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POST CHARTERED DOCTORATE IN PSYCHOLOGY

(D PSYCH)

A portfolio submitted in fulfillment of the requirements for the degree of Doctor of Psychology

D Psych Thesis:

A study of the mental health and relationship problems in a sample of children in family foster care compared with a matched control of school peers and concordance in mental health need and service use

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pp 286-287:	**Appendix II.** Assessment measures for ‘Self-harm’ from Sansone and Sansone (2010).
pp 288-289:	**Apppendix III.** Section 4 from Policy paper on suicide prevention: review of national and international policy approaches to suicide prevention (National Office for Suicide Prevention) (NOSP) (2014).

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Declaration

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Title

A study of the mental health and relationship problems in a sample of children in family foster care compared with a matched control of school peers and concordance in mental health need and service use

Abstract

Mental health problems are common and complex in children in care and most have mental health needs that resemble clinic referred groups. Deficits in relationships and poorer educational outcomes are identified in the population yet services are often poorly matched to levels of need. The mental health and relationship problems of 39 children in family foster care, aged 6 to 13 (mean age 8.4 years) was assessed on Teacher and carer report as well as concordance in service use and mental health need. 1 in 10 children in care had significant mental health problems compared with 1 in 20 peers. Social problems occurred more frequently than any other mental health problem, identified in two thirds of boys and over half of girls in foster placement and one third of boys and less than one in ten girls in school. More externalizing problems were detected than internalizing problems suggesting emotional distress can be missed in the population. Relationship problems were a significant concern for one in four children in care in school and one in five in foster placement and associations were found between relationship problems and mental health indicating the potential buffering role of relationships for emotional wellbeing. The low to moderate concordance in mental health need and service use and the few contacts with mental health agencies suggests that problems are not being sufficiently targeted in the population while the high rate of contact with GP raises questions about the health of the sample. Almost a quarter of children had no contact with their caseworker suggesting unmet social service need and the unavailability of an important gateway for children to access supports. 36.6% of children in care needed extra educational supports yet only 2.4% received educational psychology provision confirming high educational risk and unmet educational needs. Findings confirm the importance of including school systems in mental health assessment and intervention in the population. Other research implications include the need for systematic studies with representative samples to capture the mental health of the looked after population in general, the need for multi agency supports and tiered entry to services to address the critical gaps identified in existing service provision for children in the looked after system.

Section A - Preface

1.0 Introduction to the D Psych Portfolio

This Preface: Section A of the D Psych portfolio links the researcher's clinical experience and practice with research. It outlines the three broad areas of the portfolio which comprise Section B, the research study, Section C a professional practice report and Section D which is a critical review of an area of the literature. This Preface will introduce the D Psych portfolio and provide the clinical context and professional background of the researcher, will then describe the outline and structure of the portfolio, summarise the aims and objectives of the various sections and provide an overview of how each of the sections interrelate.

2.0 Clinical context

As a clinician I have worked in a variety of settings during my training and post qualifying as a psychologist. This has included the opportunity to work with children who are looked after in the care system. My current work setting provides the clinical context of this research study which involves working with children in alternate care and their foster carers as well as the professionals and agencies supporting children in various settings including social, health and educational sectors as well as the legal system. The work requires observations, discussions and reflections with teams to reach informed decisions on matters directly impacting children's lives and wellbeing. There are many positives about services for children in care and the commitment of the many involved professionals striving to improve outcomes for children is unquestioned. Foster carers, can potentially make the single biggest difference in children's lives and ensure children are secure, valued and looked after. Work with children in care however, is not always easy and more often is very challenging as it concerns what is working well but more often what is not. Resources can be stretched and demands can be high in meeting the needs of children and the adults who support them. The circumstances of many looked after children and their families add to the complexity and often make it difficult to find solutions to dilemmas and achieve good outcomes.

Mental health is a challenging concept in general and more so in the context of looked after children. Mental health is a growing concern due to increasing numbers of children being placed in state care annually in Ireland and there is increasing recognition in this country of the pressing need to improve existing services and supports. Generating knowledge regarding the mental health of this population is key to achieving this aim.

Child development is embedded in family life that is secure, lasting and stable and when family breakdown occurs it is the opposite of what children need. Lord Listowel who is a cross bench member of the House of Lords has spoken about the challenge for the looked after children's system in finding ways to re construct the child's family or construct a new family that has all the characteristics that children need.

It is exactly this challenge that informs my work as a psychologist in a service tasked with meeting the needs of children in care. Identifying the mental health needs of this population is a necessary starting point in an attempt to plan for the multi level interventions that children in care often require and provides the clinical context of this study.

The next section presents my personal background and what inspired this choice of research topic.

3.0 Personal background

On a personal level my reason to undertake the D Psych post chartered doctorate was motivated by a desire to complete my professional qualifications and training to doctoral level. I qualified as a registered clinical psychologist receiving the post graduate award of Diploma in Professional Clinical Psychology (DPP Clin) from the Psychological Society of Ireland. During the period of clinical training I also completed a Masters in Applied Psychology at the University of Ulster, Northern Ireland.

Psychology was not the subject of my primary degree and my entry to the field was as a mature student through a Higher Diploma in Psychology at University College Dublin. Embarking on doctoral studies at City University was undertaken against a background of commitment to the pursuit of lifelong learning and continuous professional development.

The choice of subject area of this portfolio grew out of professional discussions and case formulations while I worked as a psychologist on a CAMHS team post qualifying as a psychologist. These case conceptualisations surrounded the crucial importance of early attachment relationships for mental health in later childhood, adolescence and continuing into adulthood. I developed further interest in this area whilst working in a mental health service for children at greatest risk of disrupted attachments i.e. children removed from their family of origin and placed in alternate care. I became interested in how early adversity can predispose towards to a range of psychopathology and the consequence in particular of interpersonal trauma and early unfavorable care on later relationship functioning.

Having worked in the area of education first as a teacher and later as a psychologist, I was aware of the protective role of education in the lives of children and the opportunities that schools offer for psycho social development. Work in child mental health requires systemic thinking and interagency collaboration between health and educational services to provide the range of services and supports that are often required to best meet children’s needs. For children who are looked after, schools provide an important context for capacity building in children’s peer and teacher relationships.

Reflecting on the nurturing attachments experienced in my childhood I am aware of the importance of relationships with parents and siblings, whilst in my adult life I have come to know how the infant caregiver relationship provides the blueprint for later partner relationships and the importance of adult attachments for our sense of happiness and emotional wellbeing.

Mindful of this irreplaceable role of the mother or primary caregiver for infant wellbeing I am interested to better understand how outcomes can differ for those who experience early loss or unavailability of the mother/ primary attachment figure or when the emotional capacity of the mother/ primary caregiver is compromised.

It is unsurprising that the factors surrounding the removal of a young person from their family of origin and placement in care can involve significant distress and trauma. At the outset of this study, a search of the literature yielded significant research evidence confirming high rates of psychopathology in children in care in the UK and internationally, but a dearth of research on the mental health of the looked after population of children in Ireland. Consultation of the literature also yielded scant information on the relationships of looked after children despite the knowledge that impaired interpersonal functioning characterises children with histories of maltreating early care. As a practitioner, I was keenly aware of the lack of empirical data documenting the needs of this population in Ireland and the services and interventions accessed by children and the supports that may be required. It was my objective to investigate this under-researched population and contribute important knowledge in the area.

Key aims of the study were - to provide data regarding the psychopathology of children in care in Ireland from a robust empirical research perspective by obtaining direct multi informant report on standardised measures across foster care and school settings and compare mental health ratings with a control group of school peers, to explore relationship problems on a measure designed to identify children with attachment related disturbance, and finally to explore the supports and services accessed by children to determine the match between service use and mental health need. The study aims to highlight any gaps in knowledge in these areas with the objective of identifying practice implications for intervention and service delivery.

The following section introduces the Portfolio components, how the Portfolio is organised and how the different Chapters interrelate.

4.0 Outline and Structure of the Portfolio

The Portfolio is divided into 4 Sections which include this present Section A - the Preface Section A, followed by Section B the Research study , Section C the Professional Practice Report and Section D ; the Critical Review of the Literature.

The thematic link between the Sections of the Portfolio is the impact of early relational trauma on mental health and psychosocial functioning of children in care.

Section B– Research

This Section is composed of Four Chapters and includes an Appendices section. In view of the range of issues pertinent to in care populations as outlined above the study sets out to achieve a number of aims. The study examines mental health of children in care on standardised measurement and assesses relationship problems on a relationship specific measure for use with the population. Looked after children do less well educationally compared with other children and a range of risk factors are thought to impact on academic performance and overall psychosocial and school adjustment. Little is known regarding educational outcomes of children in care in Ireland. The study aims to compare mental health of children in care and educational risk factors alongside a matched control of school peers.In spite of the complex needs of the population, failures are documented in service responses and poor match between services provided and level of need. There is a dearth of information on what services are provided to this child population in Ireland. The study explores this area and the concordance between service use and identified mental health need.

Chapter 1 – Literature Review

This Chapter reviews the literature on mental health, relationship functioning and concordance in service use and mental health need.

The Literature Review is organized by the author’s examination of the topics relevant to the area of mental health and relationships of children in care in foster placement and school settings, beginning with an overview of child welfare and protection services present and future in the context of the recent establishment in Ireland of the Child and Family agency to provide for the safety and well being of all children in

Ireland and how this service is shaping services for looked after children in particular. Prevalence and complexity of psychopathology is reviewed and problems of classification and measurement highlighted. Barriers to accessing appropriate interventions and treatments for children in care are explored.

Chapter 2 Rationale for the Study and Research Questions

Chapter 2 comprises the Rationale for the Study and Research Questions the study will address. Current knowledge, gaps in current knowledge are identified and aims of the study and research hypotheses outlined

Chapter 3 Methodology

Chapter 3 outlines the Methodology and research design employed in the study. It describes the strategies used in data collection, the sample population and recruitment procedure and describes the matched school control group. A description of the measures used and statistical analyses is outlined.

Chapter 4 Results

Chapter 4 provides the Results and statistical analyses used

Chapter 5 Discussion

Chapter 5 contains a Discussion of findings and suggestions for further research. The chapter outlines the research and clinical implications of the findings.

Section C Professional Practice Report

This Chapter comprises a Professional Practice Report that is one of the components required in the D Psych programme. This report relates to a case referred to a Primary Care Psychology Service which details the assessment and therapeutic intervention in the case.

The subject of the report is a ten year old child placed in family foster care within the Health Service Executive. Referral information reported a history of neglect in the context of maternal mental health problems. Referral also described emotional problems occurring in the context of her difficulties attaching within her foster home s and a complex profile of developmental needs.

This practice report highlights the complexity of the problems with which children in care present frequently including co-morbidity of problems, and presenting neurodevelopmental and psychosocial concerns. It illustrates the interagency and multi level supports that are required by services to flexibly provide for the spectrum of presenting needs.

Section D   Critical Review of Literature

The impact of neglectful or maltreating relational environments on children can include a range of developmental impairments as well as severe and complex mental health problems often manifest in self injury.

Section D of the portfolio is a Critical Review of the literature on non suicidal self injury (NSSI) which is associated with deficits in emotional regulation and can be found in young people with histories of trauma and maltreatment.

It is the purpose of the author to critically review the literature on non suicidal self injury and differentiate the motivational aspects of this behaviour from other more lethal forms of self harm where there may be an intent to die. It is aimed to provide conceptual clarity regarding different terminologies used and different motivational aspects of non suicidal self injury and self harm which have been confounded in the literature.

The review aims to examine current theoretical views in relation to non suicidal self injury which is associated with deficits in emotion regulation understood to be impacted by the quality of the early care received. The review aims to inform clinic practice with current insights regarding the etiology of severe emotional disorders where NSSI is a feature looking specifically at the evidence base regarding efficacy of treatments for children and adolescents in care.

Chapter 1

Introduction and Literature Review

1.1 Introduction

More than half of children in foster care in the developed world have a measurable need for mental health services, while up to one quarter present with complex and severe trauma and attachment related psychological disorders (Tarren-Sweeney, 2014). This, coupled with the rise in numbers of children taken into care annually in Ireland, the UK and further afield, makes the study of this population, identification of their complex needs and access to services, a pressing concern.

Ensuring the health and well being of looked after children has been referred to as a critical public health issue by the UK Department of Health (DOH, 1998) and studies in the UK (Meltzer et al. 2004; Minnis et al., 2006; Stanley et al. 2005), the US (Burns et al., 2004) and Australia (Millburn et al., 2008; Tarren-Sweeney, 2008, 2009) have consistently found high rates of psychopathology in this group.

In Ireland, there has been a dearth of research to date on the mental health of children in care. A recent report by Mc Elvaney et al. (2013) highlighted the complex needs and services required by young people with experience of the care and youth justice system in Ireland while a study by Mc Nicholas et al. (2011) confirmed the presence of emotional and behavioural disturbance and poor educational outcomes in a cohort of Irish children in foster and residential care.

There is consensus that no other non-clinically defined child population has greater need for mental health services (Minnis et al., 2006) and rates of mental, developmental and physical health problems are much higher in looked after children than others (Garland et al., 2001; Tarren-Sweeney & Hazell, 2006; Wood, 2008) and of such scale and severity to warrant specialist mental health provision (Kerker & Dore, 2006; Leslie et al., 2005; Sawyer et al., 2007; Minnis et al.2006; Tarren-Sweeney, 2008a).

The term *looked after* was introduced by the Department of Health, UK (1998) to describe all children in public care. Other terminology used to describe children in care includes *out of home care* (OOHC) (Tarren- Sweeney, 2010) and *alternate* care (Golding, 2010; De Jong, 2014). The term *looked after* and *in care* will be used interchangeably in this study.

The mental health needs of children in care are neither well recognised nor well met by traditional mental health agencies (Golding, 2010) and research has consistently found many looked after children with mental health problems do not receive adequate clinical assessment and are not referred for the supports they require (Kerker & Dore, 2006; Minnis et al., 2006; Sawyer et al., 2007; Tarren- Sweeney, 2010). The assertion that the threshold for taking children into care is very high (Hardy & Murphy, 2014) and often children are removed from their families following years of abuse and neglect (Simmonds, 2010) underscores the importance of early assessment of needs and intervention when children enter care.

