	.180	-.231	.229	-.255	.375	1		
M	15.11	9.79	3.04	3.08	3.04	3.28	26.67	10.22	8.11	10.94	3.38		
SD	1.08	2.04	0.52	0.52	0.78	1.20	9.17	4.78	3.7	3.98	0.41		

Note. Non-adopted group coefficients above the diagonal; adopted group coefficients below the diagonal; *p*<0.05; **p*<0.01.

Discussion

This chapter aimed to explore academic attainment, school experience, identity development and educational and occupational aspirations for adopted and non-adopted adolescents in the UK. It is the first empirical UK study to examine adopted adolescents' identity-related information and consider associations with academic attainment and school experience. Using self-report measures and an accessible online platform, this study offered an opportunity for adopted adolescents' voices to be heard in an area of research that has relied almost exclusively on parent perspectives (Garcia-Quiroga & Salvo Agoglia, 2020). This chapter also builds on the findings of Chapter 4 by investigating the educational and occupational aspirations of adolescent adoptees.

Participants were asked to respond to questions regarding their career choices beyond the compulsory school age of 16, whether to continue in some form of education or to seek employment, and to identify their occupational aspirations. In this sample, a significantly smaller proportion of adopted relative to non-adopted adolescents intended to stay in some form of education post-16. This finding is consistent with the outcomes of Chapter 4 derived from the Understanding Society data. Whilst group differences in aspiration to attend university, or in the type of occupational aspiration, were not found, for those that responded positively to going on to higher education, a larger proportion of non-adopted children thought it was likely to happen. Conversely, a larger proportion of adopted children were certain about their career aspiration (i.e., they thought it was likely to happen). For this sample, adopted adolescents have decided, with a high level of certainty, prior to leaving compulsory education that their career path involves employment at the earliest opportunity. Intended career paths for non-adopted adolescents largely involved continuing to university education and they appeared confident about doing so.

Regarding identity styles, it was hypothesised that a difference in assigned style according to the outcomes from the ISI-6G would be found between the two groups. Specifically, it was hypothesized that the adopted group would show a dominance of the diffuse/ avoidant style, both within the adopted group itself and in comparison to the non-adopted group. It was also hypothesised that adolescents in the non-adopted group would be categorised as either normative or information more so than diffuse/ avoidant within the group and in comparison, to the adopted group. Whilst more of the adopted group were assigned to the diffuse /avoidant style than the other styles group differences were not detected: similar proportions of both groups were also assigned to the diffuse

/avoidant style. At face value, the between group similarities in the present sample suggest that adolescents do not necessarily process identity-related information differently based on adoptive status. Explanations for this unexpected result may not only be attributable to low power from small sample sizes. Firstly, White et al. (1998) expected each of the identity style scales to be associated in a particular pattern: a moderate positive correlation between the information and normative scale; negative correlations between the diffuse / avoidant style and both the information and normative scales. The findings of this study partly followed this pattern in that the adopted group showed small negative correlations between the diffuse /avoidant scales and the non-adopted group's scores on the information and normative scales were moderately, positively associated. However, the remaining inter-scale associations did not follow the expected pattern, for either group. It is possible that the ISI-6G scale items posed comprehension difficulties for respondents at a cultural (the scale was devised in the United States and whilst culturally similar in many ways, some of the terminology may not have been familiar to the respondents) and cognitive level (the original scale was piloted on college-aged students) though it was hoped that the adjustments made to the language level from the original ISI to the ISI-6G would compensate for this.

It is more likely that the scale items posed difficulties for the adopted group because several items focused on value judgements related to family life. On closer inspection, the normative scale contained items about family, specifically (e.g. *I act the way I do because of the values I was brought up with; I like to deal with things the way my parents said I should*), may have caused some confusion or hesitation in the response. Further evidence for the potential inappropriateness of the scale for adopted adolescents may be reflected in the low internal reliability scores for the normative scale in the adopted group ($\alpha=0.399$). One item in particular, *I've known since I was young what I wanted to be* was particularly problematic, with this item removed, the alpha value would be 0.583 which is close to the alpha value (0.64) reported by White et al. (1998). Piloting of the questionnaire prior to distribution did not raise any issues with this scale, though the pilot sample comprised largely of an opportunistic sample of non-adopted undergraduate students; consequently, issues with scale item appropriateness for adoptees, may have been missed.

The link between self-esteem and school belonging has been established (e.g. Allen & Kern, 2017; Slaten et al., 2016) and was supported in the present sample: adolescents who have a higher regard for themselves also expressed a greater sense of belonging to the school community. Unexpectedly, this held true regardless of adoptive

status as it was hypothesised that adopted adolescents would report a lower sense of school belonging. Both groups reported similar levels of self-esteem and school belonging suggesting that, for this sample, adoptive status may not play a pivotal role in how adolescents regard themselves or how they perceive acceptance and inclusion into the school community. In an extensive meta-analysis, Juffer and van IJzendoorn (2007) demonstrated not only that adoptees did not lack self-esteem, but also that moderating factors (e.g. age at adoption, life stage at point of assessment, type of adoption), did not increase the risk for low self-esteem in specific groups of adoptees. In other words, adoptees' displayed similar levels of self-esteem to non-adopted peers *despite* their experience of early adversity. Juffer and van IJzendoorn (2007) explain similar levels of self-esteem in adopted and non-adopted children in terms of protective factors in the home and this may well be the case in our sample. Though accurate measurement of time since adoption placement was not feasible in this study, given the average age of adoption in the UK is three years (DfE, 2020b), it is likely that the adoptees in our sample have had some semblance of stability at home for most of their lives and this may have served as one of several protective factors, though additional research is required to establish this.

For adopted adolescents who have been adopted following institutionalization, lower levels of school membership than their non-adopted peers are reported (Lutes, Johnson, & Gunnar, 2016). The PSSM scale is a measure of global connectedness to the school community and may not capture the intricacies of relationships with teachers and peers and how they might impact on a sense of belonging (Paniagua et al., 2020). Given that children and young people adopted from care often face difficulties in forming and maintaining relationships, further exploration may highlight the nature of their contribution to school belonging.

To further explore school experience for adoptees, items were included in the questionnaire that related to feelings of being adopted, social communication of adoptive status and perceptions of reactions to their adoptive status (adapted from Soares, Barbosa-Ducharne, Palacios, and Fonseca (2017)). Negative feelings of being adopted in the school context were associated with a sense of school belonging (Table 23), in that, as a sense of school membership increased, lower negative feelings of being adopted in the school context were reported. Negative feelings of adoption were similarly associated with self-esteem: those adolescents with a greater sense of self-esteem feel less negative about their adoptive status. Conversely, adoptees with lower levels of self-esteem tend to feel more negative about being adopted, in the school

context. It is important to note that the scales measuring appraisals of being adopted were not polar, i.e. positive and negative feelings were not opposites of the same scale. This means that a respondent feeling less negative about being adopted in school does not necessarily indicate that they feel positive about their adoptive status. In fact, the negative association between the positive and negative feelings scales, was not significant (Table 23). Analysis of young people's responses in the present study cannot establish a causal connection between self-esteem, school membership and feeling negative about adoptive status in the school context. It does suggest, however, that these factors may be related in meaningful ways and further investigation is warranted.

Whilst the associations between school-based comfort in talking about adoption and positive or negative feelings about adoption were not significant, they are in the same direction as Soares, Barbosa-Ducharne, Palacios, and Fonseca (2017). Also of note is the moderate association between school membership and comfort in talking about adoption; it is plausible that a school climate which provides a safe space for adolescents to freely discuss their adoptive status, may see a greater sense of belonging from its pupils. It would also appear from the outcomes of the adoption related questions that comfort in communicating about adoptive status is not a factor in the extended social network.

A majority of adopted young people in the present sample, reported being teased about being adopted, and think that some people do not react well to adopted children. Almost half reported that adopted children are treated differently. These findings echo those of previous studies exploring perceptions and reactions to adoptive status (e.g. Baden, 2016; Crowley, 2019; Neil, 2012; Reinoso et al., 2016). These results are concerning because established negative perceptions may preclude opportunities in the school setting to develop healthy relationships and may further contribute to the challenges faced by adoptive young people when navigating an already tumultuous stage of development. It is possible that an increased awareness of the sensitivities of being an adopted young person, by the whole school community, may contribute to general well-being and may improve school experience.

If the school community is to be considered an extended part of the adopted child's support network, then it is logical to expect all school staff to be aware of specific, effective, and beneficial strategies to support well-being and development. The successful socialization of adoption (Soares et al., 2018) with school staff and peers is therefore a crucial contribution to the construction of a stable and positive sense of adoptive identity. If the extended network is not well informed and is fuelled by

stereotypical understandings of adoption, increased instances of bullying from peers, or micro-aggressions from school staff, as well as peers, may be seen (Baden, 2016). Additionally, if the mechanism which the child uses to process the information or feedback from peers and *trusted* adults is altered because of early adversity, making rational meaning of the past may be challenging. It is likely that a child's extended network influences identity development, peer relationships, and school experience but perhaps more so for children who are continuing to contend with the impact of early adversity and contact with members of their birth family, either directly or indirectly.

Communication about adoption could be at the heart of establishing and maintaining continuity between domains of care. Chapter 3 established the importance of home-school communication for adoptive families. In communicating with schools, adoptive parents may well be framing the meaning making for school staff in such a way to maintain the continuity of the adoption narrative, thus reinforcing the child's ongoing understanding of their past. Should a continuous narrative be established, it may be that the additional mental and emotional resources drawn upon by the adolescent to accommodate misconceptions about adoption from poorly informed others in the school community are redundant. Consequently, more resources may be available for other areas of school engagement, which may ultimately lead to a less challenging school experience and improved achievement.

Limitations and future research

The present study highlights potential differences in educational and occupational aspirations and expectations between adopted and non-adopted adolescents, but also gives voice to adopted adolescents' school experience. Some limitations are nevertheless noteworthy. The foremost limitation is the lack of statistical power from the unexpected sample size for both groups, particularly the adopted group. Inferences must therefore be made with caution and may not be generalizable to the adolescent population in the UK, regardless of adoptive status.

The reduced sample sizes in this case may have resulted in considerable homogeneity observed between the two groups. No significant differences in terms of most demographics (i.e. proportions of sex were similar; levels of socio-economic status, ethnicity, country of residence, number of siblings at home) or measures (i.e. self-esteem, identity style, school belonging, occupational desirability) were found. What separated the two groups, apart from adoptive status, was that the adopted group were slightly younger, more likely to have SEN, smaller social networks, more likely

not to aspire to stay in education post-16, and for those who did aspire to higher education then they were less likely to think it will happen but more likely to think that their occupational aspiration will happen. Further investigation is warranted in this area and future studies should consider the challenge of recruiting adopted young people to participate in research, especially regarding access and consent.

Limitations are also found in the varying geographical distribution of the sample. The non-adopted group were recruited from a single, large secondary school and consequently the participants who took part were from a population limited by the school's catchment area and admission policies. Out of necessity, the adopted group were recruited nationally. The methods used to recruit adopted adolescents (e.g. social media, adoption charities and organisations) may also present issues related to selection bias. It is possible that adoptive families who gave consent were minded to do so because their current perception of the adoption experience is largely positive. The adopted group is likely not to be representative of the adopted population as a whole and caution should be taken when generalising from these results. Future studies should address issues related to selection bias, whilst being mindful of the increased complexity for recruitment in doing so. Ideally, a national adoption survey would be conducted that not only draws its sample from a wider range of gatekeepers, but also works with them to support adoptive families in participation. The survey design provided little opportunity for obtaining detailed information on additional demographic factors, e.g. parental income, highest level of parent education; factors that have previously been identified to affect outcomes (Hamilton et al., 2007).

Caution must also be taken in ascribing too much value to the difference in additional educational needs between the two groups. Though it was found that adopted young people in our sample were more likely to have additional needs than the non-adopted group, most of the adopted group reported no additional needs. Further, it was not possible to ascertain the nature or severity of the additional needs and the resultant impact on their academic prowess or school experience, including type of educational setting (e.g. mainstream or special education). Existing research suggests that adopted children are more likely than their peers to be referred to mental health services or receive additional support (Dalen & Theie, 2019; Juffer & van IJzendoorn, 2005), these characteristics were not apparent in this sample and, as such, the contribution of the presence of additional educational needs may not account for differences or contribute greatly to significant associations.

Regarding the ISI-6G, including the commitment sub-scale may have shed some light on the outcomes recorded, in that low commitment across the board may not have led to strong associations or observable differences in identity style groupings. The impact of the excluded commitment scale on the pattern of results in the present study is speculative, however, and the construct of identity may have been better explored through interviews or focus groups.