The vulnerabilities of looked after children are understood to stem from an interaction between pre- and post-care experiences (Golding, 2010). Most children enter care under distressing circumstances and suffer traumatic experiences and disrupted attachments prior to placement in care (Wolkind & Rushton, 1994) while problems associated with adjustment to care and systems supporting children whilst in care compound risk factors for children (Golding, 2010).

The relationship between early adversity and later psychopathology is complex and not fully understood. What is acknowledged, is that pathogenic care giving and disrupted attachments are associated with problems in children’s long term psycho social adjustment (Tarren-Sweeney, 2008) and the experience in itself of being removed from one’s family of origin, is associated with feelings of rejection, anger and loss (Craven & Lee, 2006, Tarren-Sweeney & Hazell, 2006).

The impact of disrupted attachment relationships and early adverse care on child mental health is the subject of extensive research in maltreatment. Some writers have focused on differentiating attachment insecurity from disordered attachment and clarifying the core clinical presentations of both (Minnis et al., 2009, Green & Goldwyn, 2002; Zilberstein, 2006). Clarity has been brought to the area with advancement in theories of attachment disorder and interventions with children with attachment disorder (Newman & Mares, 2007). Consensus exists that insecure attachments are not clinical disorders in themselves but constitute patterns of relationship functioning that confer later psychosocial risk (Zeanah & Smyke, 2008). However attachment disorder remains a less well understood construct with uncertain research and clinical validity (Minnis et al., 2009; De Jong, 2014; Hopkins & Philips, 2008).

While debates continue in attachment theory, the impact of early relational trauma on children’s long term adjustment is undisputed with relationship functioning in maltreated children particularly impacted (Tarren- Sweeney, 2014). Empirical research has identified behaviours in looked after children that differ from those found in ordinary clinical practice (Minnis et al., 2009) and pervasive deficits in children’s ability to establish relationships with others (Green, 2003). Studies also confirm problems in children’s peer and teacher relationships (Stanley et al., 2005; Minnis & Del Priore, 2001) and more socialization problems in children in foster and residential care compared with peers (Mc Nicholas et al., 2011).

Poor school outcomes and difficulty remaining engaged with school systems are also documented (Social Exclusion Unit Report, 2003; Stanley et al., 2005) and studies identify more rule breaking, aggression, anxiety and depression (Shore, 2002) poorer academic achievement (Mitic & Rimer, 2002) and early school leaving (Mc Nicholas et al., 2011) in looked after children compared with others. Studies confirming co-existing psycho social and educational risk in children in care (Stanley et al., 2005; Jimenez & Palacios, 2009; Mc Nicholas et al., 2011) imply the importance of involving schools in addressing the mental health in this population. The protective role of educational attainment and positive peer and teacher relationships (Colton et al., 2003; Bernedo et al., 2012; Buyse et al. 2008 ; Mc Elvaney et al., 2013) underscores the importance of school in the lives of children in care and involving school systems in children’s care planning (Mc Nicholas et al., 2011).

The adequacy of assessment measures and diagnostic criteria in capturing the clinical picture of psychopathology in this population is an area that has received much research attention. The use of measures developed for ordinary clinical practice with looked after populations characterized by complex presentations has been cautioned (O’Connor & Rutter, 2000; Minnis et al., 2006; De Jong, 2014) while others assert that no standard assessment or screening measure yet exists for use with maltreated children (Tarren-Sweeney, 2009). Notwithstanding the difficulties in identifying appropriate measures for use with this population, early screening and detection of mental health problems in those exposed to aversive care is essential (Glascoe, 2000) as better outcomes are achieved when children access well coordinated, timely assessment and evidence based treatment (Mental Health Service Report, 2009-2010).

Limited access to services despite high levels of need is a further area of concern (Leslie et al., 2000; Zima et al., 2000; Minnis et al., 2006; Bellamy et al., 2010) and while high rates of psychological disturbance exist in samples, it may not be recognised that problems are of the scale and severity to warrant professional help, or may not be felt that services can be of help, consequently children with mental health needs are not being referred for the specialist supports required (Minnis et al., 2006). The heterogeneity of social care and health systems throughout the western world is suggested to account for variation in mental health service access and use by children in care (Tarren-Sweeney & Vetere, 2014).

The timing in investigating the mental health needs of looked after children in Ireland and access to services is underscored by the fact that in a ten year period between 2000 and 2010, the deaths occurred of 196 children and young people who were in the care of the state or known to child protection and welfare services. An Independent Child Death Review Group who investigated these deaths, found specific failures in mental health services for children in care in this country and found that services were either not involved in cases where children died, or their involvement was not known to child protection agencies (Shannon & Gibbons, 2012).

A more recent Review Panel report by Buckley (2014) documented that in Ireland a total of 26 deaths of children and young people in care or known to child protection services were notified during 2014. The number of deaths in this population average

20 per year and the number of deaths reported in 2014 was the highest recorded to date. The review highlighted historical deficits in practice and inconsistencies in service provision to children in care. The quality of services provided to children in care was found to be affected by inter-agency issues. The review recommended the implementation of one standard framework for assessment of children in care and protocols to promote inter agency cooperation as well as increased availability of specialist therapeutic services and placement options for children (Buckley, 2014).

Recurrent themes that were highlighted by Buckley (2014) included inadequate information sharing between services and opportunities missed to develop creative solutions to problems of children in care due to the lack of an inter-agency forum. Recommendations were made to address inter-agency difficulties, including protocols about agreed thresholds and mutual expectations and sharing of information, a matter that has become more significant since the child protection services in Ireland (i.e. The Child and Family Agency) have become separate from the wider health sector (i.e. The Health Service Executive).

The present study is therefore undertaken at a time of significant need for specialist provision for children in care and at a time when there has been significant change in services for children in care in Ireland with the setting up of the Child and Family Agency in January 2014. This is a time when the critical need for inter-agency co-operation is acknowledged to ensure better multi-disciplinary planning and provision of services (Mc Elvaney et al., 2013), information sharing between agencies and a consideration of all aspects of policy and planning to ensure evidence based and best practice is provided to all children in care in Ireland.

The study is undertaken against a background of accumulating UK and international research confirming complex mental health needs in children in care alongside gaps in knowledge regarding the psychopathology of this population of children in Ireland or their access to services, making this research inquiry at this particular time, from an Irish perspective, a pressing concern.

The study aims to describe the mental health, relationships, and access to services of a sample of looked after children in a Health Service Executive (HSE) area in the south of Ireland. The Literature Review which follows addresses in more detail the areas discussed above and is divided into four inter-related sections, with a summary provided at the end of each of the four areas explored; The Mental Health of Children in Care, the Importance of Relationships to Positive Mental Health, Mental Health and Wellbeing of Children in Care in School and Mental Health Supports and Services for Children in Care. The concluding section of the Literature Review integrates the theoretical findings informing the study and is followed by Chapter 2 which outlines our current knowledge in the area, the gaps in the literature, the rationale for the present study and the research questions the study will address.

1.2.0 Literature Review

1.2.1.0 Mental Health of Children in Care

1.2.1.1 Prevalence of Mental Health Problems in care

There is a consensus in the literature that mental health vulnerability in children in care is significantly higher than children not in care (Burns et al., 2004; Ford et al., 2007; Leslie et al., 2005; Minnis et al., 2006; Tarren-Sweeney, 2014). Studies have found more than half of children met criteria for a major mental health diagnosis (Kenrick, 2000, Burns et al., 2004), while others identified 100 percent of samples with psychopathology (Lieberman & van Horne, 1999).

In the UK, a large national survey by Meltzer et al. (2003) of children in local authority care found a four to five times higher rate of mental health problems in children in care than that identified in the general population of children in the UK in an earlier study by the same authors (Meltzer et al., 2000). Among a sample of 2,500 children and adolescents between 5 and 17 years in 134 local authorities, the prevalence of three main categories of ‘mental disorder’; conduct disorder, hyperactivity and emotional disorders, was investigated (Meltzer et al., 2003). Mental disorders were defined by ICD-10, as clinically identifiable indicators of distress and interference in functioning and were identified by structured interviews. Meltzer et al., (2003) used a multi informant research design with data collected from carers, teachers and young people if aged between 11 and 17 years. The study found 45% had a psychiatric disorder, 37% had conduct disorders; 12% had emotional disorders (anxiety or depression) and 7 % were hyperactive. 40 % of children in family foster care and 72% in residential care had a clinically rated mental disorder. More than three-quarters of those with a mental disorder had at least one physical complaint. About 60% experienced some or marked difficulty with educational attainments which were found to be more prevalent in those in residential care (Meltzer et al., 2003).

A further UK study (Stanley et al., 2005) examined the mental health needs in a smaller sample of looked after children (80) in two UK local authorities and service response to needs. The study focused on those presenting with greatest challenges and was therefore biased towards those with high needs. The sample included a larger proportion (28%) of children in residential care compared with the 10% national UK average. Data informing the study was gleaned from social services case files and relied on the recording of information and judgement of professionals and carers regarding young people's mental health. Stanley et al. (2005) explained that in order to identify mental health needs that took account of the full spectrum of clinical symptoms a set of indicators was designed for the study drawing on a psychosocial model of mental health emphasising interpersonal and social and emotional problems rather than clinical diagnoses. The sample was stratified into three groups of high, medium and low need with two thirds of children in residential care more likely to be in the high need group. Stanley et al. (2005) found some indicators stood out as particularly likely to be found at high levels of severity and frequency in the entire sample while low self esteem, angry or hostile emotions and aggressive behaviours occurred at high frequency and severity in 45-50% of the group. Other problems included difficulties in relationships with adults (34%) and peers (39%). A concerning educational picture was found where 55% of children had special educational needs and although half the sample was doing well in school, there was evidence of educational problems and underachievement in the rest. School attendance was problematic in about a quarter and school exclusion in one third.

In a large scale study by Ford et al. (2007) in the UK, data were combined from three previous studies of looked after populations in the UK, Scotland and Wales (Meltzer et al., 2000, 2003, 2004 a,b) and included one study of British children living in private homes all of which were nationally representative and used the same instruments across studies to assess psychopathology. Structured interviews (Development and Well-Being Assessment) (DAWBA) (Goodman et al, 2000) were administered to parents, carers and Teachers and children (if over 11) and diagnoses were made based on information obtained, according to ICD–10 criteria (World Health Organization, 1993). The methodology used by Ford et al. (2007) examined socio-demographic characteristics and psychopathology by type of placement among children (total sample = 1,453), and compared looked after children with deprived and non deprived children in private households (total sample = 10,428). Children looked after by local authorities had higher levels of psychopathology, educational difficulties and neuro-developmental disorders, and ‘looked after’ status was independently associated with almost all types of psychiatric disorder after adjusting for educational and physical factors. Prevalence of psychiatric disorders was particularly high in residential care and in children who had experienced multiple changes of placement. The authors concluded that children looked after by local authorities had significantly poorer mental health than the most disadvantaged children outside the care system and care-related variables were strongly related to mental health. Ford et al., (2007) also concluded that the substantially increased prevalence of psychiatric disorders could be at least partially explained because children had also experienced especially high levels of psychosocial and educational adversity.

The above findings have been replicated and extended in North America (U.S. and Canada) in studies comparing looked after children with disadvantaged children living in private households, all of which report higher rates of psychopathology in children in the care system both in the US (dos Reis et al., 2001; Farmer et al., 2001) and Canada (Stein et al., 1996). A large scale and nationally representative US study (Burns et al., 2004) surveyed the mental health needs and access to mental health services in a sample of children investigated by child welfare agencies after reported maltreatment and found nearly half of those between 2 to 14 years (3,803) with completed child welfare investigations had clinically significant emotional or behavioural problems on the CBCL**.** The authors highlighted by comparison that clinically significant mental health problems occur in about one fifth of children and young people in the general U.S. population (US. DHHS,1999). In their study, Burns et al. (2004) used data from the National Survey of Child and Adolescent Wellbeing (NSCAW) a nationally representative sample of young people who were subjects of reports of maltreatment investigated by child welfare agencies (NSCAW Research Group, 2002). Because of the national scope of the research and the inclusion of a large representative sample (including the majority of young people who remained at home), Burns et al. (2004) highlight that their findings provide a broader perspective on the clinical need and service use patterns of children entering the child welfare system than previously available in the U.S. and avoid the methodological issues in previous research. The authors highlight that in the absence of a research measure of psychiatric diagnosis, the Child Behaviour Checklist (CBCL) and companion measures, Youth Self Report and Teacher’s Report Form, used to estimate emotional and behavioural problems and identify need for mental health treatment have well established reliability and validity in previous research with child welfare populations (Armsden et al., 2000; Kolko et al., 2003).

Studies in Australia confirm high rates of psychopathology in children in alternate care. Research by Milburn et al. (2008) of children entering care for the first time in the Western Metropolitan Region of Melbourne (n=161) identified 60% met criteria for a major psychiatric diagnosis with Post Traumatic Stress and Adjustment Disorders being the most common diagnostic categories. The area where the study was carried out covered a traditionally working class demographic and had a high population of people with mental illnesses and a tradition of multiple generations of individuals receiving welfare. Almost three quarters of children over 5 scored in the borderline or abnormal range on the Strengths and Difficulties Questionnaire (SDQ) Goodman et al., 1997). The authors importantly highlight that most measures of infant functioning have a developmental and attachment basis which rely on primary caregiver or parent report (Milburn et al., 2008). At entry to care children are between carers which is challenging for relationship-based measures suggesting the need for brief and standardized mental health assessments for under 5’s entering care or in care (Milburn et al. 2008). In a study by Fernandez (2008) also carried out in Australia, 35% of children in care were in the clinical range for Internalising problems, 34 % for Externalising problems and 43% for Total problem scales of the CBCL with total problems three times the national Australian average for community samples. Fernandez (2008) highlighted when subscales of the CBCL were analysed, carer ratings indicated clinically significant problems in 7.5% to 28% of children, with attention problems, social problems, delinquent behaviour and anxiety and depression frequently rated in the clinical range.

Tarren-Sweeney & Vetere (2014) provide the most comprehensive review of the prevalence of mental health problems in alternate care in Europe, North America and Australia, reporting on studies consistently identifying children in care are more likely than not to have psychological problems of the scale and severity to require mental health services irrespective of the country in which they reside. More than 20 population studies in North America, Europe and Australia measured the mental health of children in care on standard caregiver-report, primarily using the Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997) the Rutter Scales (Elander & Rutter, 1996) and the Child Behaviour Checklist (CBCL) (Achenbach & Rescorla, 2001). Studies consistently found the scale of mental health difficulties more closely resembled clinic-referred children than children at large (Armsden et al., 2000; Burns et al., 2004; Cappelletty et al., 2005; Heflinger et al., 2000: Pilowsky, 1995: Tarren-Sweeney & Hazell, 2006).