Conclusion

A persistent educational attainment gap exists for adopted adolescents in the UK, yet research, from the point of view adopted young people, examining inter- and intra-personal aspects is sparse. Despite limitations, this study indicates that adoptive status has implications for adolescent school experience with consequences for educational and occupational expectations. Frustratingly, the main aims regarding academic attainment could not be explored fully due to problematic access to a vulnerable sample. Large-scale household studies (e.g. Understanding Society) have the structure and capacity to include adoptive families in their sampling frame through purposive methods to boost the representativeness of the overall sample and thus enable robust exploration of school experience for adopted adolescents. Future research should also employ a mixed methods approach to provide fertile opportunities for the voice of adopted young people to be heard.

Overall, this study contributes to knowledge about using the voice of adopted young people and the justification to do so. These findings correlate with what is known about the interactions between self and peers and adds new knowledge as previous surveys have relied on mainly adult perspectives. This study validates the use of adoptive young people's voice in exploring experiences of social networks and communities, including school, whilst simultaneously highlighting considerable methodological challenges in sample recruitment and consent. The realisation of the enduring impact of early trauma on children and young people in terms of education has gained momentum in recent years, as seen in the increased drive for *attachment aware* schools and trauma informed school improvement interventions (Thomas et al., 2019). Improvements in practice at policy and school level should be informed by the outcomes of this study, especially regarding self-esteem, school belonging and the socialization of adoption.

Chapter 6: General discussion

Introduction

The aim of my doctoral research was to explore the persistent and enduring education gap that exists for adopted children. Pervasive views of the nature and impact of adoption as a panacea for early adversity renders this phenomenon an under-researched area in child developmental and social care research. Globally, adopted children and young people form a significant minority, many of whom face residual challenges across the life-course from their early life experiences: a successful educational career is a key factor in ameliorating the impact of those early experiences to maximise opportunities for healthy development. Though interest in adoption research is gaining momentum, particularly in areas of social competence (Cáceres, Moreno, Román, & Palacios, 2021; Soares et al., 2019) and the lived experience of adoption, the perspective of adopted children and young people is notable in the research literature by its scarcity. Through a multi-informant approach (adoptees, adoptive parents) my research aimed to widen the scope of previous research by acknowledging the importance of school experiences and individual developmental challenges outside of academic attainment. In particular, concepts of adoptive identity, school belonging and socialisation of adoption were employed to further explore school experience and performance for adopted children and young people.

A systematic review of recent research literature was completed (Chapter 2) to ascertain the status quo for published research of adoption in education, to identify potential gaps in research for investigation and to learn lessons from previous work. Most of the studies included in the review focussed on school performance and behavioural outcomes for children in the mid- to upper- adolescent age range, highlighting a clear gap in the literature for exploration of the beginning of the school journey and how adoptive families may be best supported in that transition. Chapter 3, therefore, explored experiences of newly formed adoptive families' transition to formal schooling using data from the Wales Adoption Cohort Study. Many families reported largely positive experiences of starting school facilitated by clear communication and parents' advocacy for matters specifically related to adoption. A further finding of the systematic review in Chapter 2 outlined the meagre, by comparison, sample sizes often found in research that primarily focuses on adoption. A potentially large cohort of adopted adolescents was identified in the USoc survey. Amongst a range of variables, the Youth Survey in USoc explored well-being, school experience and occupational

aspiration. However, meticulous examination of the dataset revealed only a small number of viable cases for analysis (Chapter 4). Despite the unexpected reduction in sample size, tentative findings indicated differences in behavioural and emotional functioning, school engagement and occupational aspiration for adoptees, compared to non-adopted peers, which appeared worthy of further investigation. A bespoke survey for adopted adolescents was constructed to address research gaps highlighted in previous chapters (e.g., adoptee voice, school experience) and to develop understanding of concepts (e.g., educational and occupational aspiration) suggested by my earlier findings (Chapter 5).

Findings from each chapter contribute new knowledge to the field of adoption research. The present chapter aims to draw these threads together. To aid coherence and avoid repetition, the discussion is presented thematically as a series of challenges for different levels of the adoption ecosystem (Brodzinsky et al., 2021; Palacios, 2009), drawing on outcomes from specific chapters, where relevant. The first thread discusses challenges for adopted children and young people, including emotional symptoms and behavioural problems, socialisation of adoption and future aspirations. The next thread concerns challenges for parents and families, including advocacy in the home-school partnership and an emerging notion of an *adoptive family identity*. The third thread presents challenges arising from the findings for schools and associated adoption professionals; school belonging and understanding the nuances of adoption and communication. The final component of this section discusses the challenges for adoption research by synthesising methodological issues encountered over the course of my studies. Implications for policy and practice follow before strengths and limitations of the thesis are outlined and directions for future research identified. A summary conclusion will complete the thesis discussion.

Challenges for adopted children and young people

Emotional symptoms and behavioural problems

It is well documented that adopted children and young people fare less well than their non-adopted peers in terms of emotional symptoms and behavioural problems (e.g. Juffer & van IJzendoorn, 2005; Sanchez-Sandoval & Palacios, 2012), but marginally better than their counterparts remaining in and on the edge of care (van IJzendoorn et al., 2005). Findings from the systematic review in Chapter 2 largely confirmed that the difference between adopted and non-adopted children's emotional symptoms and

behavioural problems persists across a range of ages and measurement instruments, though most of the included studies were based in the US, limiting generalisation to other countries, including the UK. However, recent evidence from countries outside of the US corroborate an enduring challenge for adoptees (e.g. Paine et al., 2020; Smith et al., 2021; Tregeagle et al., 2019). Further exploration in Chapters 3 and 4 revealed elevated levels of emotional symptoms and behavioural problems for domestically adopted UK children when compared to national norms or a matched sample of non-adoptees, respectively.

It is important to note that two studies (Lloyd & Barth, 2011 and Nilsson et al., 2011) included in the systematic review found no differences between adopted and non-adopted groups in emotional symptoms and behavioural problems, and a further study (Lewis et al., 2007) found no difference for internalising symptoms only. Adolescent respondents in the USoc survey (Chapter 4) also reported similar levels of internalising symptoms on the SDQ, regardless of adoptive status. In Chapter 3, parents of recently placed adopted children rated their children higher than national norms on all sub-scales of the SDQ, except for peer problems and emotional symptoms subscales. Lack of difference on the peer problems scale may be attributed to the age of the children at time of testing (M_{age}=5.34 years) in that potential issues between peers are yet to fully emerge. Further, none of the measures used (i.e. SDQ, CBCL, BPI) were specifically designed for exploring emotional symptoms and behavioural problems in care-experienced children and so may have lacked sensitivity to consistently identify differences across groups (Eadie, Wegener, & Bergh, 2020). Alternative psychometric scales have been devised to capture the impact of traumatic experiences possibly faced by care experienced children (e.g. Brief Assessment Checklists; Tarren-Sweeney, 2013). Nonetheless, the SDQ remains one of the most widely used measures in CAMHS for screening emotional symptoms and behavioural problems as it is sufficiently sensitive to detect mental health problems (Mathai, Anderson, & Bourne, 2002; Yoon et al., 2021) across diverse populations. In addition, all but one of the studies included in the systematic review (Chapter 2) that explored emotional symptoms and behavioural problems, and the study in Chapter 3, relied on parent reports of behaviour, as is common in adoption research (e.g. Neil, Morciano, Young, & Hartley, 2020; Soares et al., 2019). One study (Sanchez-Sandoval & Palacios, 2012), used a validated teacher report scale only and the Understanding Society survey (Chapter 4) used self-report only. Paine et al. (2021), however, used both parent and teacher reports.

Research designs that use multiple informants to explore psychopathology offer incremental validity and information over single sources (Alexander, McKnight, Disabato, & Kashdan, 2017) and may account for discrepancies in ratings of child behaviour according to situational contexts (Martel, Markon, & Smith, 2017). Further, variance in scale scores occurs depending on the informant. In a survey of parents and teachers, Mathai et al. (2002) examined 130 new referrals to the Child and Adolescent Mental Health Service in Australia; a self-report SDQ was also used. Parents were more likely to rate their children higher for emotional symptoms and behavioural problems on the SDQ than teachers or the children themselves. Issues with relying on a single-informant design may also be compounded by variance within informant type. In the study by Splett et al. (2020), 160 teachers rated their students' behaviour (*n*=2450) on the Behavioural and Emotional Screening System (BESS) – Teacher Form (Reynolds & Kamphaus, 2015). Multi-level analysis revealed that between-teacher variance could only be partially explained by differences in perceptions of emotional symptoms and behavioural problems and further empirical exploration was required. Accurate estimation of children's psychopathology in terms of emotional symptoms and behavioural problems has clinical implications but also for resource allocation and effective intervention in an educational setting. It would seem that instruments designed for multi-informant use (e.g. SDQ – parent, teacher and self-report) should be incorporated into future research designs to maximise validity and account for variance in situational context and informant. Large, national surveys, such as the Understanding Society project, can not only include a multi-informant approach (parents and children are surveyed as one household) but can also boost under-represented groups (in this case adopted children and young people) to allow for detailed exploration of pertinent issues for adoptees.

Socialisation of adoption

Chapter 5 explored school experience for adopted adolescents including feelings about being adopted, communication about adoption and disclosure of adoptive status. Considering the modest sample, findings from Chapter 5 indicated that adopted adolescents perceive the reaction overall (in a school setting) to their adoptive status as negative: almost two-thirds reported being teased about being adopted. Earlier research into stigma associated with adoption corroborates this finding (Neil, 2012). The results from Chapter 5 also indicated that self-esteem and school belonging may be a factor in adjusting to adoptive status insofar as they were negatively associated with negative

feelings about adoption. The experience of being adopted in the school context for 94 Portuguese adoptees (M_{age}= 8.81 years, SD =0.79) was explored by Soares, Barbosa-Ducharne, Palacios, and Fonseca (2017). Through their analysis of child interviews and psychometric scales, Soares and colleagues suggest that both individual (feelings about adoption) and interpersonal (social communication about adoption) processes interact to explain feelings related to being adopted in the school context. Their study highlights the complexity and nuance of school experience for adopted children, in which the feelings involved and the comfort in the social communication about adoption provide an emotional characterisation of the adjustment process for adoptees in school. Part of the adjustment process lies in the challenges adoptees experience when transitioning their established adoption narrative into a new or different setting; in the case of this thesis, from home to school. (Bronfenbrenner, 2005) describes this transition as part of the mesosystem. Findings from Chapter 5 add to the potential for the concepts of school belonging and self-esteem to be considered as additional factors in further explorations of the mesosystem. The interaction between school belonging, self-esteem and feelings about adoption may yield additional insights into the emotional characterisation (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017) of the school experience of being adopted. Novel research in this area would extend the application of the adoption ecosystem described earlier. By considering how the microsystem of school influences adoptee school experience, strategies for intervention may be finely tuned to support adoptees as they progress through their school journey.

Open communication about adoption plays a key role in adoptive family interaction (Aramburu Alegret et al., 2018; Brodzinsky, 2006; Soares et al., 2018), providing opportunities for adoptees to make sense of their pre-adoption experiences (Pinderhughes & Brodzinsky, 2019). Similarly, in the school context, open and sensitive communication about adoption between adoptees, parents, peers, school staff and associated professionals may be integral to successful socialisation of adoption as a continuation of the openly communicative atmosphere. When discussing items of a deeply personal nature one must feel comfortable in the practice of doing so. Adoption is a complex experience, indicated by the protracted process of resolving adoption issues. Part of the adjustment to adoptive status involves re-framing and re-establishing deeply sensitive narratives that contribute to healthy adjustment (Grotevant et al., 2017). For this to happen, open discussion within and between microsystems is necessary; for an adopted child this will immediately occur within the family but inevitably, as the child grows and the social sphere expands, will extend into the school community and

beyond. Findings from Chapter 5 indicate that feeling secure in social communication about adoption may be linked to school belonging. Further exploration of the interaction between school belonging and communication about adoption is warranted as the link to school belonging could represent a marker for a contented child, rather than something specific about school. Having a positive sense of themselves in relations to others could be differentially meaningful to children according to their adoptive status.