In their review, Tarren-Sweeney & Vetere (2014) report that approximately half of children in care scored in the clinical range on one or more CBCL broadband or syndrome scale, while approximately three-quarters scored above one or more borderline range cut off points. In particular, studies estimate a high prevalence of DSM-III-R and DSM-IV Conduct Disorder (17%-45%), Attention-deficit Hyperactivity Disorder (10%-30%), Depression (4%-36%), Post-Traumatic Stress Disorder (40%-50%), and Generalised Anxiety (or DSM-III-R Overanxious) Disorder (4%-26%) among mixed samples of children and young people in foster and residential care (Blower et al., 2004; Mc Millen et al., 2005). Studies found significantly more problems in children in care compared to others on externalizing and total behaviour problem scales (Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2011; Lawrence et al., 2006; Shore et al., 2002; Tarren-Sweeney, 2008a) while Keller et al. (2011) found significantly more internalizing as well as externalizing behaviour problems on the CBCL.

In Ireland there is a scarcity of published literature on the mental health of the general child and adolescent population and even less on the mental health of looked after children. One study in Ireland (Martin & Carr, 2005) examining mental health in community based populations identified 1 in 5 children and young people met criteria for at least one psychological disorder. A further study (Cannon, 2011) investigated psychiatric illness in 11-13 year olds in Ireland and found 15% met criteria for a mental health disorder. High co morbidity was identified with 15% diagnosed with two or more disorders and 5% with three or more. Shortcomings have been highlighted in the Irish health care system including lengthy waiting times to access mental health supports (Hughes et al., 2013) and reliance on primary care services to meet mental health needs because of low referral to specialist mental health agencies (Mc Hugh et al., 2013). In view of prevalence of mental health disorder in community based samples, it is assumed even higher levels of psychopathology exist in looked after children and possible co morbidity of disorder. A dearth of information exists on prevalence or profile of psychopathology in the looked after population of children in Ireland and no published studies have heretofore utilised standardised assessment to measure these children's mental health.

Two publications have informed the area more recently however. An empirical study by Mc Nicholas et al. (2011) examined mental health, care histories and educational outcomes of children in foster and residential care and a report by Mc Elvaney et al. (2013) described the experiences and service needs of young people in the care and youth justice systems in this country.

In the study by Mc Nicholas et al. (2011) placement histories, mental health and service use of 174 children with a mean age of 10 years were examined. Data was obtained from social workers in CAMHS using a questionnaire designed for the study which investigated length of time in care, reasons for entry to care, family history, and educational attainment. More than half of children in foster care and 88.9% in residential care were identified with behaviour problems. Most attended school but almost 10% left school early or attended inconsistently. Being in residential care and in long term care and having frequent placement changes was significantly related to poorer outcomes and increased mental health contacts. There are obvious limitations to this study and the conclusions that can be drawn, as data informing the study was obtained from social work survey interview and did not include carer or teacher report on standardised measures of mental health. The findings of Mc Nicholas et al. (2011) should therefore be interpreted cautiously.

Mc Nicholas et al., (2013) asserted that as one in six had no social worker and one in three had no GP, the possibility existed that mental health needs were not properly assessed and prevalence of mental health may be underestimated in findings. Notwithstanding these limitations, the evidence from Mc Nicholas et al.'s findings (2011) indicates the existence of mental health needs in more than half of children in foster care and the majority in residential care in their study.

The second publication to inform this area is a qualitative report by Mc Elvaney et al. (2013) which obtained the views of 8 young people with experience of alternate care and youth justice in Ireland and also sought opinions of professionals with care, youth justice, legal, mental health and educational systems. The study methodology included interviews with young people and focus groups with professionals aimed to explore young people's experiences and identify types of services required to meet their needs and barriers to meeting needs. Areas that needed improvement according to young people were: the need to be understood, to have better services, and for care to be child-centred. Professionals identified the system itself as contributing to the trauma experienced by young people. Professionals highlighted the complex mental health of the looked after population who are affected by a range of developmental, family and socio-economic factors. Significant challenges in assessing and responding to need was also acknowledged. While Mc Elvaney et al. (2013) did not shed any light on actual prevalence of psychopathology in the population, the report represents the perspectives of young people, confirms the complexity of their needs and shortcomings in service response to need. Significantly, Mc Elvaney et al. (2013) identified that supporting young people in care does not necessarily mean providing a multitude of services. Young people themselves highlighted the need for stability and continuity in care and asserted that if one single trusting relationship could be established, the impact of this on their mental health and wellbeing would be enormous.

Correspondingly, in a national survey - *The My World Survey,* of the general population of children in Ireland (Dooley & Fitzgerald, 2012) relationships were identified as an important protective factor by young people themselves who stressed the need to be able to talk to someone about their problems and to have *one good adult* in their lives. One of the strongest predictors of good mental health in the lives of young people surveyed was the availability of at least one good adult in their lives, someone who knew them personally and was available to them, especially in times of need. The survey identified that having such a person was found to be related to the development of young people's self-esteem, sense of belonging, and how they coped or did not cope with problems and that the absence of one good adult was significantly related to levels of depression, suicide and self-harm. Thus, the importance of relationships for the experience of positive mental health is identified by children themselves in normative samples and those in alternate care in Ireland.

In prevalence studies of mental health in looked after children gender is investigated as a variable. Some research reports more boys than girls have behaviour problems (Keller et al., 200; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006) while others report no differences (Heflinger et al., 2000; Jiménez & Palacios, 2009). Where differences have been found boys have more externalising problems than girls. Tarren-Sweeney (2008) and Tarren-Sweeney & Hazell (2005) identified more boys (57%) than girls (53%) had at least one CBCL scale score in the clinical range. Minnis & Del Priore (2001) found more boys (65%) than girls (36%) had mental health problems, and according to carers, more boys than girls got into fights, displayed externalising behaviour problems, had more trouble concentrating, were more avoidant of social contact and appeared generally more unhappy than girls.

Rosenthal & Curiel (2006) examined prevalence of mental health problems on caregiver, teacher, and adolescent self report, and found girls identified more behaviour problems than caregivers or teachers. A possible explanation for this finding according to the authors, was the propensity for girls to experience more internalizing problems, which are difficult to observe by caregivers or Teachers, while boys display more identifiable externalizing problems.

Gender is examined as a variable in placement breakdown in a meta- analytic review by Oosterman et al. (2007) where an interaction affect between gender and placement breakdown was observed where older girls were more likely to have experienced placement disruption than either younger girls or older or younger boys (Smith, 2001). Whereas most studies agree looked after children have more mental health problems than peers (Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2011; Lawrence et al., 2006; Shore et al., 2002) particularly externalizing behaviours, Bernedo et al. (2012) only partially support this view, with the finding that foster boys, rather than foster children as a group, have more behaviour problems than peers – but only on externalising (aggressive behaviour and rule-breaking) and total problem behaviours. Fernandez (2008) on the other hand, identified more Attention and Social Problems for girls and Aggressive Behaviour for boys on Teacher ratings on the TRF. In comparing children's mean percentile ranks with regard to academic performance girls in care appeared to function at a lower average percentile to non care peers, while boys appeared more evenly matched. Fernandez (2008) used a longitudinal design and on re assessment at time 2 fewer children were above the clinical threshold and there were no statistically significant differences between boys and girls in care except for Attention problems, where girls had higher mean scores than boys. Interestingly, both groups demonstrated significant changes in problem scores on the TRF from first assessment with most change observed in Externalising problems.

Age is investigated as a factor in mental health in looked after children. Some studies (Heflinger et al., 2000; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006) have found older children in care have more behaviour problems than younger children. For example, Heflinger et al. (2000) identified that behaviour problems peaked during mid-adolescence (between 12 and 15 years) compared with early or late adolescence. Bernedo et al. (2012) did not observe any age differences, which the authors suggested might be due to the fact that the majority of children in their study were in long term care and lived with their current foster family for a lengthy period. Bernedo et al. (2012) concluded that stable care may lead to a gradual disappearance of behaviour problems over time. The authors recommended that future studies examine other possible mediating factors related to age. Tarren-Sweeney (2008c) asserts that although age is associated with poorer mental health in children in care, as evidenced by differences in CBCL scores (Armsden et al., 2000; Dubowitz et al., 1993; Heflinger et al., 2000), age effect is confounded by age at entry to care where older children with mental health problems are more likely to have entered care with poorer pre-care mental health (Tarren-Sweeney, 2008c). Tarren-Sweeney (2014) explains that beyond infancy, there is evidence of linear deterioration in the mental health of children entering care at progressively older ages, including increasing interpersonal behaviour problems suggestive of attachment disturbance (Tarren-Sweeney, 2008c). The attachment difficulties of late-placed children are found to be more resistant to therapeutic change in response to markedly improved care, which is suggested as partly explained by children having more established internal representations of self and others (Tarren-Sweeney, 2008c). Milan & Pinderhughes (2000) found that maternal representations of late-placed children are shaped by the extent of maltreatment during their mother's care, which influences in turn, representations of their foster mothers and their mental health.

The above literature overwhelmingly suggests on the basis of small and large survey research in the UK, North America and Australia, that looked after children experience higher rates of psychopathology than children at large and those in residential care and with multiple moves in care are especially vulnerable. Findings regarding gender and age as mediating factors are mixed. In general boys are found to have more externalising behavioural problems than girls although some researchers assert that some mental health problems may be underreported in girls while evidence suggests that girls have more attention and social problems than boys. Although age at entry to care is a confounding factor in research examining age as a variable in mental health with older age associated with more psychopathology, it is also asserted that pre existing mental health problems can often be present in late placed children. Some methodological factors need to be considered when interpreting research evidence such as data collection methods and assessment methodologies however, there is consensus that looked after children have higher rates of mental health problems than peers and the psychosocial and educational adversity experienced by in care groups has implications for the breadth of interventions required to best meet the needs of the population. Notwithstanding the information which has recently come to light regarding the mental health needs of children in Irish state care, this remains a largely unexplored area where a dearth of research exists investigating prevalence of psychopathology in the population or the match between identified need and service use.

1.2.1.2 Complex Psychopathology in care

It is asserted that more is known about the scale and prevalence of mental health difficulties in children and young people in alternate care than of the nature, patterns or complexity (Tarren-Sweeney & Vetere, 2014). Recent findings however, suggest that a sizeable proportion manifest complex psychopathology, characterised by attachment difficulties, relationship insecurity, problematic sexual behaviour, trauma related anxiety, inattention/hyperactivity, conduct problems and defiance (Tarren-Sweeney, 2008a).

In a study by Tarren-Sweeney (in press) several complex symptom clusters have been identified in a series of cluster analyses performed on CBCL and Assessment Checklist for Children (ACC) (Tarren-Sweeney, 2007) scores obtained in the Children in Care Survey (CICS) in Australia (Tarren-Sweeney & Hazell, 2006). The ACC is a caregiver-report psychiatric rating scale developed to measure difficulties in care in the longitudinal CICS study (n=347) carried out in New South Wales, Australia (Tarren-Sweeney, 2007). Among the CICS sample, 30% were reported with normative difficulties, 15% had elevated, sub-clinical checklist scores, 35% had relatively non-complex, clinically significant psychopathology that could be conceptualised as discrete mental disorders or co-morbidity within standard diagnostic classification systems and 20% manifested complex attachment and trauma related psychopathology that could not be adequately conceptualised within standard classification systems (Tarren-Sweeney, In Press).

Tarren-Sweeney (In Press) asserts that the above CICS analysis indicates that the presence of hallmark social and interpersonal difficulties among a large proportion of children in care, which overlays and possibly mediates children’s experience of other types of symptoms, adds to mental health symptom complexity. It is suggested that this complexity accounts for some unexpected findings, where for example, despite high prevalence of clinical DSM-oriented attention –deficit hyperactivity scores among the CICS sample (Tarren-Sweeney & Hazell, 2006), an ADHD profile type was not located for either gender. Instead, analyses suggest that clinically significant inattention / over-activity in children in the CICS sample was largely manifested as a component of complex symptomatology. Tarren-Sweeney (In Press) asserts that much symptomatology in the CICS sample is too complex and shows too much variability across children’s individual profiles to allow traditional classification suggesting that differences between symptom profiles warrant further research and new ways of conceptualising complex attachment – and trauma-related disorders.

Children in care are more likely to have higher rates of developmental and physical health problems than others (Sawyer et al., 2007; Minnis et al., 2006; Nathanson & Tzioumi, 2007; Royal Australia and New Zealand College of Psychiatrists 2008) and high rates of co- morbidity of disorder (De Jong, 2014). Research suggests that almost all children in care at some stage, present with at least one physical health problem while the majority (50%-60%) present with more than one (Leslie et al., 2005) while Crawford (2006) concurs that children in care have poorer physical health, higher prevalence of learning and language difficulties and poorer educational outcomes than others.

There is increasing evidence to suggest the existence of pain insensitivity or failure to communicate felt pain in maltreated samples (Tarren-Sweeney, 2010). Early scientific literature has informed our understanding of how neural pain pathways programmed by genetics and sensory conditions are further shaped by stress-regulating systems and subjective interpretation of pain-inducing events (Melzack, 1999). This insight is relevant in the field of maltreatment as many children have experienced physical and other forms of abuse. Cheng et al. (2003) have contributed towards this growing evidence with the finding that the experience of pain shapes children's subsequent pain experiences while research in neuronal plasticity has found neonates exposed to repeated painful interventions undergo alteration of pain pathways (Woolf & Salter, 2000) resulting in higher sensitivity to pain during childhood and adolescence (Hermann et al., 2006).

Researchers assert that early psychological trauma is relevant to the investigation of abnormal pain response in maltreated children (Tarren-Sweeney, 2009) who report more somatic problems than others (Haugaard, 2004). In one study, Tarren-Sweeney (2009) identified approximately one in ten children with abnormal pain response and corresponding high levels of mental health problems, suggesting those with abnormal pain response may be a particularly impaired group of children with psychological disturbance in maltreatment. Links between attachment difficulties and abnormal pain response have been investigated with associations found between ambivalent and disorganised attachments and increased pain sensitivity (Walsh et al., 2008). Associations between abnormal pain response and ad hoc measures of Inhibited-Avoidant attachment have also been found suggesting the possibility that abnormal pain response is a phenotype characterised by comorbid psychopathology and problems in the attachment relationship (Tarren-Sweeney, 2009). Thus, growing evidence suggests that maltreatment and abuse in infancy causes alterations in neural pain pathways and incurs greater neuro-developmental changes than later onset abuse

(Tarren-Sweeney, 2009) which is supported by research in infant brain plasticity (Glaser, 2000). There is however, insufficient evidence as yet to fully confirm this hypothesis according to Tarren-Sweeney (2009) who explains that children's felt experiences are less reliably identified compared with overt phenomena which limits research in the area as well as the absence of measures to identify children's felt pain.