Qualitative analysis of the WACS survey responses in Chapter 3 concur with the idea that the quality of communication about adoption related issues is somewhat dependent on the relationship established between home and school. Key actors in the school context are peers and school staff, usually teachers, but also teaching assistants. The wider pastoral team may also take on an important role, perhaps being better placed to develop a trusting relationship where comfort in talking about sensitive issues, in this case related to adoption, may be engendered. Comfort in the social communication about adoption, both in informal conversations and interactions between teachers and peers, but also in formal exchanges, in the classroom or meetings (e.g., parents' evenings, EHCP reviews etc), may well have an impact on how the adopted young person, and their family, construct a meaningful narrative of their adoptive status and consequently how this in turn manifests in attitude and behaviour in school. Adoptive parents in the WACS survey reported that support from school was effective when dialogue was reciprocal and demonstrated an understanding of issues specifically related to adoption. A consistent, knowledgeable member of school staff readily available for discussion added to parents' feelings of effective support. Future research that explores characteristics of key members in the adoption network may provide useful information for resource allocation in schools and support the view that a designated member of staff, knowledgeable of adoption related issues, would be of benefit for adoptive families and their children in school.

Chapters 4 and 5 found smaller social networks for adopted children and young people when compared to a general population comparison group. Importantly, due to study design and distribution of adopted children across the country (i.e., adopted children form a relatively small proportion of a schools' population) the comparison group was not the in-school peer group of the adopted children. Differences therefore may be attributed to characteristics of the individual schools, but this is unlikely as the difference was observed in a large nationally representative sample spanning many schools (Understanding Society; Chapter 4) as well as the sample used in Chapter 5, who were recruited from one large secondary school.

Peers may be viewed as the child's choice of an extended network to facilitate meaning making, or as a test bed for new ideas as adopted young people explore narratives of identity (during moratorium, perhaps (Marcia, 1987)). As adopted children grow and develop their meaning of the past, it is possible that they, autonomously, recruit selected peers as a perceived *safe* ground within which to communicate about adoption. Understandably, such recruitment may well occur in typically developing adolescents. In the case of the adopted adolescent, however, the difference lies in the uniqueness of adoption. It is likely that their peers are not adopted and may even have limited understanding of adoption. It is also feasible for a scenario where adopted peers are specifically sought, as a kindred spirit, with which to share experiences.

Opportunities for experimental discussion about adoption related matters may be limited in a smaller social network but may provide an intimate and trusting atmosphere conducive to discussing sensitive topics. Maintenance of quality social relationships, rather than network size benefits well-being (McMahon, Creaven, & Gallagher, 2020). Much of the existing research regarding children's social networks and relationships relies on parent or teacher report, a notable exception, however, is the Brightspots project (CoramVoice, 2021; Selwyn, Wood, & Newman, 2017). Gathering over 10,000 responses across 50 local authorities in the UK, the Brightspots online surveys highlighted factors that care experienced children and young people thought were important to their well-being (Staines & Selwyn, 2020; Wood & Selwyn, 2017). One of the key well-being indicators identified was concerned with relationships, specifically, having at least one good friend. It may be that the quality of the relationship is key and a large social group may not be fundamental to increasing comfort in discussing sensitive and personal topics, such as experiences of care and adoption (Wood & Selwyn, 2017). The quality of friendships, however, was not established in the present study and so having fewer friends may not be an issue, if they are of sufficient quality to provide appropriate emotional support.

Discussing adoption related matters with peers is especially difficult if a child is not in an emotionally prepared state to do so, or when their adoptive status knowingly puts them in the minority; feelings of difference or fears of negative reaction may increase (Soares et al., 2018). At the adolescent stage of development, most of the stress related to being adopted is socially dependent (Neil, 2012). Adopted children recognise when peers have negative attitudes towards their adoptive status (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017; Chapter 5). The recognition of one's negative standing amongst peers has been termed *status loss* (Brodzinsky, 2014; p20) and is yet

another form of loss for the developing adopted adolescent to resolve. Status loss in the school context is likely to accentuate feelings of non-acceptance and difference, thus destabilising adopted children's self-esteem and identity construction, i.e. feelings towards their school experience of being adopted (Soares et al., 2018). Findings from Chapter 5 suggested that adopted children perceive others' reaction to their adopted status in a negative fashion, including teasing about adoption. Further investigation of the peer microsystem may reveal useful insight into its role in experiencing status loss, developing the adoption narrative, and adolescent development generally.

The theme of advocacy by adoptive parents when communicating with schools established in Chapter 3, highlighted their role in supporting adopted children in the transition to new microsystems (e.g. school). By translating adoption specific knowledge, as it pertains to their child, for school staff, parents demonstrated how the mesosystem facilitates an adopted child's transition through the systems of the adoption ecology (Palacios, 2009). Adoptive parents become *meaning makers* (Brodzinsky, 2014) of their child's life story, achieved through open adoption communication; acting as moderators of childhood memories and caretakers of items related to early life which in turn supports healthy adoptive identity development. Helping children cope with negative reactions about adoption is another facet of the role of meaning maker (Soares et al., 2018). Adoptive parents often do not have access to complete histories of their children's lives but are obligated to take on the mantle of meaning maker *regardless* of the amount (or quality) of information they have about the child's past. Without opportunities to openly discuss adoption within the family, children experience increased difficulties in making sense of past experiences and may encounter difficulties in resolving a sense of identity (Brodzinsky, 2011; Grotevant & Von Korff, 2011). When a child enters school, a 'loss of meaning maker' (Brodzinsky, 2014; p19) may be experienced. It is possible that adopted children actively seek to resolve this loss by recruiting school staff (and peers) as an extended family of meaning makers (H. Grotevant, personal communication, 06/07/21). Whilst the search for surrogate meaning makers may hold true for all typically developing children, the nuance for adopted children is that the life experiences and consequent adjustments needed by an adopted young person are more complex. Specialist awareness and up-to-date knowledge of issues related to adoption is required to successfully fulfil this role. The ability of teachers and ancillary staff to provide continuity in the meanings made by adoptive parents could be pivotal, as was indicated by parents' views of key characteristics for schools when educating adopted children (Chapter 3). Furthermore, parents in the

WACS survey described their lived experience of mediating the search for meaning makers through advocating for their child's adoption specific needs. Consistent and coherent messages from those in a position of parental responsibility, whether directly *in loco parentis* or not, should facilitate healthy identity development (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017) and lead to a more positive experience of school.

Further research might explore the impact on the adopted adolescent when continuity between microsystems (i.e. an effective mesosystem) is broken, does not exist or is ill-informed. It is conceivable that layers of challenge are added for the developing adolescent trying to make sense of their past experiences and childhood, thus restricting attention to academic demands. Further research to explore the role of school staff acting as extended meaning makers is therefore warranted and may support adopted adolescents in the future. However, many adopted children in the education system are currently struggling with issues directly related to the socialisation of adoption (AUK, 2021; Chapter 5). Policy change, at school and local authority level, to incorporate an ongoing programme of developing awareness of specific adoption related issues for all school staff is urgently required.

Future aspirations

Chapters 4 and 5 explored educational and occupational aspirations for adopted and non-adopted adolescents. Results indicated that adopted children were more likely to show an intention to seek full-time work at the end of compulsory schooling and less likely to choose to continue education. However, in both studies no differences according to adoptive status for desired occupation were found. In other words, even though adopted adolescents reported it more likely to seek full time employment at 16, there were no differences in job status aspired to, when compared to non-adopted adolescents. In Chapter 5, I added a second part to the questions about future aspiration to ascertain level of expectation. Focussing solely on *aspiration* may not fully elucidate influences on educational and wider life outcomes (Green, Parsons, Sullivan, & Wiggins, 2018) as several recent, large scale studies demonstrate that disadvantaged young people do not necessarily hold lower aspirations (Archer, DeWitt, & Wong, 2014) and that other factors exist as barriers to accessing higher education in particular (Harrison, 2018). Recent administrative data analysis has highlighted that a large proportion of variance in higher education participation can be accounted for by attainment at age 16 (Crawford & Greaves, 2015) over socio-economic factors. For adopted children specifically, this poses an additional challenge as the DfE and Welsh

Assembly Government data presented in Chapter 1 shows the markedly different attainment outcomes for all care-experienced children. Ascertaining whether a particular life outcome is likely or not, may provide a more meaningful indication of adopted young people's future goals. In the BEANS survey (Chapter 5) the non-adopted group were more certain about their continuing education aspiration, whereas the adopted group seemed more confident of their potential career path. Given the modest sample sizes involved these findings are tentative but, suggest that conceptions of future selves (Harrison, 2018) may play an important role in adjustment to adoptive status for adolescents and further exploration of the interplay between occupational aspiration, educational achievement and academic self-concept is justified.

Challenges for adoptive families

Families and schools form two major influential microsystems for the developing child and young person. For families formed through adoption, additional layers of complexity are present as they interact with schools and other microsystems (Brodzinsky et al., 2021; Palacios, 2009). Adopted children's developmental trajectories are heavily influenced by their early experiences and how they adjust to them. The importance of the mesosystem (i.e. the interactions between microsystems) plays a key role for adoptive families and their schools (Bronfenbrenner, 2005).

Advocacy

The Wales Adoption Cohort Study (WACS; Chapter 3) explored experiences of beginning school for newly formed adoptive families. Analysis of qualitative responses, from two time points, revealed that school experience for these adoptive families is largely positive and that schools were generally responsive to the needs of the adopted children. Making the transition to formal schooling has been previously identified as potentially stressful (Dunlop & Fabian, 2007), but most parents in the WACS survey celebrated the success of their children, perceived their academic progress to be average or above and felt that their children had settled in as expected, or better. A positive perception of start to the school career in this case may be explained, at least in part, by the strong sense of *advocacy* that adoptive parents displayed. In the WACS, parents were pro-active in initiating communication with the school about matters specifically related to adoption, as well as seeking out or providing support for their children. Importantly, the quality of the communication between school and home was deemed to be key and was heightened by the presence of a knowledgeable (or at least open-

minded) member of the school staff who provided a sense of congruity with the thoughts and feelings of the adoptive parents. In a survey of adoptive parents, representing 141 school-aged adopted children, Cooper and Johnson (2007) presented similar responses. Almost half (43%) reported that understanding of adoption specific issues by school staff were key to successful school experience, and 95% indicated they would value access to a specific person, conversant in adoption related issues.

When parents were asked to identify key features of schools related to enabling adopted children, being communicative formed one of the themes (along with understanding, supportiveness and consistency). Whilst these key characteristics may be suggested by parents of most children, regardless of adoptive status, the responses in the WACS were framed around understanding adoption experiences and support needs. Through the adoptive lens, these qualities become communication *about adoption,* understanding *the nuances of the impact of adoption*, supporting *families experiencing additional levels of challenge* and being consistent *in their attitudes towards adoption*. Collectively these qualities provide a basis for supporting adoptive families by schools but were also found in the themes identified in the qualitative analysis. Further research might pursue this line of enquiry by establishing the depth of these characteristics in schools that are effective in teaching children adopted from care. Importantly, it may also be possible to establish the extent to which effective qualities for successful outcomes are negotiated by parents through their sense of advocacy.

Impact on adoptive family life and adoptive family identity

Much of the extant research concerned with adjustment to adoption is rightly concerned with aspects related to individual development. For example, examination of dyadic relationships such as parent-child, or between peers (Canzi, Donato, et al., 2019; Canzi, Molgora, et al., 2019); or the emotional symptoms and behavioural problems faced by adoptees at various life stages (e.g. Chapter 4; Blake et al., 2021; Lionetti, Barone, & Medimond, 2013; Reinoso et al., 2016). Parents in the WACS study (Chapter 3) were indeed concerned with such issues, but also considered the impact the adoption process had on family life, most notably how they conceived themselves as a family. In the process of adoption, parents move from idealising parenthood and family as theoretical constructs before placement, to family as a reality after placement (Gabriel & Keller, 2021). The transition from theory to reality may be a point of crisis, particularly if expectations of parenthood and family diverge from reality. The findings from Chapter 3 suggest that adjustment to adoptive family life, as described by adoptive

parents, may take one of two forms: *cohesion* or *normalisation.* In the Zurich Adoption Study (Gabriel & Keller, 2021) coping patterns of adoptive parents were found to include several related to normalisation (harmony, optimism and calmness). As in the WACS, newly placed adoptive families in the Zurich study appeared to be flourishing in the main, most notably in comparable (to national norms) scale scores for emotional symptoms and behavioural problems. However, at the second Wave (5 years post-placement), tendencies of normalisation remained, but elevated scores on the CBCL and increases in critical behavioural incidents were observed. Gabriel and Keller (2021) highlight that the change in behaviour reflected an end to a *honeymoon* period but also coincided with school entry. A healthy adoptive family system is dependent on successfully navigating the honeymoon period (Goodwin, Madden, Singletary, & Scales, 2020; Santos-Nunes et al., 2020). Parents in the WACS survey also described the emerging needs and challenges their children faced in terms of emotional regulation, externalising behaviour and education. It is possible that favourable negotiation through adjustment to an unexpected reality of family life is dependent, in part, on the willingness of adoptive parents to re-frame their own images and claims of what it is to be an adoptive family (Gabriel & Keller, 2021): i.e., to develop a dynamic conceptualisation of an *adoptive family identity*.