Psychological determinants of somatic complaints in childhood have been examined and a relationship found between negative affect and somatic complaints that can be present at sub clinical levels in children (Jellesma, 2008). A relationship has also been identified between social problems and somatic complaints in children whereby self-perceived social problems associated with lowered feelings of control are linked to maladaptive emotion regulation (Jellesma, 2008). This is an area of interest in maltreatment in view of the higher prevalence of physical health complaints and emotional problems in looked after children than children at large.

1.2.1.3 Self Harm in Children in Care

Higher prevalence of self harm is identified in maltreated children compared with others (Stanley et al., 2005). Beck (2006) found 27% of young people deliberately self harmed in the previous 6 months and self harm was associated with moves of placement. Associations between self-harm and types of maltreatment have been investigated (Lang & Sharma-Patel, 2011) with robust associations confirmed in children with histories of sexual abuse. Most findings also support a relationship between self harm and physical abuse, while associations with childhood neglect are more mixed (Lang & Sharma-Patel, 2011).

A study of self harm in children in care and care leavers in Scotland, Furnivall (2013) confirmed a heightened risk of self harm as a result of adverse backgrounds and continuing stress in young people's lives. Approximately half of children in residential care in the Glasgow council area surveyed had self harmed (Furnivall, 2013). Although research is available on self-harm and suicide, few studies focus specifically on children in care implying the need to extrapolate findings from the population of children at large, to children with a background in care (McLean et al., 2008). Although such extrapolation can be problematic, the general risk factors identified within the wider population of children and adolescents are found to exist in children in care at greater levels than peers (Furnivall, 2013). The dearth of information regarding suicide and self harm in looked after populations alongside the heightened risk of self harm in this population suggests the need for research in self harm specifically in young people in the care system.

Self harm is identified in one in five children in care in Ireland (Mc Nicholas et al., 2011) with high rates reported in Irish care leavers (Saunders & Broad, 1997). In a further Irish survey of 12-18 year olds in residential care, Williams & Gilligan (2011) identified that a total of 87 incidents of self harm had taken place in 20 of the 34 residential centres surveyed, containing 72 young people, in the previous 12 months, leading the authors to conclude that self harm is a complex issue for young people in residential care. Williams & Gilligan (2011) highlighted the need to understand motivating factors behind self harm and carry out an in depth exploration of the support needs of young people in residential care who self harm.

In Northern Ireland, Devaney et al. (2012) found many children in care and care leavers self-harm and have several risk factors associated with suicide. It is asserted that the origins of adolescent suicide can be found in early trauma of young people and risks continue into adulthood and may be implicated in self-harm and suicide in later life (Devaney et al., 2012). This research reinforces other studies of care leavers indicating that traumatic experiences prior to and during care have adverse consequences well into adulthood (Duncalf, 2010).

Affect regulation-based theories have attracted most empirical support in explaining developmental pathways of self harm (Lang & Sharma-Patel, 2011). The prevailing view of emotion regulation deficits contributing towards the occurrence of self harm asserts that childhood trauma disrupts adaptive development on multiple levels of functioning, with self-injury understood as a compensatory strategy correcting deviations in regulatory developmental pathways that are disturbed in maltreatment (Lang & Sharma-Patel, 2011). Accumulating research is therefore providing explanations as to how disturbed affective processing that occurs in maltreatment (Lang & Sharma-Patel, 2011) can lead to self harm in looked after populations.

Children in care also present with abnormal eating patterns according to carer report (Tarren-Sweeney, 2006). A significant number of children in court ordered care were found to have symptoms such as excessive eating and gorging on food (23 %) hiding or storing food (14%) and stealing food (18%) and symptoms were correlated with maltreatment in care and specifically maltreatment in current care placement (Tarren-Sweeney, 2006).

Children in care are also found to present with sexualised behaviour problems understood to be linked to child sexual abuse and maltreatment, family dysfunction or parenting deficits and other developmental difficulties (Tarren-Sweeney, 2008). An exploratory analysis of sexual behavior problems in a large epidemiological study of 347 preadolescent children in foster and kinship care in Australia, simultaneously examined discrete and cumulative influences on the development of children at high risk for sexual behaviour problems. Most of the sample with sexual behaviour problems had corresponding psychopathology, most notably conduct problems, inattention, and interpersonal behavior problems suggestive of attachment disturbances and high concordance of sexual behaviour problems was found among 52 sibling dyads. The study by Tarren-Sweeney (2008) found that independent predictors of sexual behaviour problems were entry to care at older age, being female, placement instability, and contact sexual abuse. Tarren- Sweeney (2008) concluded that findings emphasized the significance of cumulative risk in children exposed to multiple adversities and also generated hypothesized mechanisms involving attachment disturbances.

De Jong (2014) concludes that the atypical symptoms that are commonly seen in children in care require a contextual understanding and the complex constellation of symptoms and pervasive impact on development is difficult to categorise.

What is evident from the above literature confirming complex mental health in this population is that the presence of what have been termed ‘hallmark’ social and interpersonal relationship problems, suggested to mediate the experience of other symptoms, adds to symptom complexity, making children’ s complex psychopathology more difficult to measure and treat.

1.2.1.4 Correlates of Mental Health Problems in Care

Explanations as to why children in care present with significantly increased levels of mental health problems are suggested to relate to child, family and environmental risks (Pearce & Holmes, 1994) and a combination of pre- and post-care experiences (Golding, 2010). In addition to risks prior to coming into care such as family disorganisation and disadvantage, by definition, children in care have experienced multiple attachment and trauma related problems leading to placement in care (Tarren-Sweeney, 2008; De Jong, 2010; Golding, 2010; Mc Auley & Davies, 2009).

A range of pre and post natal risk factors such as maternal stress in pregnancy which is linked to aspects of infant development have been identified (Golding, 2010; De Jong 2014) while Bergman et al. (2007) assert that high prevalence of domestic abuse exacerbated during pregnancy, constitutes a significant pre-natal risk. Substance abuse is highly prevalent in parents of maltreated children and the resulting neuro-developmental impairment in children such as cognitive deficits (De Jong, 2014) and physiological dysregulation (Schuetze et al., 2009) have been documented.

Stanley et al. (2005) found that 82.5% of children entered care as a result of abuse or neglect. Both sexual and emotional abuse are associated with increased mental health problems in children although physical abuse was the largest single category precipitating admission to care in 22.5 % of cases by Minnis et al.(2006).

Mc Nicholas et al. (2011) confirmed that in an Irish cohort of children in foster and residential care, 59.2% had a history of abuse, while parental alcohol or drug misuse was the reason for placement in care in 30% of cases.

The detrimental effect of multiple moves in care on children’s mental health has been identified although only a limited number of studies have systematically examined the impact of multiple care placements (Minnis et al., 2010). Beck (2006) found that children in care who moved placement frequently were three times more likely than those whose care placements were stable to have a psychiatric diagnosis and probable conduct disorder. Beck (2006) identified 27% of young people were more likely to have self harmed in the previous 6 months than those whose care placements were stable (Beck, 2006).

In a study by Fernandez (2008) the majority of children in the sample had experienced significant placement instability in their lives and more than half had multiple care placements. Fernandez (2008) found that children experienced fragile permanence as placements broke down and placement moves were accompanied by a change of schools and consequent broken peer and adult attachments. In 78 % of cases, children changed schools when they moved foster placement and 62% of children had had three or more unscheduled school changes (Fernandez, 2008). Fernandez (2008) highlighted that children struggled to keep up with their peers, and were conscious of the disruption caused by their many moves based on children's responses in the study. Just under half of carers (48%) in Fernandez (2008) study felt that children were performing very well in school, the majority of the children were coping moderately, however 16% rated children in their care as performing not very well at school. Overall Fernandez (2008) identified children in their sample had high levels of psychological need and multiple and inter related problems affecting emotions and mood, behaviour and relational capacities.

Fernandez (2009) researched outcomes of long term foster care and found that the greater the length of time children spent with current foster carers, the better the ratings of adjustment, satisfaction, integration, academic progress and behavioural outcomes. The study concluded the longer the residence of children in their placements, the better the integration they experienced. Overall, longer placements were associated with better outcomes as rated by caseworkers. Children were found to be at risk of their psychological and social development being compromised when stability of their living environment was not maintained. Fernandez (2009) found that placement moves were accompanied by a change of schools and disruption of adult and peer attachments and concluded that this recurrent finding must reinforce the commitment of care systems to plan proactively for stability. Fernandez (2009) findings indicate the need to support foster placements and carers to achieve best outcomes for children and placement stability.

The relationship between placement disruption and mental health is complex however. It is suggested that mental health problems may both contribute to and be a consequence of multiple placements (Stanley et al., 2005). The identified association between moves in care and mental health is difficult to disentangle from age at entry to care which is supported by the finding that those who experience multiple placement moves were found to have entered care for the first time at an older age and already had poorer pre existing mental health (Tarren–Sweeney, 2008).

In the US, Newton et al. (2000) found a strong association between placement change and behaviour disturbance in their cohort of foster children (N= 415) on the CBCL. Volatile placement histories were found to contribute negatively to both internalizing and externalizing behaviour problems and children who had several changes in placement were at high risk for deleterious effects. The authors found that initial externalizing behaviours were the strongest predictor of placement changes and suggested that their findings were consistent with other researchers and as expected, children who were disruptive, aggressive and/or dangerous to others were likely to be moved to alternate care settings. Newton et al. (2000) also found however, that children who initially scored within normal ranges on the CBCL may be particularly vulnerable to the detrimental effects of placement breakdowns. For the sample of children who were initially rated as not evidencing behavioural problems (n= 173), the authors found that the number of placements was a consistent predictor of increased internalizing, externalizing and total behaviour problems. The authors argued on the basis of their findings that behaviour problems are both a cause and a consequence of placement disruption. Newman & Mares (2007) suggested that children who do not evidence behaviour problems may in fact constitute a neglected population that responds to multiple disruptions of their primary relationships by becoming increasingly withdrawn and isolated, as opposed to a population that evidences more hostile and externalising behaviours. The authors suggested their results provided an argument for early assessment of all children and careful monitoring of those who experienced frequent placement disruption. Assessment of those who appear resilient is also warranted (Newman & Mares, 2007).

Tarren-Sweeney (2014) explains that placement breakdowns most often occur when caregivers are confronted by children’s severely disruptive behaviour while placement instability accounts for further deterioration in mental health over and above the difficulties children bring to placements (Delfabbro & Barber, 2003). The spiralling decline in stability and functioning observed in children who endure repeated placement breakdown constitutes ‘developmental cascade’ involving both cumulative and progressive effects (Masten & Cicchetti, 2010) which become increasingly difficult to reverse as successive placement breakdowns occur (Tarren-Sweeney, 2014).

McNicholas et al. (2011) investigated mental health and placement breakdown in an Irish sample of children in care and found that as well as being in long term and residential care, frequent placement changes were significantly related with poorer outcomes and increased mental health contacts. Mc Nicholas et al. (2011) agree that the relationship between placement disruption and increased mental health problems is complex because it is unclear as to whether mental health problems contribute to placement disruption or are a consequence of multiple placements. Other studies have similarly identified both cause and effect relationships (Stanley et al. 2005). Minnis et al. (2007) assert that poor mental health is associated with disrupted attachments linked to changes in placement and that children in care by definition, have experienced neglect or maltreatment in their family of origin, and are at increased risk of experiencing other trauma-related mental health problems.

Golding (2010) highlights that prior to coming into care, disorganisation and high levels of need within families frequently leads to neglect of health needs and once in care, repeated changes of placement, lack of advocacy and poor inter-agency communication can further hinder access to quality health care. It is suggested that acceptance of challenging behaviour by those involved with children leads to under use of services and continuation of problems (Ward et al.,2002) while Golding (2010) concurs that problems are compounded by a low expectation of service availability.

Mc Elvaney et al. (2013) agree that mental health problems can be attributed to the failure of services to meet children’s needs and the care system itself can contribute to the experience of trauma. Shortcomings in social work provision are highlighted in child protection and welfare services in Ireland by Mc Nicholas et al. (2011) who found the majority of children in care had no case worker while the Health Information and Quality Authority (HIQA; 2012) found half of looked after children had no social work allocation. Case worker provision is highlighted in research in Ireland (Mc Elvaney et al. 2013) and in studies internationally. Tarren-Sweeney (2010b) for example confirmed that having a caseworker was the only independent predictor of children in care accessing mental health supports. Young people in the care system in Ireland themselves identified having someone to turn to for support and advice was the most important factor whilst in care and when leaving care (Daly, 2012a; 2012b).

From the above, it is evident that multiple risk factors exist for children in care. In addition to exposure to interpersonal trauma and early adverse care, children experience further mental health risk factors including age at entry to care, placement instability and repeated moves in care. Mental health problems are both a cause and a consequence of placement disruption whereby multiple placements contribute negatively to internalizing and externalizing behaviour in children and those who are initially within normal behavioural ranges on screening measures may be particularly vulnerable to the effects of placement breakdown. Problems in the systems supporting children in care constitute further developmental risk for children and cumulative vulnerability whilst in care.

1.2.1.5 Limitations in Assessment and Diagnosis in Care

It is acknowledged that assessment and diagnosis of mental health problems in children in care is complicated with current assessment and diagnostic classification systems.

The Achenbach System of Empirically Based Assessment (ASEBA) (Achenbach & Rescorla, 2001) comprises the Child Behaviour Checklist for Ages 6-18 CBCL (Achenbach, 1991; Achenbach & Rescorla, 2001) and corresponding Teacher Report Form for Ages 6-18 (TRF) (Achenbach, 1991; Achenbach & Rescorla, 2001) which are standardised parent/ caregiver and Teacher screening measures of mental health.