The idea of *cohesiveness* in a healthy adoptive family identity may play an important role in adjustment to adoptive family life. Forming a cohesive shared family identity has been shown to be beneficial to family development as it enables a deep sense of shared belonging (Colaner, Horstman, & Rittenour, 2018). The idea of coming together as a family unit also involved extending relationships into the wider family network and finding a place in the community (Chapter 3). Co-construction of the family narrative occurs in most family types, but may be considered an additional challenge in adoptive families as there are more relationships within which to construct an identity (Grotevant, Dunbar, Kohler, & Esau, 2000). Understanding the formation and nature of an adoptive family identity could facilitate meaningful, and ultimately beneficial, interactions within and between microsystems, but may also exert positive influence on other levels of the adoption ecology. Future research may explore how individuals within the adoptive family network view the cohesive family unit. Implications for policy makers in education and social care may also be highlighted as strategies and resources for support could be designed and allocated appropriately.

Challenges for schools

Numerous challenges for schools in the education of adopted children and young people have been highlighted in this thesis. Chapter 2 provided international evidence that the school performance of adopted children should be routinely monitored as challenges in emotion regulation, externalising behaviour problems and academic attainment persist for adopted children, regardless of the type and location of adoption. Parents of adoptive families in Chapter 3 illustrated the importance of understanding the uniqueness of the impact of adoption. Adopted children are unique from their peers as their experience of early adversities, resulting in an entirely different family formation and circumstance, provide additional layers of complexity in child development and consequent adjustment to adoptive life. Adopted children deal with different challenges to other care-experienced children and young people, in that adoptees contend with a notion of life-long permanence as they develop a coherent narrative about their life history. Thus, they experience *ambiguous microsystems* – they are members of an adoptive family (physically present) and, simultaneously, a birth family (psychologically present) (Brodzinsky, 2014). The educational ramifications may play out in the classroom, and other aspects of the school community. Chapter 5 presented tentative findings for the importance of the socialisation of adoption in school and how this may take precedence, for the adoptive young person, when engaging in school life and study. School belonging may prove to be a key factor in successful educational experience for adopted children as it has been linked with self-esteem and academic performance (Allen & Kern, 2017). For adoptees, establishing a sense of belonging to an additional microsystem (i.e. school) may require a sensitive approach as their experiences of forming a lasting bond will have been affected by their experiences of early adversity and subsequent quality of relationships. Chapters 2, 3 and 5 provided further evidence that adopted children are more likely to have additional[8] educational needs, as well as challenges presented by the legacy of early adversities. The task for schools is to meet the specific needs related to learning and teaching whilst holding at the forefront of their approach, the relational and emotional needs of adopted children and their families.

Relationships with teachers, and their pedagogical approach, are important for care-experienced children in particular when increasing confidence in the classroom

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[8] Previously known as 'Special Educational Need' (SEN), change reflects current usage in schools to include needs that are not met by Quality First Teaching, but not necessarily as a result of atypical development, e.g. English as an additional language

(Berridge et al., 2020). Ensuring adequate and appropriate awareness training, for all school staff, in meeting the needs of adopted pupils is a particular challenge for complex systems, such as schools, and will have ramifications in terms of staffing and resource allocation. Adoptive parents in Chapter 3 described knowledgeable individuals as a vital part of a successful school experience. In a recent study by Goldberg (2014), however, 20% of adoptive parents described sensitivity and experience of adoption related matters on the part of teachers as lacking. Incorporating the role *adoption advocate* into existing roles amongst the school staff may provide the open channel of communication, and informed professional, coveted by adopted parents (see also Cooper & Johnson, 2007).

Challenges for associated adoption professionals

Professionals outside of immediate microsystems in the adoption ecology may include post-adoption social workers, speech-therapists, paediatricians, mental health clinicians and form the exosystem level. Whilst individuals at this level have less direct impact on the developing child, many of their challenges are like those of schools and teachers. Many of the roles in the exosystem may be considered gatekeepers for providing effective support for children and their families, but not necessarily adoptive families. Understanding the uniqueness of adoption and its impact on children and families, as described above, is also key for associated professionals. Services provided at this level also face challenges in terms of relational quality. Many adoptive parents in Chapter 3, described a high turnover of staff as a barrier to successful adjustment to adoptive family life. Managing change in relationships for children and young people who already find this challenging, adds additional layers of stress and uncertainty for many care-experienced children (Berridge et al., 2020).

Challenges for adoption research

The final area of challenge informed by the outcomes of this thesis concerns another aspect of the adoption exosystem. Scientific research into all aspects of adoption holds a vital position in the wider experience of school for adopted children, young people and their families. Research has the potential to influence children directly (through development of practice and intervention for teachers and social care workers) and indirectly through informing educational policy.

The most significant issue for future research into adoption arising from the studies that comprise this thesis concerns sampling. Specifically, recruiting adopted

children and young people into an empirical, quantitative study design. Chapter 5 illustrated this issue. Understandably, adoptive parents may be reluctant to grant consent for their children to participate in research that explores sensitive issues such as well-being and school-based relationships as it may add further distress to already delicate family dynamics. Conversely, some parents in the Chapter 5 survey declined the invitation to participate because they were currently experiencing a period of relative calm in the family and were wary of disrupting the equilibrium. Using adoptee voice to add clarification and authenticity when exploring the complexities of adoption is notable in the research literature by its scarcity. Recruiting viable numbers of vulnerable children for participation in research is an issue not limited to the studies in this thesis. Care experienced children, including those adopted, are often viewed as too vulnerable to meaningfully participate in research as they are perceived to lack agency (Garcia-Quiroga & Salvo Agoglia, 2020). Consequently, studies that are primarily concerned with issues exploring adopted children are often underpowered thus limiting generalisation of findings. Further research may explore reluctance of adoptive parents to act as gatekeepers by ascertaining circumstances that would ameliorate their concerns and provide opportunities for meaningful research. There is also scope for issues related to sample size, access to vulnerable participants and relevant aims of survey to be addressed collectively by the research community. It may also be prudent to work with the adoptive research community and families to guide the design of appropriate survey items.

Pre-adoption factors (e.g. age at placement, early adversity, time and type of care) have shown to present risks to successful adjustment to adopted life (Blake et al., 2021). Many of the included studies in the systematic review (Chapter 2) and the surveys used in Chapters 4 and 5 were unable to report pre-adoption factors. Difficulties obtaining often sensitive pre-adoption placement factors may be inherent in research design, or often from relying on parent reports, who may well themselves hold incomplete information. Systemic or policy change may be required to enable initial recording and subsequent access to meaningful data for the adoption research community to fully explore the nuances of adjusting to adoptive family life.

Limitations of thesis

This thesis aimed to explore the educational attainment gap experienced by many adopted children and young people in the UK. Whilst contributions to the field of

adoption and education research have been made, some limitations are noted. A consistent and salient issue throughout the thesis is that of sample size. Previous research, that focusses specifically on adoption and education, has been plagued by similar restraints (e.g. Wijedasa & Selwyn, 2011). Several attempts were made to address this issue in each of the studies that comprise this thesis. For example, in Chapter 4, by using an existing, large scale household survey, I intended to provide a robust presentation of the issue at a level only seen in experimental data from the DfE (e.g. DfE, 2020b). Several large-scale datasets were scoped for potential capturing of adoptee respondents, the initial interest in the USoc Survey was piqued by a potential sample of 800 adoptees, linking to the NPD and a specific adolescent survey of education and well-being. The resultant viable sample of $n=22$ illustrates the complexities of large-scale prospective research where adoption is not the primary area of investigation. Future studies may benefit from the recent interest in linking of administrative datasets, but will be required to navigate complex issues of anonymity, confidentiality and recording systems. The presentation of centrally collated data in Tables 1 and 2 (Chapter 1) further illustrate the magnitude of the issue at a national level: educational attainment for adopted children in Wales is not currently collated at a national level to the same extent as that of CRCS. Thus, this thesis is also limited from a policy level as establishing the extent of the attainment gap in Wales is seemingly not possible, though it is reasonable to assume it follows a similar pattern to the attainment gap in England.

The limitations presented thus far relate to ethical questions and dilemmas outlined in Chapter 1 and discussed in subsequent chapters according to study design. The intersection of ethical principles with research aims may require alternative approaches to study design that enables meaningful and impactful research to be conducted, whilst simultaneously upholding fundamental and universal ethical principles. The principles of consent and minimising harm are central to this dilemma. Assessing the risk of harm and distress for their probability and severity, coupled with focussed support available after participation may further address this issue. It would seem reasonable to involve adopted young people and parents in the risk assessment during the piloting phase of research design to improve confidence in participation.

The broad range of recruitment strategies employed in Chapter 5 for the BEANS survey, highlights one the challenges for researchers in recruiting vulnerable children and young people to participate in meaningful, quantitative research. The benefits of triangulation of responses in self-report measures, through using a multi-informant

approach, has been discussed in detail above. However, the absence of involving teachers into research designs in this thesis limits the extrapolation of findings into the school microsystem.

Synthesis of studies using large datasets for secondary analysis (Chapter 2) and the analysis of the USoc dataset in Chapter 4 highlight methodological limitations. A reduction in statistical power through reduced sample size may be overcome by using large datasets for secondary analysis. Several of the included studies in Chapter 2 used this approach (e.g. Bramlett, 2011; Vinnerljung & Hjern, 2011; Zill & Bramlett, 2014). Different issues, however, arise from secondary analysis methodology. There is reduced control over sampling and accuracy of responses, items in the original survey may not align with research aims of the secondary analysis and the measures used might not reflect accuracy of concepts under investigation. The latter issue was prominent in Chapter 4 where there was ambiguity over the definition of adoption used and lack of clarity in questions concerning educational and occupational aspirations. For example, it is unclear from the question wording how 'adoption' may be understood by respondents in the main adult survey. A sensitive analysis of the effect of adoption type is unfeasible without differentiating between adoption from the public care system, and inter-country adoption, kinship adoption and step adoption in the main survey. However, large scale panel surveys have the potential to boost the overall survey sample to include minority populations, such as adoptees, and develop questionnaire items attuned to the experiences and needs of adopted children and their families.

The scope of this thesis was to explore performance and experiences of education for adopted children and young people. Whilst gender effects have been the topic of considerable debate in educational research for decades, a focussed examination fell out of range for the aims of this thesis. Nevertheless, it is prudent to acknowledge its importance in relation to adoption research that relates to education. Few differences exist in intellectual abilities between males and females, but differences do exist in academic achievement. In the general population, throughout the educational journey, girls tend to achieve higher test and examination results and have higher educational aspirations than boys (van Houtte 2004). Girls are also less likely to have SEND and drop out of secondary school. Young women are more likely to attend Higher education and graduate (Clark, Thompson & Vialle, 2008). Differences exist in UK and also globally (van Langen, Bosker & Dekkers, 2006).

However, gender differences in adoption studies tend not to exist in terms of educational achievement or attainment (e.g. Brodzinsky et al 1984). For the purposes of

the exploratory work in this thesis, the experiences of adopted children and young people directly related to their adoptive status was the prime focus. There appears to be little evidence from existing research that experiences of *adopted* girls and boys differ significantly in terms of education performance or experience that can be explained by their adoptive status alone. In Soares et al., (2017) none of the factors relating to school experience of being adopted, social disclosure of adoption, social reaction to adoption status or adoptee social competence differed according to gender. It is feasible that needs created by the impact of early adversity may trump explanations of general gender differences in education for adopted pupils, though more research is needed to evidence this.

Strengths of thesis

This thesis employed a range of research designs to establish the nature of school experience for children adopted from care in the UK. Systematic review, secondary analysis of an existing dataset, qualitative exploration of parents' views and a bespoke survey for adopted adolescents were brought together not only to highlight gaps in the research literature, but also to address them. The BEANS survey (Chapter 5) is the only survey, to the best of my knowledge, to explore the interaction of school belonging, identity development, educational and occupational aspiration for UK adopted adolescents. Furthermore, the Chapter 5 survey sought the views of adoptees themselves; a voice seldom captured in existing adoption research literature (Crowley, 2019).

A further strength is the incorporation of school-based items into the WACS survey (Chapter 3). The WACS sample is a nationally representative sample of adoptive families in Wales. As the systematic review in Chapter 2 demonstrated, much of the existing adoption literature is US based. Many differences exist between the US and UK in social care, population demographics and education systems, meaning findings in US studies may not apply to UK settings. In addition, subtle differences exist in the education and social care policies of Wales and England; most notably in areas of funding allocation (e.g. Adoption Support Fund), curriculum structure and recording and reporting of educational attainment.