The ASEBA has been used as a psychiatric screening tool in large scale community mental health research (Rishel et al., 2005; Martin & Carr, 2005).
The ASEBA has also been widely used to determine the clinical status of children in state custody (Heflinger et al., 2000), to assess children's behavioral adjustment (Perrin et al. 1991) and in epidemiological surveys of psychiatric disorders used concurrently with other measures (Frombonne, 1989, Tarren- Sweeney, 2007, 2008a). Associations have been identified between CBCL subscales and specific diagnoses by Rishel et al. (2005) although using the ASEBA as a stand alone measure was deemed inadequate as unacceptably high numbers of cases could potentially be missed leading to the conclusion that use of the CBCL as a diagnostic screening tool alone would be unlikely to accurately identify children with specific diagnoses. The CBCL is recommended however as a triage tool to inform practitioners where in-depth structured diagnostic interviews are required (Rishel et al. 2005).

The ASEBA also has established validity and reliability in numerous research studies investigating mental health of children in care (Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2011; Lawrence et al., 2006; Shore et al., 2002, Minnis & Del Priore, 2001; Tarren –Sweeney & Hazell, 2005; 2006; Fernandez, 2008; Tarren-Sweeney, 2010; Bernedo et al. 2012).

De Jong (2014) asserts that the most widely used of these, the Diagnostic and Statistical Manual for Mental Disorders (DSM) (APA, 2000) fails to identify the particular difficulties experienced by maltreated children while Tarren-Sweeney (2014) explored psychiatric symptoms in looked after children and found that although 35% had psychiatric diagnoses, a further 20% displayed complex attachment and trauma related symptomology that could not be adequately conceptualised within psychiatric classification systems such as the DSM.

The fifth edition of DSM (APA, 2013) conceptualises two attachment disorders; reactive attachment disorder and social engagement disorder with significant impairment in children's abilities to relate interpersonally to others described in both. DSM also recognises that it is not uncommon for the clinical picture to include combinations of symptoms**.** Researchers however have challenged the validity of the distinction between different attachment disorder categories which have been found to co-occur in some children (Minnis et al., 2009) while others support the viewpoint that attachment disorder subtypes can be mixed (Zeanah et al., 2004).

Insecure and disorganised attachments are the norm in maltreated populations of children, with the latter reported in at least 65% of looked after samples (Green & Goldwyn, 2002) which contrasts with 1% prevalence of RAD in the population (Richters & Volkmar, 1994). Even if the latter represents an underestimate, it is still evident that disorganised attachment is a much broader concept than RAD which typically includes social disruption and other possible psychopathology that may not be present in attachment disorganisation (Hanson & Spratt, 2000).

De Jong (2014) asserts that attachment disorder in clinical settings poses a number of problems in outlining the practice parameter for RAD set out by the American Academy for Child and Adolescent Psychiatry (AACAP, 2005) which describes children who have not developed a preferred attachment relationship (Prior & Glaser, 2006) whereas children seen in clinical settings have some capacity to form attachments, albeit with distorted and maladaptive patterns. Minnis et al. (2009) used a questionnaire to measure RAD symptoms in children in care and found 30% of those who fulfilled RAD criteria were also rated as securely attached. This raises questions, including the possibility that RAD is not a purely attachment related phenomenon and a more fundamental question about the validity of the concept and attempts to measure it.

Minde (2003) and others have asked whether attachment problems represent a continuum with attachment Disorganisation and other forms of insecure attachment merging into Attachment Disorder. Although adopting a dimensional approach to assessing attachment may have advantages over a categorical approach preliminary research does not suggest that the spectrum continues into attachment disorder (Fraley & Spieker, 2003).

De Jong (2014) explains that the question of what is attachment-related and what is not is a familiar conundrum for the clinician and not only are the diagnostic boundaries of attachment disorder unclear, the existence of multiple co-morbidities further confuses the clinical picture and in such uncertainty, confident diagnoses of

RAD is difficult. De Jong (2014) highlights that most research assessment tools for attachment do not translate easily into clinical settings and the unreliability in diagnosing RAD over the age of 5 years alongside multiple interacting influences the older the child becomes making it difficult it to disentangle attachment patterns from other aspects of development.

Other problems with the use of classification systems in maltreatment is that often, children's difficulties rather than reaching thresholds for a psychiatric disorder constitute a combination of multiple lower- level difficulties below clinical thresholds for a range of problems such as anxiety, depression, conduct disorder, ADHD and PTSD and as a result of such combinations of symptoms, children experience greater impairment than those who reach thresholds on a single psychiatric diagnostic category (De Jong, 2014). Additionally, there may be considerable functional impairment associated with sub-threshold presentations which are not given proper weight because of the lack of a diagnosis. Multiple lower level impairments are thought to be poorly understood or overlooked by clinicians applying DSM and problems are compounded by the fact that many psychiatric disorders frequently seen in maltreated populations, such as Conduct Disorder, ADHD, PTSD, Depression and Anxiety are part of a co-morbid picture (De Jong, 2014).

De Jong (2014) concludes that the difficulty working clinically with available diagnostic classifications with children who have histories of abuse and neglect as combinations of pre-natal influences, interpersonal trauma in the early caregiving relationship, disturbed and disrupted attachments and other significant losses and adverse environments produce a complex constellation of symptoms and pervasive impacts on development that is difficult to categorize (De Jong, 2014).

Tarren- Sweeney (2013) concurs that complex attachment and trauma related problems in looked after children elude coherent formulation within DSM and ICD and suggests that the most defining feature is not the *form* of disturbance but the *complexity* and *severity* while others agree that diagnostic classification systems do not adequately support trauma related developmental case formulations and interventions (Kinscherff, 2012). van der Kolk (2005) has conceptualised Developmental Trauma Disorder that more accurately defines the chronic interpersonal trauma experienced by maltreated children manifested in dysregulation in several domains; emotional, cognitive and social, triggered by traumatic memories with altered attributions and expectancies with regard to children’s self concept and that of others as well as functional impairment in a number of domains. De Jong (2014) explains that the concept of ‘complex trauma’ is firmly embedded into clinical usage to conceptualise the pervasive developmental impairment experience by maltreated children.

From the above, the limitations of diagnostic classification systems in capturing complex mental health in care and the consequence of adherence to narrow definitions in approaches to treatment, underscores the need for broader concepts of mental health incorporating psycho social factors in assessment, case formulation and treatment.

1.2.1.6 Conceptualising Mental Health in Care

It has been highlighted importantly, by Mc Elvaney et al. (2013) in a report of the experience of young people in the Irish care system, that the type of services provided to children in care is underpinned by the models of mental health being used and the way mental health is conceptualised.

Adopting broad definitions of mental health is proposed by the World Health Organisation (WHO) (2005) emphasising well-being and the capacity to achieve and maintain competencies in psychological and social functioning. Mental health in young people according to the WHO includes “a sense of identity and self worth, sound family and peer relationships… and an ability to be productive and to learn” (WHO, 2005, p.7). Such a definition encapsulates the young person’s ability to function in a social world and manage relationships within it. Concepts of mental health that extend beyond simply the absence of illness or psychiatric disorder (Barry, 2009) mean that services supporting positive mental health need to involve more than diagnoses-led interventions (Mc Elvaney et al., 2013).

In Ireland, the Mental Health Commission’s (MHC, 2005) model of mental health emphasises the expectation of recovery from mental ill health, recognising that help for those experiencing mental health problems may involve a range of disciplines, the use of community based resources both formal and informal and school and peer supports.

Mc Elvaney et al. (2013) assert that emotional disturbances can be considered mental health difficulties, and that children's behaviour problems are often an expression of underlying mental health problems. Mc Elvaney et al. (2013) also highlight that differences in terminology may have consequences for how difficulties that children experience are interpreted and addressed by service providers in education, care and youth justice agencies. It is suggested that the focus on positive psychological well-being reflects an increasing emphasis on concepts of mental health that extend beyond the absence of mental health problems (Barry, 2009). The implication of adopting broader concepts of psychological well-being is that mental health is relevant to everyone and that services need to go beyond diagnosis-specific interventions in supporting mental health needs.

In the present study 'mental health' is used interchangeably with the term 'emotional and behavioural problems' where both definitions reflect a continuum of psychological distress ranging from sub-clinical to problems reaching clinical significance and potentially fulfilling diagnostic criteria for disorder. Importantly as outlined above, the implication of adopting broad definitions of mental health emphasising psychosocial wellbeing is the relevance of mental health to all agencies involved in child wellbeing and for services to go beyond diagnosis-led interventions in supporting children's wider psycho-social needs.

1.2.2.0 Relationships and Mental Heath in Care

1.2.2.1 The Early Caregiver Relationship and Brain Development

The maltreatment literature has drawn attention to the profound feelings of separation and loss experienced by a young person required to leave their family of origin and be placed in care, at the heart of which are 'powerful issues about the breaking and making of relationships' (Simmonds, 2014, p. 195). Also highlighted, are the problems faced by children placed in care, in having to establish new relationships in the ‘long shadow’ cast by family of origin and the associated traumatic and conflicted feelings as well as problems associated with the care system itself (Simmonds, 2014).

We are in no doubt from Bowlby’s (1979) early writings in attachment, of the impact on the child of the rupture and loss of the primary attachment figure. Attachment theory articulates how the infant develops mental representations or internal working models of relationships based on the infant caregiver relationship and the importance of this for the infant’s psychological functioning (Bowlby, 1988).

Over the last recent decades, scientific strides have been made in research in neurobiology which has informed developmental models of attachment and explained how emotional transactions with the primary caregiver influence maturing brain systems that are key to effecting regulation and psychic development in the infant (Schore, 2010).

The primary caregiver is understood to be the psychobiological regulator of the developing infant brain via a process whereby the caregiver responds to arousal levels and moment to moment changes in infant affective states such that the infant learns to regulate their own affect and tolerate increasingly higher levels of stress (Schore, 1996). This co-regulation of affect between infant and caregiver facilitates understanding and containment of emotional states which are central to the maturing infant’s emotional intelligence and social competence (Music, 2008). Emotional regulation which is initially external between caregiver and infant becomes increasingly internalized and neurologically hard-wired in the developing infant brain (Schore, 2001a). Through this co regulatory process with the adult, the infant learns to identify emotional states, which in turn facilitates the development of their mentalizing capacities (Fonagy et al., 2002).

Caregivers who are poor readers of their infant’s affective cues compromise the infant’s healthy psychosocial development and such children remain poor at understanding and regulating affective arousal and distress (Fonagy et al., 2002). Children whose caregivers are sensitive and attuned develop different mental representations of self and others and expectations within relationships (Music, 2008).

Howe (2005) describes how caregivers who evoke fear and distress in the child and fail to regulate ensuing emotional distress cause particular psychological harm. Such children develop fewer insights into the nature of their own distress and arousal, and have reduced capacity to contain and regulate their feelings.

Under emotionally demanding conditions where there is constant or cumulative trauma, it is possible for the child to become hyper-aroused with a constant sense of danger and inability to calm, or a suppressed and shut down state of self-protection, where the child removes themselves psychologically from the physical event as in extreme dissociation (Schore, 1996). In such psychologically shut-down states where mind and body are disconnected, the child feels nothing (Schore, 1996*)*.

The consequence of experiencing catastrophic states of relational trauma in early life is progressive impairment in the ability to adjust or take defensive action on one’s own behalf and a blocking of the capacity to register affect and pain which are essential functions for survival (Schore, 2010). It is understood that the hippocampus can atrophy as a result of exposure to neglect and trauma with excess cortisol involved in this, leading to developmental delays, impaired ability to empathise or regulate emotions and consequently difficulties in the capacity to manage social relationships and ordinary social interaction (Schore, 2010).

It is evident from neurobiological research which has informed the area of maltreatment, how the relationship with the early caregiver directly impacts the infant’s affect regulation and structural brain development. The end point of early adverse care is wide ranging impairment in developmental areas, emotional regulation and social and emotional competencies in the child.

1.2.2.2 Relational Trauma and Attachments of Children in Care

While attachment theory explains how children develop emotional connections and bonds to their parents (Dallos & Dallos, 2014), for children in the looked after system with histories of maltreatment, disrupted attachments and placement in substitute care, the process is considerably more complex.

Unsurprisingly, studies have found that children in substitute care generally hold insecure, and in many cases, complex traumatic attachment representations (Crittenden, 2008; Tarren-Sweeney, 2010). Children with histories of abuse are likely to develop insecure or disorganised attachments or display attachment disorder behaviours (Howe & Fearnley, 2003; Newman & Mares, 2007; O'Connor & Zeanah, 2003a; 2003b) manifest in emotional and behavioural adjustment problems (Marcus, 1991). Alternate care placements can be fraught with difficulties for both children and carers and breakdowns frequently occur resulting in the experience of further disrupted attachments (Steele et al., 2003; Tarren-Sweeney, 2010).

Because of the complex trauma experienced by maltreated children, Tarren-Sweeney (2013) suggests that attempting to differentiate attachment classifications and attachment disorder behaviours in children who have been abused from those who have been neglected is problematic. As well as the experience of abuse, neglect or both, maltreated children may have had other pre-care experiences contributing to the development of attachment problems. Some children may have been cared for by a succession of strangers often for lengthy periods while others may have had multiple losses prior to or post entry to care (Tarren-Sweeney, 2013).

It is acknowledged that adverse pre care experiences constitute significant developmental risk for children's mental health and psychological adjustment.

1.2.2.3 Neuroscientific Research in care giving Relationships

Bowlby (1988) contended that secure attachments to an adult caregiver form the basis of all future relationships. While Bowlby maintained this relationship was crucially important to the development of attachments, others have less deterministic views and encompass the role of relationships with multiple caregivers and important others (Rutter, 1981) as well as the positive effect when emotional warmth and support is provided to children following separation from their caregiver and placement in care (Clarke & Clarke, 2003).

Scientific strides in neurobiology have informed developmental models of attachment explaining how emotional transactions with the primary care giver influence maturing brain systems that are key to affect regulation and infant psychic development (Schore, 2010). The co-regulation of affect between infant and caregiver facilitates understanding and containment of emotional states which are central to the maturing infant's emotional intelligence and social competence (Music, 2008). In line with Bowlby's goal of integrating psychological and biological models of human development, the current interest in affective processes, interactive regulation, early experience-dependent brain maturation and non-conscious relational transactions has shifted attachment theory to theory of regulation (Shore & Shore, 2007).