Future studies

This thesis looked mainly at individual, microsystem and mesosystem influences on adopted children and young people's development. Future studies may take a broader approach either by focussing on other levels (exosystem and macrosystem) or by taking a cross-sectional approach through multiple levels of the adoption ecosystem, to provide a holistic view of adoptee development as it pertains to school experience. Introducing the *chronosystem* in research design will enable longitudinal analysis as the interactions between the different levels of the ecosystem develop over time. Specifically, understanding how the lived *school* experience of adoption is influenced by the development of a personal adoption narrative and school belonging as they progress through the education system. Points of transition in a child's school career (e.g. primary to secondary, change of class) may be of particular interest as they constitute a new beginning or significant change in context, which may present additional challenges.

The role of the social and cultural environment is central to the formation of a coherent and meaningful adoptive identity (Berzonsky, 2011; Grotevant & von Korff, 2011; Luyckx & Robitschek, 2014). It would seem reasonable to explore how existing identity development mechanisms located within the family operate in the wider social environment, specifically in school. When appropriate, contemporary adoption practice encourages contact with the birth family after placement. Contact between adoptive and birth families facilitates adoptive identity development by providing opportunities for communication between adopted children and their adoptive parents (Neil, Beek & Ward, 2013). Whilst the school is unlikely to be directly involved in contact arrangements, understanding its benefits and challenges would further assist school staff in their role of surrogate meaning-maker. Future studies might examine the nature of extended conversations around contact with birth family that take place in the daily social interactions at school, and how they offer contexts for narrative exchange and identity formation (Von Korff & Grotevant, 2011).

Despite growing interest and understanding of adoption related issues, the attainment gap persists. Though only part of school experience, academic attainment has ramifications for educational and occupational opportunities as young people leave school and move into early adulthood. Future research may explore underlying processes and mechanisms that may contribute to the attainment gap, with a view to implementing interventions and policy changes designed to close the gap. Recent analysis of the NPD in England (Sinclair et al., 2021) demonstrated differential

effectiveness of schools for disadvantaged pupils. In settings of best practice, just over half of children in care made academic progress deemed to represent *catch-up* to levels comparable to their peers. Placement stability was found to be a mediating factor between care status and academic performance in KS4 examinations (Sinclair et al., 2021). However, placement stability and best practice alone does not explain the persistence of the attainment gap for adopted children. Given that adoptive placements are inherently stable (bearing in mind, of course, that some adoptive placements are disrupted) one would expect that those in *good* schools would be seen to flourish. At present, the data to explore this finding for adopted children is not readily available. Future research could explore the contribution of permanence, and other correlates of academic performance, to further understanding of the attainment gap, and wider school experience.

Chapter 3 suggested that adoptive families may seek to define themselves as a family unit in their social contexts. The idea of an *adoptive* family identity could be explored in relation to school experience for adopted children and their families. As children develop independence in a microsystem other than the family (e.g. school), how children present themselves as a member of an adoptive family may shed light on the nuances of school experience that may ultimately impact attainment. Individual adoptive identity is constructed and practiced within family relationships (Grotevant et al., 2000), it follows that the school context may be one of the first social arenas in which development of both individual and family adoptive identity is extended.

Exploration at the exosystem level may involve the role of the Virtual School. In 2007, the UK introduced the Virtual School model as a way to support the education of children in care. In 2018, a statutory responsibility was created and extended to include children leaving care through adoption, special guardianship or a care arrangement order (Sebba & Berridge, 2019). As the name suggests, the Virtual School is not a physical entity but a team of professionals (often ex-teachers and Head-teachers) working within the Local Authority across a wide range of schools to improve the educational experiences and outcomes of care-experienced children. Virtual schools advise schools and associated professionals on the educational needs of care-experienced children but are also well-placed to provide support for carers and families as they navigate a complex education system (Sebba & Berridge, 2019). It would seem that virtual schools are also ideally placed to be involved in future research for adopted children and young people. A key contribution could be in the role of gatekeeper for

recruiting adoptive families which would then provide a solution, at least in part, to the issue of recruiting adopted children and young people described earlier.

The development of adoption research since its earliest beginnings was delineated by Palacios and Brodzinsky (2010) and three trends were identified: a) identifying differences in adjustment between adopted and non-adopted groups; b) recovery from early adversity and, c) psycho-social and contextual factors and processes underlying variability in adoptee adjustment. In the decade since its publication, it is possible to see a fourth trend emerging: the *lived experience of adoption* reflecting the growing number of studies considering experiences within the family and wider community, including the roles of advocacy and microaggressions (J. Palacios, personal communication 11/08/21). Future studies may direct their attention to develop this trend further by examining interventions and improvements in professional practice (including the development of teachers and wider school staff, as well as social workers and clinical staff) that may impact on the lived experience of adoption for adoptees and their families.

COVID-19

The educational impact of the global COVID-19 pandemic cannot be understated; an estimated 1.6 billion learners worldwide have been affected by closures of schools, colleges and other educational institutions (Pokhrel & Chhetri, 2021). Many of the known risk factors that contribute to poorer outcomes, for children and young people in general, have been exacerbated by the pandemic and subsequent lockdowns (Hagell, 2021). Though children and young people have been less affected by coronavirus infection, a disproportionate impact by social, educational and economic factors as a result of the pandemic has been reported (Hagell, 2021).

All data pertaining to this thesis were collected prior to the declaration of the pandemic in March 2020. The first UK lockdown occurred during the write-up period; therefore, I am unable to meaningfully consider the impact of the pandemic on the findings. However, school closures have resulted in children educated at home by parents, significant changes in statutory assessment at all ages (but most notably at KS4 and KS5) and difficulties in accessing educational resources. Despite advances in technology and the use of *virtual learning*, many families found home-schooling challenging due to differential access to digital education (Smith & Barron, 2020).

In a recent survey of UK adoptive families during lockdown, over half reported an increase in their children's emotional distress, anxiety and instances of challenging behaviour, whilst almost a third of adoptive parents experienced more violent and aggressive behaviour than usual (AUK, 2020b). Feelings of loss and instability in adopted children and adolescents has been heightened by pandemic related fears such as the spread of the virus and the health and safety of family members (AUK, 2020b).

Despite significant challenges experienced by many families, some positive accounts have been recorded. Some adoptive parents report improved relationships as a result of more time spent together during lockdown (AUK, 2020b). Children who experience bullying or other school-related stressors may feel relieved to be away from the site of persecution (Hagell, 2021), though increases in time spent on-line has heighted risks for cyberbullying (Allkins, 2021).

The impact of the COVID-19 pandemic has brought novel challenges to supporting care-experienced children and young people in schools. A new emphasis on well-being and mental health, as well as targeted support for adopted children and their families, will need to be enacted to facilitate recovery from the effects of the pandemic.

Final conclusion

For children adopted from care, a persistent and enduring education attainment gap exists. Experiences of schooling are further impacted by wider contextual factors, such as construction of a consistent and coherent adoption narrative, and the socialisation of adoption. Communication is an overarching theme that runs throughout the adoption ecosystem and echoed in the chapters of this thesis: what and how children communicate about their adoptive status within the family, to friends and in school; what and how parents communicate adoption related matters with their children, with school (through advocacy) and within their wider community; how school staff hear and respond to adoption related information, how it is then translated for their peers, colleagues and associated professionals; and, ultimately, how we, as researchers, interpret and present the information we gather from adopted children, young people and their families.

At school, families entrust the safekeeping, well-being and development of their children to the school community and the adults working within it. School staff act in *loco parentis,* meaning that they act *in the place of the parent*, taking on the role and responsibility of the parents whilst in their care. Though adoptive parenting retains

many of the characteristics required of typical parenting, a *different* set of strategies, approaches and understandings is also often demanded. As such, the wider communities (especially schools) within which adopted children and young people operate, necessitate an extension of adoptive parenting: perhaps better conceptualised as *parentum loco adoptivi.*

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Appendix I

Example of systematic review search strategy (for OVID database):

1. exp adopted children/
2. exp "adoption (child)"/
3. (adopt* adj3 child*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
4. (adopt* adj3 care*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
5. 1 or 2 or 3 or 4
6. exp education/
7. exp Schools/
8. educat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
9. school*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
10. 6 or 7 or 8 or 9
11. 5 and 10
12. exp Performance/
13. exp Achievement/
14. exp educational attainment level/
15. perform*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
16. achieve*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
17. attain*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
18. exp competence/
19. competen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
20. exp learning/
21. learn*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
22. exp academic achievement/
23. (academic adj2 achieve*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
24. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23
25. 11 and 24

Appendix IIa

Adapted Newcastle-Ottawa quality assessment scale – Case Control Studies

<u>Note</u>: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability.

Selection

1) <u>Is case definition adequate? (adoption type (from care, private, international)/ foster care)</u>

    a) Well defined with a reasonable duration of exposure. *
    b) Well defined but short exposure or overlap with the other risk factors.
    c) No description

2) <u>Representativeness of the cases</u>
a) Representative series of cases *
b) Potential for selection biases or not stated
3) <u>Selection of Controls</u>
a) Well-matched controls (irrespective of adoption type) *
b) Not well-matched or matched on very few factors
c) No description
4) <u>Definition of Controls</u>
a) Clear distinction from cases *
b) No description of source or overlap with cases.

Comparability

1) <u>Comparability of cases and controls on the basis of the design or analysis</u>
a) Study controls for _____Education_____ *
b)) Study controls for any additional factor *
c) No control

Outcome

1) <u>Ascertainment of exposure (IQ test/ school performance/ specific skill e.g. reading - indicate)</u>
a) Validated objective test/ standardised school assessment used e.g. national tests*
b) Non-validated measurement tool but tool is available or described
e) No description
2) <u>Same method of ascertainment for cases and controls</u>
a) yes *
b) no
3) <u>Non-respondents</u>
a) Comparability between respondents and non-respondents characteristics is established, and the response rate is satisfactory. *
b) The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory.
c) No description of the response rate or the characteristics of the responders and the non-responders.

Selection	Comparability	Outcome	Total

Appendix IIb

Adapted Newcastle-Ottawa quality assessment scale – Cohort Studies

<u>Note</u>: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

Selection
1) <u>Ascertainment of exposure (adoption type (from care, private, international)/ foster care)</u>
a) National registers ☐
   b) Well defined with a reasonable duration of exposure. *
   c) Well defined but short exposure or overlap with the other risk factors.
d) No description
2) <u>Representativeness of the exposed cohort</u>
a) Truly representative of the average adopted young person in the community *
b) Somewhat representative of the average adopted young person in the community *
c) Selected group
d) No description of the derivation of the cohort
3) <u>Selection of the non exposed cohort</u>
a) Drawn from the same community as the exposed cohort *
b) Drawn from a different source
c) No description of the derivation of the non exposed cohort
Comparability
1) <u>Comparability of cohorts on the basis of the design or analysis</u>
a) Study controls for _____Education_____ *
b) Study controls for any additional factor *

Outcome
1) <u>Assessment of outcome (IQ test/ school performance/ specific skill e.g. reading - indicate)</u>
a) Standardised IQ test/ standardised school assessment used e.g. national tests *
b) Non-validated measurement tool but tool is available or described/ proxy variable created
c) No description
2) <u>Adequacy of follow up of cohorts</u>
a) Complete follow up - all subjects accounted for *
b) Subjects lost to follow up unlikely to introduce bias *
c) Subjects lost to follow up likely to introduce bias
d) No statement

Selection	Comparability	Outcome	Total

Appendix III

Outcomes for quality assessment of included studies (Newcastle-Ottawa Scale)

Table 24

Quality Assessment of Case Control Studies

Study	Selection	Comparability	Outcome	Total	
				Stars[a]	%
Burrow et al. (2004)	2	0	1	3	33
Howard et al. (2004)	3	1	1	5	56
Lewis et al. (2007)	1	1	2	4	44
Bramlett et al. (2011)	4	2	1	7	77
Vinnerljung & Hjern (2011)	4	2	3	9	100
Sanchez-Sandoval & Palacios (2012)	2	0	2	4	44
Zill & Bramlett (2014)	3	1	2	6	66
Thomas et al. (2016)	2	1	1	4	44

Note. [a]Maximum stars=9

Table 25

Quality Assessment of Cohort Studies

Study	Selection	Comparability	Outcome	Total	
				Stars[a]	%
Iervolino (2003)	3	1	0	4	57
Weinberg et al. (2004)	3	0	1	4	57
Lloyd & Barth (2011)	3	1	2	6	86
Nilsson et al (2011)	3	1	2	6	86
Wijedasa & Selwyn (2011)	2	0	1	3	43
McClelland et al. (2013)	3	2	2	7	100
Raleigh & Kao (2013)	2	1	2	5	71

Note. [a]Maximum stars=7

Appendix IV

SDQ - Goodman, R. (1997) The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry* 38: 581-586.

Response on 3-point scale: Not true; Somewhat true; Certainly true

Completion notes: 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.

Table 26

SDQ Items

No.	Item
1	I try to be nice to other people. I care about their feelings
2	I am restless, I cannot stay still for long
3	I get a lot of headaches, stomach-aches or sickness
4	I usually share with others (food, games, pens etc.)
5	I get very angry and often lose my temper
6	I am usually on my own. I generally play alone or keep to myself
7	I usually do as I am told
8	I worry a lot
9	I am helpful if someone is hurt, upset or feeling ill
10	I am constantly fidgeting or squirming
11	I have one good friend or more
12	I fight a lot. I can make other people do what I want
13	I am often unhappy, down-hearted or tearful
14	Other people my age generally like me
15	I am easily distracted, I find it difficult to concentrate
16	I am nervous in new situations. I easily lose confidence
17	I am kind to younger children
18	I am often accused of lying or cheating
19	Other children or young people pick on me or bully me
20	I often volunteer to help others (parents, teachers, children)
21	I think before I do things
22	I take things that are not mine from home, school or elsewhere
23	I get on better with adults than with people my own age
24	I have many fears, I am easily scared
25	I finish the work I'm doing. My attention is good

Appendix V

Table 27

Open-ended Items and Response rates - Wales Adoption Cohort Study, Wave 3 and Wave 4

Question	W3 (%)	W4 (%)
Can you outline what you think is going well in adopted family life?	97.2	94.83
What is the <u>main</u> concern that you currently have in relation to the care of your child? *(Please give a brief description)...*	94.4	86.21
Did you encounter any difficulties in getting your child into the school/pre-school of your choice?	12.5	n/a
Please outline the nature of the concerns you raised with the child's school?	43.1	67.24
Please outline the nature of the concerns the child's school raised with you?	33.3	65.52
Please briefly outline the nature of your child's difficulties/needs	23.6	44.83
Please tell us about your experience of the way in the school/preschool have responded to the knowledge about your child's adopted status.	86.1	91.38
Please add anything else you would like to tell us about your child's experiences of school and education.	38.9	62.07
Is there anything else you want to tell us about your needs and/or experiences as an adoptive family?	68.1	75.86
What does the school do well?	n/a	89.66
What could the school do better?	n/a	77.59
Do you think your child's needs at school have changed since the last questionnaire?	n/a	39.66

Appendix VIa

Table 28

WACS – T3 Education Items

SECTION 4: Your Child's School and Education
4.1 Does your child attend school or a pre-school facility? Yes - school ☐ Yes - preschool (including nursery/playgroup) ☐ No ☐ (Go to Section 5)
4.2 Is your child's school in your local area? Yes ☐ No ☐ (please tell us why they are not in local provision) _____
4.3 Did you encounter any difficulties in getting your child into the school/pre-school of your choice? No ☐ Yes ☐ (please outline the difficulties faced) _____
4.4 Over the past 12 months have **you** needed to contact your child's teacher with concerns about your child's behaviour/progress at school? No ☐ Yes ☐ (please outline the nature of the concerns you raised) _____
4.5 Over the past 12 months, has **your child's teacher** contacted you with concerns about your child's behaviour/progress at school? No ☐ Yes ☐ (please outline the nature of the concerns raised by the teacher) _____
4.6 Has your child had any involvement with a SENCO (special educational needs co-ordinator)? Yes ☐ No, but needs SENCO involvement ☐ No, does not need SENCO involvement ☐
4.7 Has your child had any involvement with an educational psychologist? Yes ☐ No, but needs educational psychologist involvement ☐ No, doesn't need educational psychologist involvement ☐
4.8 At this point in time, does your child have, or do you think he/she may have, any special educational need? Yes ☐ (Go to next question 4.9) No ☐ (Go to question 4.10)
4.9 Please briefly outline the nature of your child's difficulties/needs.

4.10	Does your child receive any of the following educational support packages? Please tick all that apply. School action ☐ School action plus ☐ School action with statement of SEN ☐ Education and Health Care Plan (EHCP) ☐ Personal Education Plan (PEP) ☐
4.11	Are staff at your child's school/pre-school aware that he/she is adopted? Yes ☐ (Go to question 4.13) No ☐ (Go to next question)
4.12	What were your reasons for not telling school staff about your child's adoption? _____
4.13	Please tell us about your experience of the way in the school/preschool have responded to the knowledge about your child's adopted status. _____
4.14	Do you have any regrets about informing/not informing the school/preschool about your child's adoption? If so, please explain why below. _____
4.15	How important do you think it is that staff at your child's school/preschool know about your child's adopted status? It is important ☐ It is neither important nor unimportant ☐ It is unimportant ☐
4.16	To what extent do you agree that your child's early (pre adoption) life experience negatively affects their school (or pre-school) life and their capacity to learn? Agree ☐ Neither agree, nor disagree ☐ Disagree ☐
4.17	Do you consider your child's educational needs differ from children of a similar age who have not been adopted? Yes, but not at this stage of my child's education ☐ Yes, and the differences are apparent now ☐ No ☐ Don't know ☐
4.18	Are you familiar with the initiative that encourages schools to become 'attachment aware?' Yes, and this has influenced the choice of school for my child ☐ Yes, but this did not influence the choice of school for my child ☐ No ☐
4.19	Please add anything else you would like to tell us about your child's experiences of school and education. _____

Appendix VIb

Table 29

WACS – T4 Education Items

<table>
<tr><td colspan="2">SECTION 5: Your Child's School and Education</td></tr>
<tr><td>5.1</td><td>Does your child attend school or a pre-school facility?
Yes - school ☐
Yes - preschool (including nursery/playgroup) ☐
No ☐ (Go to Section 6)</td></tr>
<tr><td>5.2</td><td>Where does your child go to school/ preschool?
Wales ☐   England ☐   Other ☐</td></tr>
<tr><td>5.3</td><td>Which year group is your child currently in?
Preschool/Nursery 1   Reception 2   Year 1 3   Year 2
Year 3 5   Year 4 6   Year 5 7   Year 6
Year 7 9   Year 8 10   Year 9 11   Year 10
Year 11 13   Post-16 14</td></tr>
<tr><td>5.4</td><td>How has your child settled in since starting their current school?
Better than expected   As expected   Worse than expected</td></tr>
<tr><td>5.5</td><td>What three characteristics would you consider most important for schools to have for adopted children?
1.   2.   3.</td></tr>
<tr><td>5.6</td><td>Over the past 12 months have you needed to contact your child's teacher with concerns about your child's behaviour/progress at school?
No   ☐
Yes   ☐ (please outline the nature of the concerns you raised and tell us how often you   have contacted the school)
_____</td></tr>
<tr><td>5.7</td><td>Over the past 12 months, has your child's teacher contacted you with concerns about your child's behaviour/progress at school?
No ☐ 0
Yes ☐ 1 (please outline the nature of the concerns raised by the teacher and tell us how often they have contacted you)
_____</td></tr>
<tr><td>5.8</td><td>Has your child had any involvement with a SENCO (special educational needs co-ordinator)?
Yes ☐
No, but needs SENCO involvement ☐
No, does not need SENCO involvement ☐</td></tr>
<tr><td>5.9</td><td>Has your child had any involvement with an educational psychologist?
Yes ☐ 1
No, but needs educational psychologist involvement ☐
No, doesn't need educational psychologist involvement ☐</td></tr>
<tr><td>5.10</td><td>At this point in time, does your child have, or do you think he/she may have, any additional educational needs?
Yes ☐ 1 (Go to next question 5.11)   No ☐ 0 (Go to question 5.12)</td></tr>
</table>

5.11	Please briefly outline the nature of your child's difficulties/needs.
5.12	Do you think your child's needs at school have changed since the last questionnaire? No ☐ Yes ☐ In what way?
5.13	Does your child receive any of the following educational support packages? Please tick all that apply. School Action ☐ School Action Plus ☐ School action with statement of SEN ☐ Education and Health Care Plan (EHCP) ☐ Personal Education Plan (PEP) ☐ Currently being assessed for one of the above ☐
5.14	What does the school do well in terms of meeting your child's educational and/or emotional needs?
5.15	What could the school do better in terms of meeting your child's educational and/or emotional needs?
5.16	Are staff at your child's school/pre-school aware that he/she is adopted? Yes ☐ (Go to question 5.18) No ☐ (Go to next question)
5.17	What were your reasons for not telling school staff about your child's adoption?
5.18	Please tell us about your experience of the way in which the school/preschool have responded to the knowledge about your child's adopted status.
5.19	Do you have any regrets about informing/not informing the school/preschool about your child's adoption? Yes ☐ please explain why below No ☐
5.20	How important do you think it is that staff at your child's school/preschool know about your child's adopted status? It is important ☐ It is neither important nor unimportant ☐ It is unimportant ☐
5.21	From the information given by school in reports, parents' evenings and other meetings how would you describe your child's performance in Significantly above average 1 — Somewhat above average 2 — Average or on target 3 — Somewhat below average 4 — b English? Maths?
5.22	Please add anything you would like to tell us about your child's experiences of school and education.

Appendix VIIa

BEANS survey – Adoptive parent information sheet

You are being asked to consent for your adopted child to take part in a survey about how adopted young people experience school, what they think about their career choices as well as questions about their overall wellbeing. The survey is part of a bigger project being conducted by Andrew Brown, who is studying for a Doctorate (Ph.D.) in the School of Psychology at Cardiff University.

Before you decide whether to give consent for your child to take part in this study, we would like you to understand the aims of the study and what it will involve for you and your child. If you have any questions or if anything is not clear please do contact Andrew (details are at the end of this information sheet).

What is the aim of the study?
In this survey we aim to find out more about how adopted young people feel about their school and how school belonging and overall wellbeing might affect how well they do at school and career choices.

Previous research has shown that many adopted young people find school to be a challenging part of their lives – this might be for many reasons including the school environment, relationships with friends or family or something else. Past studies have found this to be the case for adopted young people at various ages and all over the world.

Most research has asked parents or teachers about how adopted young people are doing at school. We think that asking adopted young people is very important too, and that is why we are doing this survey.

When people think about jobs they would most *like* to do it is called an aspiration. Previous research has shown that the aspirations we have can be affected by several things. In turn, these aspirations can affect the job or career we *actually* do. Other research shows that career choice might be affected by how well students do at school.

We think that what students think of their school, how they feel about themselves and their friends can also play a big part in their aspirations. There has been very little research about this for adopted young people.
This survey aims to answer the following questions:
1   How do adopted young people feel about their school?
2   How is academic achievement for adopted young people affected by school belonging and wellbeing?

3   How are adopted young people's career choices affected by school belonging and wellbeing?

Why have I been invited to take part?
You have been invited to give consent because you are the parent of an adopted young person who may be in Year 10-13 (S3-S6 in Scotland) at school. It is important to remember that it is up to you whether you allow your child to take part or not. **All responses to the survey are anonymous and confidential. None of your child's answers will be shared with you or their teachers.**

What will happen?
If you agree to take part in this study, you will be asked to click the link in this email which will take you to a short survey (less than two minutes) asking for your consent. If you give consent for your child to take part a separate link to the BEANS 2019 survey will be emailed. You can choose the email address. **Please note that we will not share this email with ANY third party and will be deleted once the survey window closes.**
If you have more than one eligible child we ask that the eldest child completes the survey. They can complete it on their phone, tablet, laptop or computer. All responses to the questions are confidential: this means that their answers will not be seen by anyone other than the researchers involved in the study.
Once your child has finished the survey, they will be asked if they would like to enter a prize draw for a chance to win a £10 Amazon voucher. Again, entering the prize draw is up to them. The answers they give in the survey do not affect their chances of winning. The winners will be selected at random and the prize sent via email after the survey has closed.

What will happen next?
When the survey has closed, Andrew will analyse the results and write them up for his thesis. Andrew will analyse the results using numbers and will not identify any young people.

Do I have to take part?
No. It is entirely up to you to give consent for your child to take part in the study. Please contact Andrew (details below) if you have any questions after reading this information sheet.

What are the potential disadvantages of taking part?
We do not anticipate any disadvantages of taking part. However, in the unlikely event that you or your child is affected the details for the Adoption UK helpline are given at the end of this information sheet.