The US based National Scientific Council on the Developing Child (2012) recognises the crucial importance of the early care-giving environment on infant development and contends that beginning immediately after birth, a strong foundation for infant well-being requires a responsive environment and supportive relationships to build sturdy brain circuits, facilitate emerging capabilities, and strengthen the roots of physical and mental health (Field, 1994; Hofer, 1994; Shonkoff & Phillips, 2000).

Interventions to enhance caregiver capacity and promote infant caregiver attachments have an already established evidence base while other promising interventions are currently being developed and validated (The National Scientific Council on the Developing Child, 2012).

There is now abundant scientific evidence demonstrating that the major ingredient in this process is the *serve and return* relationship (National Scientific Council on the Developing Child (2004; 2007) between infant and parent or caregiver via mutually rewarding reciprocal and dynamic interactions that literally shape the architecture of the developing brain and are essential for healthy development. In contrast, the significant absence of basic serve and return interactions can produce serious physiological disruptions that lead to lifelong problems in learning, behaviour, and health.

Notwithstanding the early relational trauma experienced by children there is research evidence suggesting that disrupted attachments can ameliorate over time when good and stable care and parenting is provided (Dozier et al., 2001).

There is also new evidence suggesting that felt security is an important part of the psychosocial development and mental well-being of children in care and is closely linked to perceived placement security (Tarren-Sweeney & Vetere, 2014). Indictors of placement security have been found to independently predict better mental health in children in care (Tarren-Sweeney, 2008c), while felt security measured retrospectively has been associated with positive outcomes for young people after they left care (Cashmore & Paxman, 2006).

1.2.2.4 Evidence Based Intervention

As interpersonal relationships and life challenges change over the course of the lifespan, it is essential that the adverse consequences of deprivation are addressed in developmentally appropriate ways (National Scientific Council on the Developing Child, 2004; 2007). The negative consequences of severe neglect can be reduced or reversed through appropriate and timely interventions. The capacity for recovery in children who are removed from neglectful conditions and placed in nurturing environments in a timely way has been well-documented (Dozier et al., 2006; 2009; Fisher et al., 2000; 2007). However, improvements may need more than the cessation of neglectful care. Long-term, systematic and empirically supported interventions are often required to promote effective recovery. Successful treatments have been found that reduce attachment and behavioural problems in children who were previously neglected and placed in alternate care (Dozier et al., 2006; 2009; Fisher & Kim, 2007) while interventions that promote secure attachments in young children who continue to live with their families while being monitored by child welfare services are also identified (Bernard et al, 2012).

From a biological perspective, systematic interventions that target social and emotional needs of young children in foster care have demonstrated evidence of improving stress-regulatory capabilities in patterns of cortisol production that were found to be indistinguishable from healthy non-neglected children (Pears et al., 2008; Dozier et al., 2006, 2008; Fisher et al., 2006). With the provision of appropriate interventions, previously institutionalized children have also shown improvements in brain activity as measured by EEG (Moulson et al., 2009; Vanderwert et al., 2010).

The timing of interventions is a critical predictor of outcome. If appropriate interventions are provided early on then substantial improvement in cognition, attention, memory, and executive functioning are achievable (Nelson et al., 2007; Bos et al., 2009; Moulson et al., 2009; Vanderwert et al., 2010).

As maltreatment and neglect often co-occur with other family problems, effective interventions needs specialized approaches to address a variety of adult health and socio economic needs. Programs that are not designed specifically for children but are aimed for adult caregivers who are experiencing significant challenges have been found to indirectly improve child outcomes by building caregiver capacities and family resources that can prevent problems occurring in the first place (National Scientific Council on the Developing Child (2012). The growing research evidence on the long term effects of maltreatment on lifelong learning, behaviour, and physical and mental health suggests that the economic benefits of addressing problems early on are substantial (National Scientific Council on the Developing Child, 2012).

1.2.2.5 Maltreatment and Problems in Social Functioning

It is understood, that in helping young children regulate their arousal, caregivers are introducing their infants to the world of feelings and subjective mental states, and the importance of relationships with others (Howe, 2005). Children helped by their caregivers to understand situations in terms of their own and other’s mental states are more secure, empathic, socially oriented and popular (Fonagy et al.,1991).

George et al. (2011) explain that in sensitive caregiving where attachment bonds are ordered and within normal limits, there is a high probability the infant will use the security and stability of the relationship to develop adaptive relationships with others and ultimately develop self-reliance and social and cognitive competence. On the other hand, Solomon & George (2011) assert that when attachment bonds are disordered and disruptions in the attachment relationship are not repaired it is probable that children will have problems in academic performance, emotional regulation and family, teacher and peer relationships.

Schore (2010) has described the empathy disorders and reduced capacity to understand the emotional states of others in children with histories of relational trauma resulting in altered development of right cortical systems that non-consciously decode emotional stimuli. Such deficits in social cognition, lead to misattribution and misinterpretation of the emotional states and intentions of others and lead to the problems children experience in adaptive social relationships (Schore, 2010).

Writers have observed disrupted social relationships in maltreated children associated with disordered attachments (Green, 2003; Green & Goldwyn, 2002; Minnis, 2003) leading to the proposal of a theory of social impairment (Green, 2003) which acknowledges the profound impact that disturbance in the early attachment relationship can have on later social understanding and functioning. De Jong (2010) proposes that impaired social cognition in children with histories of abuse and trauma is evident in the distorted attribution of hostility in others, feelings of shame and low self esteem, poorly developed social skills and impaired ability to form relationships with others. As mental health is associated with the ability to recognize, understand and regulate emotions which are capacities developed within the context of secure care-giving relationships, the implications are significant for the mental health and wellbeing of children with experiences of early adverse care and maltreating relationships (Howe, 2005).

De Jong (2014) agrees that poorly developed social skills and impaired ability to form relationships with others frequently occur in maltreated children**.** While attachment disorganisation and disorder may account for some of the social impairment manifested in children with disinhibition or excessively controlling behaviour, others suggest that it remains to be clarified what is attachment related and what is related to more general deficits in social development (Green, 2003). De Jong (2014) agrees with the assertion that clinically a more fine grained approach to assessment of social development is needed to advance understanding in this area as is suggested (Byrne, 2003).

It can be concluded from the above, that as mental health is associated with the ability to recognize, understand and regulate emotions all of which are capacities developed within the secure caregiver environment, maltreating relationships are a risk factor for various forms of psychopathology and have detrimental consequences socially for children's relationships and their mental health and wellbeing. Neuro science has expanded knowledge regarding the aetiology and treatment of psychopathology related to interpersonal trauma in the early caregving relationship. There is established evidence of efficacy of treatments and evidence of other promising interventions with families that promote early intervention and prevention.

1.2.2.6 Relationships and Mental Health of Children in Care

As much as half of the population of looked after children are identified with interpersonal relatedness difficulties and behaviours suggestive of attachment disorder (Tarren-Sweeney, 2014). This finding has led to the assertion that relationship problems are the hallmark feature of complex psychopathology of children in alternate care and underscores the need to assess children‘s relationship disturbance as part of overall mental health assessment.

The importance of relationships for the experience of positive mental health is identified both in studies with normative samples and in children in alternate care in Ireland. In a national study *The My World Survey* (Dooley & Fitzgerald, 2012) of children in the general population in Ireland, relationships were identified as an important protective factor by young people themselves who stressed the need to be able to talk to someone about their problems and to have 'one good adult' in their lives. The survey concluded that one of the strongest predictors of good mental health in the lives of young people surveyed was the availability of at least *'one good adult'* in their lives; someone who knew them personally and was available to them, especially in times of need. The presence of such a person in the lives of young people was found to be related to the development of their self-esteem, their sense of belonging, and how they coped or did not cope with their difficulties, whereas the absence of one good adult was significantly related to levels of depression, suicide and self-harm.

Young people with experience of the care system (Mc Elvaney et al., 2013) identified the need for continuity in relationships with social workers and other professionals and the fact that multiple placements affected the stability needed to make friends and achieve academically. Young people also identified the importance of a significant relationship with a foster family member or foster sibling, staff or professional as ‘a beacon’ in their lives whilst in care. Findings of Dooley & Fitzgerald (2012) and Mc Elvaney et al. (2013) provide strong confirmation from the opinions sought from young people themselves in the general child and adolescent and looked after populations respectively, of the protective factor of relationships for the experience of positive mental health. It is indicated that relationships within care placements are essential for the positive adjustment of the young person in care. The relationship with foster carers is a particularly important protective factor for the young person in care. Research has highlighted that providing support to foster carers can mediate the foster carer’s ability to cope with child adjustment problems and sustain the care placements (Terling-Watt, 2001). Further, the evidence that children in the care system experience systemic threats to their sense of felt security (Tarren-Sweeney & Vetere, 2014) indicates the need to strengthen caregiver child relationships aimed at promoting children’s felt security (Chambers, 2014).

Research in the UK by Beck (2006) has also found that relationships appear to buffer young people from mental health problems. Carers identified that being close to someone was a significant protective factor that mitigated against mental health problems for young people in their care. The study found that children who moved placement frequently were less likely to have someone they were close to. Findings provide further evidence of the importance for children in care of relationships to buffer against mental health problems although Beck (2006) cautioned against inferring causal links and suggested that research with longitudinal design would be needed to investigate whether the factors identified protected children in care from developing mental health disorders.

1.2.2.7 Children’s views of relationships

When studies obtain the views of children themselves about relationships, they identify relationships as central to their lives and describe the importance of relationships both with adults and peers. Children highlight the importance of a special relationship with at least one adult in their lives. They envisage this relationship as ongoing, with someone they see as a role model or mentor who listens to them (Martin & Jackson, 2002).

Children wish for someone to motivate them to work hard and achieve and support them in their education (Martin & Jackson, 2002). Similarly children interviewed by Dearden (2004) said that having a key worker who knows them well and that they can trust, would allow better communication between care and school and reduce some of the confusion from the conflicting messages young people got from different professionals. Children identify relationships with peers as important for their wellbeing. Some describe having supportive friends, who knew them prior to coming into care (Dearden, 2004). Hedin et al. (2011) identified the value of interacting with peers as a frequent narrative in children’s accounts while Celeste (2011) found that children identified the support of peers who helped or encouraged them with their homework. Children who reported less contact with friends outside of school, were living in residential care or with their parents leading to the assertion that care setting is influential in the development and maintenance of friendships (McClung & Gayle, 2010). Studies found that a positive factor influencing the development of relationships, was when other children were aware of their care status (McClung & Gayle, 2010) and that it helps when school friends have an understanding of what it means to be in care (Harker et al., 2003). Harker et al. (2003) concluded that similar to non-looked after children, peer relationships are crucial to looked after children’s identity formation and wellbeing.

1.2.2.8 Assessing attachment relationship problems

While the importance of investigating relationship problems in children in care is highlighted, the difficulties diagnosing psychopathology and problems in relationship functioning in looked after samples due to their complex clinical presentations is recognised. Most research focuses on attachment disorder diagnosis. Difficulties in the measurement of attachment disorder are acknowledged, yet identification of such developmentally inappropriate social behaviours is crucial as it is these which may place maltreated children at further risk of abuse (Minnis, 2003).

Attachment disorders are understood not only to constitute disorders in themselves due to the resulting impairment in children's relationships and social functioning, but are risk factors for a range of other psychopathology (Minnis, 2003). As questions remain about the nosology of attachment disorder beyond the age of 5 years (American Academy of Child and Adolescent Psychiatry, 2005) it is suggested that clinical presentations are simply referred to as *attachment disorder behaviours.*

In developing instruments to detect attachment disorder behaviours in children in care, researchers highlight the accuracy with which such behaviours can be detected may depend on the pervasiveness of symptom presentation (Minnis & Keck, 2003). In practice, clinical categories are only useful if clinicians can identify discrete groups of children who share attributes and outcomes which research suggests is possible to do, and where specific groups of children with behaviours consistent with attachment disturbance have been identified (Minnis & Keck, 2003). Minnis et al. (2007) identified attachment disorder behaviours in a large community sample (n=13472) of twin pairs aged 7-9 years in Scotland, using a relationship specific measure - the Relationship Problem Questionnaire (RPQ) along with the SDQ (Goodman, 1997) to measure children's global distress. Factor analysis showed clear discrimination between attachment disorder behaviours, conduct problems, hyperactivity and emotional problems in children. Findings suggested a strong genetic influence to attachment disorder behaviours with males showing higher heritability. Authors concluded that attachment disorder behaviours can be differentiated from common childhood emotional and behavioural problems suggesting the use of such measures for clinical screening (Minnis et al., 2007). Brief questionnaires such as the RPQ are recommended in clinical practice to assist in assessment and referral for appropriate treatment of those children whose symptoms are difficult to define but whose clinical outcomes are poor (Minnis et al., 2002).

A study carried out in Belgium (Vervoort et al., 2013) utilised the RPQ with 152 children (mean age = 7.92) attending 20 special education schools for children with severe emotional and behavioural problems. The authors examined psychometric properties of the instrument by testing measurement invariance across parent and teacher forms along with the SDQ to measure global mental health distress. Both versions of the RPQ were found to have good internal consistencies and correlated as expected with the Disturbances of Attachment Interview (DAI) (Smyke & Zeanah, 1999) which was administered to further assess attachment related emotional and behavioural disturbance. Similar to Minnis et al. (2007), significant associations between the RPQ and SDQ were identified leading Vervoort et al. (2013) to conclude that the RPQ possesses good psychometric qualities and is a useful multi-informant instrument to identify attachment disorder symptoms in children with severe emotional and behavioural problems. These findings provide confirmation of the appropriateness of this measure with looked after children where high rates of relationship disturbance and attachment disorder behaviours are known to exist.

It can be concluded, although attachment theory explains the importance of the early caregiver relationship on infant attachment, the picture is much more complex in maltreating early care and attachments need to be understood in the context of children’s pre and post care experiences with multiple caregivers, reduced felt security associated with disrupted placements in care and the cumulative and adverse effects of both. The evidence base suggests that problems can be reduced or reversed through appropriate and timely interventions

It is evident from the literature, that the continuity and security young people derive from close confiding relationships is a significant protective factor in their mental health and wellbeing. The mediating role of relationships in mental health and the finding that half of the looked after population of children have interpersonal relatedness difficulties and behaviours consistent with disordered attachments suggests that assessing relationship disturbance should be a key element in overall mental health assessment of children in care. It has been possible to identify in research studies, discrete groups of children presenting with attachment disorder behaviours that differ from other child mental health problems as well as useful screening tools for use in clinic practice to measure such behaviours.