What are the benefits of taking part?
Giving consent will mean that your child will have made a direct contribution to research that may help teachers understand more about what school's like for adopted children. It may also help schools understand more about the possible links between school belonging, wellbeing and career choice for adopted young people. They will also have the chance to win a prize.

Will my taking part remain confidential?
Yes. All information will be made anonymous and they will not be able to be identified by reading my research. Their school will not know who has taken part or not.

Who else is involved in this research?
Project Lead: Andrew Brown, PhD student (brownar3@cardiff.ac.uk Tel: 029 2087 4007)
Supervisors: Dr Katherine Shelton, School of Psychology (SheltonKH1@cardiff.ac.uk; Tel: 029 2087 6093;
Address: School of Psychology, Tower Building, 70 Park Place, Cardiff, CF10 3AT.

What if I have concerns about this research?
This project has been reviewed and ethically approved by the School Research Ethics Committee (SREC). If you have any concerns or complaints about this project, please direct these in the first instance to:
Secretary of the Ethics Committee
School of Psychology
Cardiff University
Tower Building
Park Place
Cardiff
CF10 3AT
Tel: 029 2087 0360
Email: psychethics@cardiff.ac.uk

> The data controller is Cardiff University and the Data Protection Officer is Matt Cooper CooperM1@cardiff.ac.uk . The lawful basis for the processing of the data you provide is consent.

Privacy Notice:
The information provided will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). The lawful basis for processing this information is public interest. This information is being collected by Andrew Brown.
The information on the consent form will be held securely and separately from the research information. Only the researcher will have access to it and it will be destroyed after 7 years.
The research information you provide will be used for the purposes of research only and will be stored securely. Only Andrew Brown and Katherine Shelton will have access to this information. After completing the survey the data will be anonymised (any identifying elements removed) and this anonymous information may be kept indefinitely or published.

Adoption UK helpline details:
England – 07904 793 974
Wales – 02920 230 319
Scotland – 0131 322 8500
Northern Ireland – 028 9077 5211

Thank you for taking the time to read this information.
Complete the BEANS survey now for a chance to win a £10 Amazon voucher!

Appendix VIIb

BEANS survey – Adopted participant information and consent sheet

Information Sheet for Participants

You are being invited to take part in a survey about how adopted young people experience school, what they think about their career choices as well as questions about their overall wellbeing. The survey is part of a bigger project being conducted by Andrew Brown, who is studying for a Doctorate (Ph.D.) in the School of Psychology at Cardiff University.

Before you decide whether to take part in this study, we would like you to understand the aims of the study and what it will involve for you. If you have any questions or if anything is not clear please do contact Andrew (details are at the end of this information sheet).

What is the aim of the study?

This survey aims to answer the following questions:

1 How do adopted young people feel about their school?
2 How is academic achievement for adopted young people affected by school belonging and wellbeing?
3 How are adopted young people's career choices affected by school belonging and wellbeing?

Why have I been invited to take part?

You have been invited to take part because you are an adopted young person and currently at school in Year 10-13. It is important to remember that it is up to you whether you take part or not. **None of your answers will be shared with your teachers or your parents.**

What will happen?

If you agree to take part in this study, you will be asked to tick three boxes at the start of the survey to say you agree to take part. You can complete the questionnaire on your phone, tablet, laptop or computer. All responses to the questions are confidential: this means that your answers will not be seen by anyone other than the researchers involved in the study.

We might be interested to see how you have got on at school and the career choices you have made over time, so we ask for an email address so that we can contact you in the future about similar surveys. It is also entirely up to you if you want to add your email address or not. We will not share your email with anyone else and it will be kept separate from your survey in a password protected file.

Once you have finished the survey, you will be asked if you would like to enter a prize draw for a chance to win a £10 Amazon voucher. Again, entering the prize draw is up to you. The answers you give in the survey do not affect your chances of winning. The winners will be selected at random and the prize sent via email after the survey has closed.

What will happen next?

When the survey has closed, Andrew will analyse the results and write them up for his thesis. Andrew will analyse the results using numbers and will not identify any young people.

Do I have to take part?

No. It is entirely up to you to decide to take part in the study or not. Please contact Andrew (details below) if you have any questions after reading this information sheet. If you are interested in participating, you will be asked to tick three boxes at the start of the survey to say you agree to take part.

If you change your mind about taking part, you can leave the survey at any time by closing the browser window.

What are the potential disadvantages of taking part?

We do not anticipate any disadvantages of taking part.

What are the benefits of taking part?

Your taking part in the survey will mean that you have made a contribution to research that may help teachers understand more about what school's like for adopted children. It may also help schools understand more about the possible links between school belonging, wellbeing and career choice for adopted young people. You will also have the chance to win a prize.

Will my taking part remain confidential?

Yes. All information will be made anonymous and you will not be able to be identified by reading my research. If you decide to give an email address it will be kept separate from your survey and secure for 5 years. After this time, it will be deleted. The school will not know who has taken part or not.

Who else is involved in this research?

Project Lead: Andrew Brown, PhD student (brownar3@cardiff.ac.uk Tel: 029 2087 4007)

Supervisors: Dr Katherine Shelton, School of Psychology (SheltonKH1@cardiff.ac.uk; Tel: 029 2087 6093;

Address: School of Psychology, Tower Building, 70 Park Place, Cardiff, CF10 3AT.

What if I have concerns about this research?

This project has been reviewed and ethically approved by the School Research Ethics Committee (SREC). If you have any concerns or complaints about this project, please direct these in the first instance to:

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Cardiff University
Tower Building
Park Place
Cardiff
CF10 3AT
Tel: 029 2087 0360
Email: psychethics@cardiff.ac.uk

The data controller is Cardiff University and the Data Protection Officer is Matt Cooper CooperM1@cardiff.ac.uk . The lawful basis for the processing of the data you provide is consent.

TERMS OF CONSENT

I understand that taking part in this survey will mean answering some questions about school life, wellbeing and career choice which will take about 15 minutes of my time.

I understand that taking part in this survey is entirely voluntary and that I can withdraw from the survey at any time without giving a reason. I understand I can do this by closing the browser window.

I understand that I am free to ask any questions at any time. I am free to withdraw or discuss my concerns with the researcher, Andrew Brown or the supervisor, Dr Katherine Shelton.

I understand that the personal data will be processed in accordance with GDPR regulations (see privacy statement below).

I understand that at the end of the study I will be provided with additional information and feedback about the purpose of the survey.

Privacy Notice:

The information provided will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). The lawful basis for processing this information is public interest. This information is being collected by Andrew Brown.

The information on the consent form will be held securely and separately from the research information. Only the researcher will have access to this form and it will be destroyed after 7 years.

The research information you provide will be used for the purposes of research only and will be stored securely. Only Andrew Brown and Katherine Shelton will have access to this information. After completing the survey the data will be anonymised (any identifying elements removed) and this anonymous information may be kept indefinitely or published.

Thank you for taking the time to read this information.

Complete the BEANS survey now for a chance to win a £10 Amazon voucher!

Appendix VIIc

BEANS survey – Adopted participant debrief sheet

Thank you for spilling the BEANS!

In this survey we aimed to find out more about how adopted young people feel about their school and how school belonging and overall wellbeing might affect how well they do at school and career choices.

Previous research has shown that many adopted young people and young people find school to be a challenging part of their lives – this might be for many reasons including the school environment, relationships with friends or family or something else. Past studies have found this to be the case for adopted young people at various ages and all over the world.

Most research has asked parents or teachers about how adopted young people are doing at school. We think that asking adopted young people is very important too, and that is why we are doing this survey.

When people think about jobs they would most *like* to do it is called an aspiration. Previous research has shown that the aspirations we have can be affected by several things. In turn, these aspirations can affect the job or career we *actually* do. Other research shows that career choice might be affected by how well students do at school.

We think that what students think of their school, how they feel about themselves and their friends can also play a big part in their aspirations. There has been very little research about this for adopted young people.

Remember, all responses to the questions are confidential: this means that none of your answers will be shared with your teachers or your parents.

We asked for an email address so that we can contact you in the future to see how you have got on at school and the career choices you have made over time. We will not share your email with anyone else and it will be kept separate from your survey in a password protected file.

Your taking part in the survey will mean that you have made a contribution to research that may help teachers and other professionals understand more about what school's like for adopted young people. It may also help schools understand more about the possible links between school belonging, wellbeing and career choice for adopted young people.

If you have any worries about taking part in this survey then you can contact any of the following for help:

Your form tutor or pastoral support team
Adoption UK Helpline:
     England – 07904 793 974
     Wales – 02920 230 319
     Scotland – 0131 322 8500
     Northern Ireland – 028 9077 5211
Childline: 0800 1111

Project Lead: Andrew Brown, PhD student (brownar3@cardiff.ac.uk Tel: 029 2087 4007)

Supervisor: Dr Katherine Shelton, School of Psychology (SheltonKH1@cardiff.ac.uk; Tel: 029 2087 6093;

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Email: psychethics@cardiff.ac.uk

> The data controller is Cardiff University and the Data Protection Officer is Matt Cooper CooperM1@cardiff.ac.uk . The lawful basis for the processing of the data you provide is consent.

Thank you again for taking part in this survey.

Appendix VIId

BEANS Survey – Non-adopted participant information and consent sheet

Information Sheet for Participants

You are being invited to take part in a survey about how young people experience school, what they think about their career choices as well as questions about their overall well-being. The survey is part of a bigger project being conducted by Andrew Brown, who is studying for a Doctorate (Ph.D.) in the School of Psychology at Cardiff University.

Before you decide whether to take part in this study, we would like you to understand the aims of the study and what it will involve for you. If you have any questions or if anything is not clear please do contact Andrew (details are at the end of this information sheet).

What is the aim of the study?

This survey aims to answer the following questions:

1   How do young people feel about their school?
2   How is academic achievement affected by school belonging and wellbeing?
3   How are career choices affected by school belonging and wellbeing?

Why have I been invited to take part?

You have been invited to take part because you are currently at school in Year 10-13. It is important to remember that it is up to you whether you take part or not. **None of your answers will be shared with your teachers or your parents.**

What will happen?

If you agree to take part in this study, you will be asked to tick three boxes at the start of the survey to say you agree to take part. You can complete the questionnaire on your phone, tablet, laptop or computer. All responses to the questions are confidential: this means that your answers will not be seen by anyone other than the researchers involved in the study.

We might be interested to see how you have got on at school and the career choices you have made over time, so we ask for an email address so that we can contact you in the future about similar surveys. It is also entirely up to you if you want to add your email address or not. We will not share your email with anyone else and it will be kept separate from your survey in a password protected file.

Once you have finished the survey, you will be asked if you would like to enter a prize draw for a chance to win a £10 Amazon voucher. Again, entering the prize draw is up to you. The answers you give in the survey do not affect your chances of winning. The winners will be selected at random and the prize sent via email after the survey has closed.

What will happen next?

When the survey has closed, Andrew will analyse the results and write them up for his thesis. Andrew will analyse the results using numbers and will not identify any young people.

Do I have to take part?

No. It is entirely up to you to decide to take part in the study or not. Please contact Andrew (details below) if you have any questions after reading this information sheet. If you are interested in participating, you will be asked to tick three boxes at the start of the survey to say you agree to take part.

If you change your mind about taking part, you can leave the survey at any time by closing the browser window.

What are the potential disadvantages of taking part?

We do not anticipate any disadvantages of taking part.

What are the benefits of taking part?

Your taking part in the survey will mean that you have made a contribution to research that may help schools understand the possible links between school belonging, wellbeing and career choice. You will also have the chance to win a prize.

Will my taking part remain confidential?

Yes. All information will be made anonymous and you will not be able to be identified by reading my research. If you decide to give an email address it will be kept separate from your survey and secure for 5 years. After this time, it will be deleted. The school will not know who has taken part or not.

Who else is involved in this research?

Project Lead: Andrew Brown, PhD student (brownar3@cardiff.ac.uk Tel: 029 2087 4007)

Supervisors: Dr Katherine Shelton, School of Psychology (SheltonKH1@cardiff.ac.uk; Tel: 029 2087 6093;

Address: School of Psychology, Tower Building, 70 Park Place, Cardiff, CF10 3AT.

What if I have concerns about this research?

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Secretary of the Ethics Committee
School of Psychology
Cardiff University
Tower Building
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CF10 3AT
Tel: 029 2087 0360
Email: psychethics@cardiff.ac.uk

> The data controller is Cardiff University and the Data Protection Officer is Matt Cooper CooperM1@cardiff.ac.uk . The lawful basis for the processing of the data you provide is consent.

TERMS OF CONSENT

I understand that taking part in this survey will mean answering some questions about school life, wellbeing and career choice which will take about 15 minutes of my time.

I understand that taking part in this survey is entirely voluntary and that I can withdraw from the survey at any time without giving a reason. I understand I can do this by closing the browser window.

I understand that I am free to ask any questions at any time. I am free to withdraw or discuss my concerns with the researcher, Andrew Brown or the supervisor, Dr Katherine Shelton.

I understand that the personal data will be processed in accordance with GDPR regulations (see privacy statement below).

I understand that at the end of the study I will be provided with additional information and feedback about the purpose of the survey.

Privacy Notice:

The information provided will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). The lawful basis for processing this information is public interest. This information is being collected by Andrew Brown.

The information on the consent form will be held securely and separately from the research information. Only the researcher will have access to this form and it will be destroyed after 7 years.

The research information you provide will be used for the purposes of research only and will be stored securely. Only Andrew Brown and Katherine Shelton will have access to this information. After completing the survey the data will be anonymised (any identifying elements removed) and this anonymous information may be kept indefinitely or published.

Thank you for taking the time to read this information.

Complete the BEANS survey now for a chance to win a £10 Amazon voucher!

Appendix VIIe

BEANS survey – Non-adopted participant debrief sheet

Thank you for spilling the BEANS!

In this survey we aimed to find out more about how young people feel about their school and how school belonging and overall wellbeing might affect how well they do at school and career choices.

When people think about jobs they would most *like* to do it is called an aspiration. Previous research has shown that the aspirations we have can be affected by several things. In turn, these aspirations can affect the job or career we *actually* do. Other research shows that career choice might be affected by how well students actually do at school.

We think that what students think of their school, how they feel about themselves and their friends can also play a big part in their aspirations.

Remember, all responses to the questions are confidential: this means that none of your answers will be shared with your teachers or your parents.

We asked for an email address so that we can contact you in the future to see how you have got on at school and the career choices you have made over time. We will not share your email with anyone else and it will be kept separate from your survey in a password protected file.

Your taking part in the survey has meant that you have made a contribution to research that may help teachers and other professionals understand the possible links between school belonging, wellbeing and career choice.

If you have any worries about taking part in this survey then you can contact any of the following for help:

Your form tutor or pastoral support team
Childline: 0800 1111
Project Lead: Andrew Brown, PhD student (brownar3@cardiff.ac.uk Tel: 029 2087 4007)

Supervisor: Dr Katherine Shelton, School of Psychology (SheltonKH1@cardiff.ac.uk; Tel: 029 2087 6093;

Address: School of Psychology, Tower Building, 70 Park Place, Cardiff, CF10 3AT.

What if I have concerns about this research?This project has been reviewed and ethically approved by the School Research Ethics Committee (SREC). If you have any concerns or complaints about this project, please direct these in the first instance to:Secretary of the Ethics Committee
School of Psychology
Cardiff University
Tower Building
Park Place
Cardiff
CF10 3AT

> The data controller is Cardiff University and the Data Protection Officer is Matt Cooper CooperM1@cardiff.ac.uk . The lawful basis for the processing of the data you provide is consent.

Thank you again for taking part in this survey.

Tel: 029 2087 0360
Email: psychethics@cardiff.ac.uk

Appendix VIIIa

BEANS survey publicity flyer

Appendix VIIIb

BEANS survey – social media wording

BEANS 2019
Belonging & Educational Attainment National Survey

**Please let your child help
to improve school life for adopted young people**

[Organisation name] are asking all parents of adopted school children in years 10 – 13 to encourage their children to take part in the Belonging & Educational Attainment National Survey (**BEANS**).

Many adopted children struggle with school, making family life difficult. BEANS will provide researchers at Cardiff University with valuable insight into how adopted young people feel about their school experience, and help schools respond in ways that can really make a difference.

All responses are anonymous and confidential, and everyone who completes a survey will have the chance to win a **£10 Amazon Voucher**.

If you are happy for your child to take part, please **click here for more information**. If you have any questions about BEANS, please contact the lead researcher Andrew Brown (adoptive dad) by emailing brownar3@cardiff.ac.uk

TWITTER / FACEBOOK

Researchers at Cardiff University are asking all parents of adopted school children in years 10 – 13 to encourage their children to take part in the Belonging & Educational Attainment National Survey (**BEANS**). If you are happy for your child to take part, please **click here for more information**. If you have any questions about BEANS, please contact the lead researcher Andrew Brown (adoptive dad) by emailing brownar3@cardiff.ac.uk The link is bit.ly/2Yy58OB

[National adoption charity] Advert

Researchers at Cardiff University are asking all parents of adopted school children in years 10 – 13 to encourage their children to take part in the Belonging & Educational Attainment National Survey (**BEANS**). If you are happy for your child to take part, please follow this link: bit.ly/2Yy58OB or scan the QR code. Any questions about BEANS, then please contact the lead researcher Andrew Brown (adoptive dad): brownar3@cardiff.ac.uk

Appendix IX

PSSM - Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, *30*, 79-90.

Responses on 5 point Likert scale: 1 – Never true; 2 – Rarely true; 3 – Sometimes true; 4 – Often true; 5 – Completely true

Table 30

Psychological Sense of School Membership Items

No.	Item
1	I feel like a real part of my school
2	People here notice when I'm good at something
3	It is hard for people like me to be accepted here
4	Other students in this school take my opinions seriously
5	Most teachers at this school are interested in me
6	Sometimes I don't feel as if I belong here.
7	There's at least one teacher or other adult in this school I can talk to if I have a problem
8	People at this school are friendly to me
9	Teachers here are not interested in people like me
10	I am included in lots of activities at this school
11	I am treated with as much respect as other students
12	I feel very different from most other students here
13	I can really be myself at this school
14	The teachers here respect me
15	People here know I can do good work
16	I wish I were in a different school
17	I feel proud of belonging to "name of school"
18	Other students here like me the way I am

Appendix X

ISI-6G - White JM, Wampler RS and Winn KI. (1998) The Identity Style Inventory: A Revision with a Sixth-Grade Reading Level (ISI-6G). *Journal of Adolescent Research* 13: 223-245.

Responses on 5 point Likert scale: 1 - Strongly disagree; 2 - Somewhat disagree; 3 Unsure; 4 - Somewhat agree; 5 - Strongly agree

Table 31

Identity Style Inventory Items

No.	Item
1	I've spent a lot of time thinking about what I should do with my life
2	I'm not sure what I'm doing in life
3	I act the way I do because of the values I was brought up with
4	I've spent a lot of time reading and/ or talking to others about religious ideas
5	When I talk with someone about a problem, I try to see their point of view.
6	I don't worry about values ahead of time; I decide things as they happen.
7	I was brought up to know what to work for.
8	If I don't worry about my problems, they usually work themselves out.
9	I've spent a lot of time reading about and/or trying to understand political issues.
10	I'm not thinking about my future now--it's still a long way off.
11	I've spent a lot of time talking to people to find a set of beliefs that works for me.
12	I've never had any serious doubts about my religious beliefs.
13	I've known since I was young what I wanted to be.
14	It's better to have a firm set of beliefs than to be open to different ideas.
15	When I have to make a decision, I wait as long as I can to see what will happen.
16	When I have a problem, I do a lot of thinking to understand it.
17	It's best to get advice from experts (doctors, lawyers, teachers) when I have a problem.
18	I don't take life too serious. I just try to enjoy it.
19	It's better to have one set of values than to consider other value options.
20	I try not to think about or deal with problems as long as I can.
21	My problems can be interesting challenges.
22	I try to avoid problems that make me think.
23	Once I know how to solve a problem, I like to stick with it.
24	When I make decisions I take a lot of time to think about my choices.
25	I like to deal with things the way my parents said I should.
26	I like to think through my problems and deal with them on my own.
27	When I ignore a potential problem, things usually work out.
28	When I have to make a big decision, I like to know as much as I can about it.
29	When I know a problem will cause me stress, I try to avoid it.
30	It's best to get advice from friends or family when I have a problem.

Appendix XI

FAS III – Family Affluence Scale III

Hobza et al 2017; Currie C, Inchley J, Molcho M, Lenzi M, Veselska Z & Wild F (eds.) (2014). Health Behaviour in School-aged Children (HBSC) Study Protocol: Background, Methodology and Mandatory items for the 2013/14 Survey. St Andrews: CAHRU

Table 32

Family Affluence Scale Items

No.	Item	Response		
		No	Yes(1)	2+
1	Does your family own a car or another motorized vehicle?			
2	Do you have your own bedroom for yourself?			X
3	How many computers does your family own (including laptops and tablets, **not** including game consoles and smartphones?)			
4	How many bathrooms (room with a bath/shower or both) are there in your home?			
5	Does your family have a dishwasher at home?			X
6	How many times did you and your family travel out of the UK for holiday/vacation last year?			

Appendix XII

Children's school experience of being adopted: Soares, J., Barbosa-Ducharne, M., Palacios, J., & Fonseca, S. (2017). Being adopted in the school context: Individual and interpersonal predictors. *Children and Youth Services Review, 79*, 463-470.

Table 33

Children's School Experience of Being Adopted Items

At school
(1 – Not true; 2 – Rarely true; 3 – Sometimes true; 4 – Often true; 5 – Always true)

1	Being adopted makes me feel angry/ annoyed
2	Being adopted makes me feel confused about who I am
3	Being adopted makes me feel sad
4	Being adopted makes a difference to me
5	I wish people did not know I am adopted
6	I think it is easy to talk about adoption
7	I am tired of explaining adoption to others
8	I like telling others I am adopted
9	Being adopted makes me feel good
10	Being adopted makes me feel special
11	Being adopted makes me feel loved and wanted

Social disclosure of adoption
(1 – totally disagree; 2 – disagree; 3 – agree; 4 – completely agree)

1	Only close family members know I am adopted
2	All my extended family knows I am adopted
3	All my parents' friends know I am adopted
4	All my parents' co-workers know I am adopted
5	All my neighbours know I am adopted
6	At school, nobody knows I am adopted
7	I told my friends I am adopted

Perception of reaction to adoption status
(1 – Not true; 2 – Rarely true; 3 – Sometimes true; 4 – Often true; 5 – Always true)

1	I am teased about being adopted
2	Do you think you are treated differently when people know you are adopted?*
3	Do you think that some people do not react well to adopted children?*

Note: * Yes/ No dichotomous response

Appendix XIII

Demographic questions for BEANS survey

- How old are you?
- What is your date of birth?
- What is your Gender
  - Male
  - Female
  - Other:
- Which country do you currently live in?
  - Wales
  - England
  - Scotland
  - Northern Ireland
- What year group are you currently in?
  - Y10 & Y11
    - What are your GCSE target grades in:
      - English (language)
      - Maths
      - Science [differentiate between double science and separate sciences]
  - Y12 & Y13
    - How many of your GCSEs were graded at level 4 or above.
    - What were your GCSE grades in;
      - English (language)
      - Maths
      - Science [differentiate between double science and separate sciences]
- SEN – Do you have any extra help in the classroom? For example, from teaching assistants.
- How many close friends do you have – friends that you could talk to if you were in some kind of trouble?
- Who do you live with at home? (Tick all that apply)
  - Mother
  - Father
  - Adoptive Mother
  - Adoptive Father
  - Foster carer
  - Other adults – please state
  - How many siblings do you live with at home?
    - Sisters
    - Brothers

- Y10 & Y11
  - Currently young people have to stay in education or training until they are aged 18. What would you most like to do when you have competed your final GCSE year at school at around age 16?
    - Get a full time job
    - Stay at school or college to do A-Levels
    - Get an apprenticeship

- Do some form of other training
- Do something else
- Don't know
- Career and academic expectations: 5-point scale (1 = 'Very likely; 5 = 'Very unlikely).
  - What job would you most like to do once you leave school or finish full-time education? [open ended]
    - Please rate how likely you think it will happen [Likert5]
  - Would you like to go on to higher education at a University after you finish school/ college?
    - Please rate how likely you think it will happen [Likert5]
- What is your ethnic group? Choose one option that best describes your ethnic group or background
  - **White**
    - 1. English/Welsh/Scottish/Northern Irish/British
      2. Irish
      3. Gypsy or Irish Traveller
      4. Any other White background, please describe
  - **Mixed/Multiple ethnic groups**
    - 5. White and Black Caribbean
      6. White and Black African
      7. White and Asian
      8. Any other Mixed/Multiple ethnic background, please describe
  - **Asian/Asian British**
    - 9. Indian
      10. Pakistani
      11. Bangladeshi
      12. Chinese
      13. Any other Asian background, please describe
  - **Black/ African/Caribbean/Black British**
    - 14. African
      15. Caribbean
      16. Any other Black/African/Caribbean background, please describe
  - **Other ethnic group**
    - 17. Arab
      18. Any other ethnic group, please describe