1.2.3.0 Mental Health of Children in Care in School

1.2.3.1 Educational Risks and Outcomes for Children in Care

Children in care are known to do less well educationally than others (Golding, 2010) and a concerning educational profile is confirmed by studies in the UK and internationally.

Limited research exists in Ireland regarding educational outcomes of children in care. Mc Elvaney et al. (2013) refers to findings in the general child population from two studies; ‘The My World Survey: National Study of Youth Mental Health’ (Dooley & Fitzgerald, 2012) and ‘Teenage mental health: What helps and what hurts’ (McEvoy, 2009) which document the type of pressures experienced by children in general and offer a consistent picture of pressure on the psychological well-being of young people with regard to self-image, school, exam pressure, bullying and isolation, and difficult relationships with family and peers.

The added difficulties faced by the looked after population associated with placement in alternate care magnifies the risk and compounds the pressure on children in care, educationally and socially. It is suggested that risks and reasons for educational challenges in looked after children are multifaceted and the engagement of looked after young people in education is a critical issue warranting the same level of attention as other aspects of their wellbeing (Fernandez, 2013).

Children in care are vulnerable to a multitude of pressures which negatively impact their educational and psycho-social wellbeing (Mc Elvaney et al., 2013) and studies report a range of educational risk factors and poor educational outcomes that are associated with psycho –social morbidity in looked after children (Minnis & Del Priore, 2001; Mitic & Rimer, 2002; Mc Nicholas et al., 2011; Stanley et al., 2005). The problems children in care have remaining engaged with school systems have been identified by Stanley et al. (2005). Stanley et al. (2005) surveyed 80 children in the care of two local authorities in the UK and found one third had poor concentration, more than half (55%) had special educational needs and although 46% were doing well in school, underachievement was identified in the remainder while a study by

Minnis & Devine (2001) confirmed one third of children in care in their sample had learning disabilities. School attendance problems were documented in one in four children in Stanley et al. (2005) and children were also more likely to have experienced placement breakdown due to difficult behaviour or unhappiness in their care placement. While the authors suggested their study was biased towards those with high needs, the sample reflected nevertheless the characteristics of looked after children in the local authority areas where the research took place, with regard to age, gender and placement type. Stanley et al. (2005) concluded that high levels of mental health need were associated with placement disruption and educational difficulties were apparent in children with the highest rates of psychopathology.

Findings confirm that in addition to problems remaining engaged with school systems, educational failure in children in care is associated with psycho- social adversity (Stanley et al., 2005). Some study limitations were identified by Stanley et al. (2005) specifically the fact that their research relied on information recorded in social service files by a range of professionals and carers and data was therefore second hand and reflected the judgements of those who compiled the records and who may not have had a clear understanding of the mental state of the child concerned. Using second hand information from case files potentially stretching back over years, led to difficult to establish information and gaps in information. The authors found that only a limited number of reports from mental health professionals were available. The research team designed a set of indicators of mental health need to distinguish different types and levels of mental health problems rather than standardised mental health assessment measures which is a further limiting factor in interpreting findings.

A number of recommendations were outlined by Stanley et al. (2005) arising from their study. The problems with key data collection suggested the need for clearer pathways of communication and information sharing between professionals caring for children in care and the young person's right to access such reports. Although a high proportion of children had received specialist assessments the most common intervention was social worker input, indicating the need for social workers to have well developed skills in supporting children with mental health needs. The need for appropriate training especially in responding to high risk behaviours should be made available to social workers who have a lead role in initiating referrals to second tier services and in responding to crises. Stanley et al. (2005) further suggested that because social workers provide the most immediate and accessible forms of support for front line carers such as foster carers and residential workers, this underscores their need for training.

In a further UK study of children in care, Beck (2006) found support for the findings of Stanley et al. (2005) where more than one in ten of the sample was out of school. Beck (2006) surveyed teachers and carers of children (n=747) looked after by a London local authority and young people themselves (over the age of 11) on the SDQ and found those who moved placement frequently were significantly more likely to be out of school than those in stable care. Children with frequent placement moves were more likely to develop psychiatric disturbance than others in care but less likely to access needed mental health services (Beck, 2006).

The Social Exclusion Unit Report (2003) in the UK has outlined why outcomes for children in care tend to be so poor and why children have difficulties remaining engaged with educational systems. The report highlighted that the permanent exclusion rate of looked after children was 10 times higher than the UK national average, with approximately one third of children outside mainstream education due to exclusion or school non attendance. The report highlighted that children in care experience significant discontinuity in their education while placements are being set up and mobility in the care system is a further factor contributing to poor outcomes where two out of every three children in the UK who move foster placement also move school.

Associations between placement change and behaviour disturbance have been identified. In a study of children in foster care (n= 415) in the US (Newton et al., 2000) volatile placement histories contributed negatively to both internalizing and externalizing behaviour problems on the CBCL and children with several changes in placement were most at risk for negative effects. Number of placements was a consistent predictor of increased internalizing, externalizing and total behaviour problems in children who were initially rated within normal ranges on the CBCL prior to changes in placement. Findings of Newton et al. (2000) suggest that unsteady placement histories contribute towards internalizing and externalizing mental health problems in children in care and those with numerous placement changes are especially vulnerable.

In a study by Fernandez (2008) which investigated school outcomes of children in care, approximately 20 % of the study sample was reported to be behind their age-appropriate grade with suspension from school and unscheduled changes of school cited as contributory factors. Both carer and teacher information was obtained in the study and based on carer accounts, 62% of children had experienced three or more unscheduled school changes. Fernandez identified that in 78 % of cases, school aged children changed schools when they moved foster placement and less than half of carers (48%) felt that the child in their care were performing well in school.

Fernandez (2008) also surveyed children in the study and based on their responses, children were conscious of the disruption caused by their many moves and their failure to keep up with peers. A strength of the study by Fernandez (2008) was the inclusion of a prospective design which surveyed child adjustment at time one , and time two after a number of interventions were provided to foster carers. Fernandez (2008) suggested that the positive trends in improvement in ratings at time one and follow up have been reflected in other research (Heath et al., 2001; Sinclair, 2005). Some of the change may be attributed to the effects of foster care intervention and specialist mental health services from which children in care benefited as well as interventions to develop attachments to foster carers.

Fernandez (2008) outlined implications of these findings including providing support to enhance carer relationships with children and enabling carers to understand the impact of maltreatment and care histories on children; Fernandez (2008) suggested that skilling foster carers in approaches required for the sensitive management of children’s emotional and behavioural problems was an important clinical implication of study findings. Fernandez (2008) identified that instability of care placements and difficulties involved in starting new schools on a regular basis present significant challenges to children in care that have an impact on educational outcomes.

Overall, findings from Fernandez (2008) study indicated that despite concerns related to emotional and behavioural development, academic performance and placement instability early in their care, there was evidence of emerging gains in children’s academic and emotional and behavioural outcomes as they progressed in their permanent care placements, supporting the optimistic trends noted in resilience studies in child development. The implications from the above research are the important benefits from such interventions for children, socially and educationally. Fernandez (2008) asserts that the evidence identified for emerging gains in academic and emotional and behavioural outcomes as children progressed in permanent care lends support to the resilience literature that views school and the educational process as offering structure, boundaries and security to children in care, confirming the importance of school in furthering the well-being and self-efficacy of children in care.

Research in children with attachment disorder symptoms (Vervoort et al., 2013) is increasingly identifying the important buffering role of teacher child relationship quality for this high risk group. Verschueren & Koomen (2012) also highlight the importance of teacher child relationships where teachers can be understood as ad hoc attachment figures and where schools can thus provide a safe haven and secure base function for children although it is also acknowledged that for most children the relationship with the teacher is probably not an attachment bond. Verschueren & Koomen (2012) conclude the positive effect of teacher sensitivity in meeting children's needs and that this suggests the need for research investigating teacher child relationship quality to inform interventions to improve these relationships.

Fernandez (2013) further asserts that research on the range of needs of looked after children in school settings, one of which is to have positive and successful educational experiences, requires planned responses. Because children can have positive and life-changing educational experiences, engagement of children and young people in education is identified by Fernandez (2013) as a critical issue that warrants the same level of attention as other aspects of children’s wellbeing. Education should therefore be a priority for child welfare and education professionals.

1.2.3.2 The role of school in mental wellbeing

The educational psychology service in Ireland- the National Educational Psychological Service (NEPS, 2010) has also adopted a holistic view of mental health, recognising in the absence of mental health, relationships with important others in a child's life may be affected and problems may interfere with the young person's individual personal and educational development. NEPS recognise that internalising or externalising behavioural problems act as a barrier to a young person's social, emotional and cognitive development (NEPS, 2010).

The importance of schools for promoting mental health and well-being of all children is enshrined in Irish law (The Education Act, 1998) and the Department of Education and Skills has set out guidelines for school based mental health promotion in primary and post education (DES, 2013) in the recognition that mental health is critical to children's success in school and life. The DES (2013) has outlined for example actions that schools can undertake to promote the emotional health and wellbeing of *a school community* (Appendix 1) which states that within the school context, positive mental health promotion should focus on enhancing protective factors that contribute to the social and emotional growth and general well-being of young people and provides key strategic actions for schools to achieve a positive mental health promoting culture.

It is recognised (DES, 2013) that schools need to be well resourced in order to provide the specialist interventions children require and consult with the educational resources available to them such as school psychologists, in the design and delivery of school based interventions and the on line supports and resources (Appendix 2). The culture change in schools towards mental wellbeing as an aim for all school going children includes informing and empowering young people themselves via support groups and on line web resources (Appendix 3).

While the DES (2013) guidelines are aimed at all children in primary and post primary education, and it is suggested that children in care have even greater needs for such learning opportunities yet there is no formal recognition by educational agencies of the need for extra educational provision for looked after children.

Gilligan (2001) in Ireland, has suggested that addressing educational needs brings benefits to children in other domains of development, including building self-esteem and resilience and asserts the importance of school in offering children positive role models as well as the benefits of routines and rituals, especially for those experiencing upheaval and adversity in their environment.

Studies in Ireland have similarly found poor educational outcomes in children. Daly & Gilligan (2005) examined the educational and social supports of 13 – 14 years olds in long term foster care (n= 247)**.** In this largely exploratory study, which Daly & Gilligan (2005) suggested marked a starting point in research at national level on educational outcomes and social supports of young people in care, progress in academic subjects was used as a measure of educational indicators. A high percentage of the sample were in care for more than 10 years and almost half were first placed in care at age 3 or younger. The overwhelming majority (98.0%) were in mainstream education and attended school regularly. Due to the difficulty envisaged by the authors in obtaining consent to interview young people foster carers were identified as best placed to provide the required information and were key informants and school behaviour ratings were based on indirect teacher feedback to carers. Although the majority of children were making good progress in school subjects, 5 out of 10 children received some type of specialist educational provision. Daly & Gilligan (2005) highlighted that where children were deemed to be making little progress academically, this did not necessarily mean they were failing to make progress in other aspects of their schooling, such as in the development of social and friendship skills**.**

School behaviour was described as either good or very good in 8 out of 10 children. Although half the sample had the same friend as one year previously and three quarters had a best friend, school bullying was a concern for almost half with higher risk of bullying reported where certain factors were present such as special educational needs or multiple moves in care. Only a third had positive friendship networks defined as; absence of school bullying, no diagnosis of special educational needs, not receiving special educational supports and progressing well academically. Daly & Gilligan (2005) identified associations between educational and psycho – social adjustment where children deemed to have good social supports were more likely to have positive educational experiences. The authors concluded research investigating educational outcomes of children in care needs to focus both on academic and non academic progress indicators (Daly & Gilligan, 2005).

Data in this study relied on carer reports and did not include standardised measures and although the study offers a useful perspective on the educational progress of looked after children in Ireland there are limitations to what can be deduced from the evidence which is largely anecdotal and reliant on carer opinion without the backup of measures or essential teacher information. Psychometric measures, multi informant data including teacher ratings and more rigour in research design would add robustness to studies and validity in findings.

A concerning educational profile is suggested in a recent study of children in care in Ireland by Mc Nicholas et al. (2011) which is more representative of the looked after population due to the inclusion of children in different types of care including residential settings with more challenging needs. 174 children in care with a mean age of 10.83 years were investigated. The majority of children (78.2%) were in foster care, 10.3% were in residential care and 5.7% were at home under supervision orders. Mc Nicholas et al. (2011) confirmed poor social interaction in 21.9% of children in foster care and in 50% in residential care. In spite of the young age (mean age= 10.83 years) of the sample almost 10% had either left school early or were inconsistent attendees. A third had learning difficulties or repeated a year in school, evidencing children’s fragmented educational provision. Findings of Mc Nicholas et al. (2011) suggest a picture of a vulnerable group of young children who experience health and educational inequalities throughout childhood lending support to previous research (Mitic & Rimer, 2002) confirming that children in care have significantly poorer academic achievement compared with peers.

Similar to research by Daly & Gilligan (2005), the data informing the study by Mc Nicholas et al. (2011) was based on reported information, in this case review of social work files and information obtained via a non standardised study specific questionnaire, which did not include key teacher information. A further limiting factor highlighted elsewhere in this review (Mc Elvaney et al., 2013) is that because significant numbers of children in the study by Mc Nicholas et al. (2011) were without an allocated social worker or GP, this may have contributed to under reporting of problems in children leading to an underestimate of problems in the sample. Notwithstanding these limitations, Mc Nicholas et al. (2011) provide a picture of significant psychological and educational morbidity both in foster and residential care leading to the conclusion that careful educational planning must form a fundamental part of children's care plan.

In a report by Mc Elvaney et al. (2013) of children in care in Ireland multiple placement moves were highlighted as impacting the education of many young people in care and changes in school were associated with children's increased challenging behaviour. Additionally, transitioning to second level from the more supportive environment of primary school is said to require significant adjustment in the managing of new classes, relationships and multiple teachers, while the stricter rules imposed at second level can be especially challenging for children (Mc Elvaney et al., 2013). Looked after children are found to be additionally disadvantaged by learning and literacy problems, especially boys in care who are in the bottom 20% of Irish school children in reading, making the transition to secondary even more difficult.

Only eight teenagers with experience of care and youth justice were interviewed by Mc Elvaney et al. (2013) and although this small sample size is not fully representative of the looked after population of young people, reducing the ability to generalize findings, the report nevertheless provides important qualitative data and a perspective on the direct experience of being in care. Important clinical implications are also outlined, based on consultation with young people, particularly the need to ensure continuity in care, to have a common assessment framework, ongoing monitoring of children's mental health and educational needs and involving young people in planning their education and service developments.

High rates of mental health problems have been uncovered in school going children in the general child population in Ireland (Lynch et al., 2004; Martin & Carr, 2006) alongside shortcomings in mental health services for young people (Power et al. 2008) leading to schools being increasingly identified as key locations in which to provide integrated mental health promotion programmes (Power et al., 2008). Others concur that ensuring mental health and wellbeing needs to take place not just at individual child or family level but at multiple layers of influence and settings including schools (Barry, 2009).

Fernandez (2008) highlights that positive experiences in school are considered to be a protective factor, especially for children who are severely disadvantaged and education, which can often be subsumed by welfare concerns, should be given a prominent focus in planning for children in care. Teachers have a prominent role to play in the enhancement of children’s outcomes and should be recognised in an expanded capacity by other professionals and systems working with children in a corporate parenting role (Fernandez, 2008). Stanley et al. (2005) assert that schools and caseworkers may represent some continuity and stability to children in care, reducing in part some of the disruption they experience.

Much of the available literature also points to the negative impact of low expectations for the educational achievements of children in care. Harker et al. (2004) identified in research on children’s views on what would assist them in their studies, the importance of an adult taking interest in them and encouraging them to do well in their school work. Fernandez (2008) suggests that education for children in care must become a priority for social workers and carers when addressing care plans and for investment in interventions and services by agencies to compensate for children’s previous social disadvantage (Berridge, 2007).

Research has investigated school based interventions such as mentoring programmes to develop relationships between children in care and supportive adults in their lives with small but significant effect sizes found in meta-analytic reviews (Du Bois et al., 2002). Almost three quarters of children with mentoring relationships with teachers or school counsellors experience favourable educational outcomes. Better psychological and physical health has also been identified in those with such relationships (Du Bois & Silverthorn, 2005).

The importance of school and supportive school relationships with adult figures is highlighted in studies with looked after populations in Ireland. Children interviewed by Mc Elvaney et al. (2013) referred to the positive influence of school which they referred to as a constant in their lives. The identification of school in this way by young people themselves, demonstrates the potential of educational systems to improve outcomes for young people in care. Mc Elvaney et al. (2013) assert that school provides a developmental context where children can build relationships which can positively influence psychological wellbeing, as indicated by those surveyed who identified a range of school personnel who had made a difference including primary and secondary teachers, guidance counsellors and home school liaison officers.

In summary, unequivocal evidence exists for the challenges faced by children in care remaining engaged with school systems, and at the same time, the potential of schools in promoting positive mental health and improving children's outcomes, educationally and socially. In addition to increased risk for developmental and academic problems, other factors such as moves in care which often involve moving school, mitigate against educational progress and sustaining school relationships.

The opportunities provided by schools to provide supportive relationships further underscores the importance, albeit difficult to achieve, of keeping young people in care engaged in school and sustaining educational provision when other systems in their lives are undergoing change. The effectiveness of school based interventions specifically to build positive relationships with teachers and other supportive school personnel highlights the need for the inclusion of schools in integrated mental health assessment and interventions.

1.2.3.3 Mental Health Problems of Children in Care in School

As outlined in this review, although the mental health of children in care has been extensively researched and high rates of psychopathology have been identified, few studies focus specifically on teacher perspective of mental health of children in care compared to class peers.

Studies based on foster carer report using standardised measures of mental health on the Child Behaviour Checklist (CBCL) (Achenbach & Rescorla, 2001) agree that children in care have more behaviour problems than the general population (Berrick et al., 1994; Dubowitz et al., 1994; Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2001; Lawrence et al., 2006; Shore et al., 2002, Minnis & Del Priore, 2001; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006), particularly on externalizing scales and subscales while Keller et al. (2001) identified children in care as having more behaviour problems on both externalizing and internalizing scales than peers.

Of the studies that have specifically investigated teacher report of mental health of children in care in school, mixed findings are suggested (Minnis & Del Priore, 2001; Shore et al. 2002; Fernandez, 2008; Jiménez & Palacios, 2009; Bernedo et al., 2012)

In a study of looked after children in Scotland, Minnis & Del Priore (2001) used multi informant research methods to investigate mental health problems. The authors identified hyperactivity, conduct problems and problems in peer relationships on both parent and Teacher ratings confirming an overall picture of co-morbid educational and psycho social risk in the cohort investigated.

In an Australian comparison study of teacher and carer report of mental health in children in care, Fernandez (2008) surveyed child behaviour problems on the CBCL and TRF. On carer ratings on the CBCL 43% of children were in the clinical range for total problems, 35% for internalising problems and 34 % for externalising problems. Fernandez (2008) highlighted that the clinical rate for total problems was three times the Australian national average for community samples. When subscales of the CBCL were analysed, carer ratings indicated that between 7.5% and 28% demonstrated clinically significant problems. Attention problems, social problems, delinquent behaviour and anxiety and depression were frequently rated in the clinical range.

Fernandez (2008) surveyed the mental health of children in care in school on teacher ratings, and found that the highest average scores for girls on the TRF was social problems and for boys, aggression. On Teacher ratings while most children in care were in the normal range, 13.9% were in the clinical range on the internalizing problems scale, 20.9% were in the clinical range on the externalizing problems scale and 16.2% were in the clinical range on the total problems scale.

In comparing mean percentile ranks for children with regard to academic performance on the TRF, Fernandez (2008) found that girls in care appeared to function at a lower average percentile to non care peers, while the boys samples appeared more evenly matched. Fernandez (2008) found that on the TRF, children in care had more aggression and externalizing behaviour problems in general than school peers. Teacher ratings on the TRF indicated that the highest average scores for girls were social problems and for boys, aggression. 13% of children were in the clinical range for Internalising problems, 20% for Externalizing problems and 16% for Total problems.

Fernandez (2008) compared Teacher and carer ratings of children’s mental health and found significant agreement between carers and Teachers ratings. Carers and Teachers were more likely to agree however, on identification of children below clinical threshold problems than above. Fernandez (2008) asserted that the most reliable trend was that carers would rate more children above threshold levels than Teachers, especially for Externalising and Total problems than Internalizing problems. While this difference may be considered an indication that Teachers were more conservative than carers or maybe have a better idea of the normal range of behaviour, an alternative explanation is that the structure of the classroom provides sufficient guidelines and rituals for children to behave within non clinical parameters, and in the absence of such structure, carers observe the more problematic spectrum of behaviours.

In follow up research two years later, Fernandez (2008) identified no differences between children in care and controls on problem subscales with even stronger findings on adaptive functioning scales, where children in care showed significant improvements relative to controls on all subscales, when the former were provided with the supports required. At time 2, according to Teachers, children in care had improved in all areas of adaptive functioning. Fewer children were above the clinical threshold and there were no statistically significant differences between boys and girls in care except for attention problems, where girls had a higher mean score than boys. Both groups demonstrated significant changes in their TRF problem score from the first assessment.

Comparisons were drawn by Fernandez (2008) between teacher and carer ratings of child adjustment in school and significant agreement between carer and teacher ratings was observed, particularly on identification of children below clinical threshold levels of behaviours problems than above. Carers tended to rate more children at the above threshold than teachers, especially with regard to externalising problems and total problems than internalizing problems. Fernandez (2008) suggested that while this finding may be considered to be an indication that teachers were more conservative than carers or have a better idea of the normal range of behaviour, an alternative explanation is that the structure of the classroom provides sufficient guidelines and routines for children to behave within non clinical levels, and in the absence of such structures, carers observe a more problematic spectrum of child behaviours.

Jiménez & Palacios (2009) also compared children in care to their classmates based on teacher report on the TRF and found more emotional and behavioural problems and hyperactivity in looked after children than peers. However, contrasting findings are provided in a study by Bernedo et al. (2012) investigating mental health in a sample of 97 children in family foster care across three regions in Spain. The study comprised 54 boys and 43 girls (mean age =10.94 years) and consisted almost entirely (94.8%) of children in long term care, with the remaining 5.2% in short-term care. 46.4% of children were performing well in school while 22.7% required learning support but were in the grade corresponding to their age and 30.9% had low academic performance indicated by being in lower grades for their age. Only a small percentage of children in care had behaviour problems within the clinical range. Foster boys demonstrated more behaviour problems than peers and boys in care presented with more externalizing behaviour problems than girls in care.

Bernedo et al. (2012) suggested the results of their study were consistent with other studies (Fernandez, 2008; Heflinger et al., 2000) reporting low percentages of foster children in the clinical range on the total behaviour problems scale. The authors suggest this normalizing view of foster children is widespread in studies where participants are not selected from clinical samples, as in their study. As the majority of children were in long term care and mainstream education, the study sample may represent a particularly stable cohort of children experiencing continuity in care and in school. Bernedo et al. (2012) suggest that externalising behaviour problems may be more visible to teachers than internalising problems as they contribute to more class disruption and require disciplinary intervention. They suggest that withdrawn, anxious or depressed behaviours may go undetected by teachers who have to focus instead on controlling and monitoring activities at whole class level, rather than on individual pupil needs. The conclusions reached by Bernedo et al. (2012) should be interpreted in light of their study sample who appear to represent a relatively stable cohort of children in stable and long term care placements who appear to be experiencing continuity in their educational and foster settings.

A UK study by Minnis & Del Priore (2001) used a multi informant report of mental health problems in children in care and found agreement on parent and teacher ratings of psychopathology with regard to externalising behaviour problems. In particular carers and Teachers agreed that half of children had hyperactivity and more than half had conduct problems. Findings for anxiety and depression were less clear cut where half of carers identified children with anxiety or depression and only one in ten Teachers did The authors speculated that carers may be overly sensitive to children's internalising difficulties, however the evidence from child self report in the study of internalising problems was more consistent with carer than Teacher report suggesting that emotional problems may be less easily detected in the classroom and more identifiable in one to one carer child relationships. Minnis & Del Priore (2001) found support in their findings for the assertion by Mc Cann et al., (1996) that internalising problems such as major depression could be undetected in looked after populations. It could be that, despite children in care presenting with externalising behaviours these are not necessarily understood to reflect mental health problems. Mc Elvaney et al. (2013) assert that while mental health factors play a role in approximately half of children in care with school attendance problems, because such problems can manifest as difficult behaviours they may not be detected by teachers.

Difficulties adjusting socially in school and within peer group have been identified in looked after populations. In a study by Stanley et al. (2005) of 80 children in local authority care in the UK with identified high needs who presented challenges to services in terms of mental health and educational provision, more than a third had difficulties in relationships with adults and just under a third had difficulties in relationships with peers. The mental health needs evident in the educational arena suggested the need to establish good systems of communication between mental health professionals, social services and schools.

It was suggested by Stanley et al. (2005) that mental health professionals might achieve a wider impact with looked after children by undertaking more consultative work with social workers and residential and foster care staff and schools. As both schools and carers offer a means of providing the continuity and stability which appear intimately connected with children’s mental health, also proposed is the delivery of interventions directly to looked after children in schools and for services targeted in educational settings to develop strategies for communicating with and working in collaboration with carers and teachers to achieve positive outcomes for children.

The National Service Framework for Children (Department for Education and Skills and Department of Health, 2004) in the UK argues for locating mental health services for children in non stigmatised settings such as schools. The development of school based behaviour and educational support teams (BEST) and extended schools (Department for Education and Skills, 2003) provide models for such structures and for looked after children such approaches might offer a means of addressing associations between mental health need and issues of school exclusion , poor attendance and low achievement.

From the above literature, although mixed findings are reported in research on mental health in children in care in school, with some offering a normalising view of mental health problems in the population, greater evidence exists to suggest more emotional and behavioural needs in children in care compared to peers. More externalising behaviour problems are reported in samples while internalising problems may be missed in the classroom setting. A number of confounding factors are identified in studies such as sample selection, methodological considerations and lack of rigor in research design.

Few studies in Ireland have investigated the mental health of looked after children. Of the studies that have, information has mostly relied on foster carer or social work reporting and on data collection measures designed for individual studies. Research will benefit from methodologies that include school controls to enable comparisons to be made with peers, standardised screening and assessment measures and multi informant methods especially obtaining key perspectives of teachers, all of which will provide greater validity to findings on the mental health of children in care in the educational arena and more rigour in research design.

1.2.3.4 The Protective Role of Relationships in the School Setting

Relationships with important others in the child's life have attracted increasing attention in maltreatment due to the importance of relationships on developmental outcomes for children in care. The benefit of education for children in care has been described as far in excess of academic attainment alone where Teachers have a unique role in facilitating children's engagement in school, socially and emotionally as well as academically (Department of Communities, Child Safety and Disability Services, 2013).

In particular, research has examined the quality of Teacher –child relationships which are found to buffer less securely attached children against negative school outcomes in normative samples of elementary school children in the U.S. (Buyse et al., 2011). Research has identified that children's insecure attachments, constitute a risk factor for later socio-emotional development (Thompson, 2008; Weinfield et al., 2008) and the quality of the attachment with the caregiver is associated with externalizing behaviour problems in the classroom (De Mulder et al., 2000). The guiding role and influence of teachers on the ecology of school relationships and developing children's capacities for emotional regulation and effective processing is acknowledged (Ryan, 2011). Thus, attention has focused on the mediating role of teacher relationships on a range of educational outcomes for children (Zajac & Kobak, 2006), and the capacity of school environments to provide a milieu in the development of such relationships (Buyse et al., 2011).

Several authors have identified positive associations between the quality of the attachment with the caregiver and teacher child relationships (De Mulder et al., 2000; Rydell et al., 2005) although associations are moderate, suggesting other characteristics shape the quality of teacher– child relationships (Lynch & Cicchetti, 1992). Not only does the child with their particular attachment history bring elements into their relationship with teachers, that may affect its quality, congruent with dynamic systems models of relationships, the teacher also brings specific qualities to the relationship (Pianta, 2003) suggesting individual child and teacher characteristics, and their interplay impact relationship quality (Pianta, 2003).

Studies with normative populations suggest teacher sensitivity may be the crucial element in the development of close teacher-child relationships for less securely attached children (Buyse et al., 2011) for whom, the relationship with teachers can be a protective factor that positively impacts on child adjustment in the presence of other risks (Buyse et al., 2011). Authors explain pathways of influence where teachers can influence working models and expectations children have of relationships with others thereby mitigating risk for developing relationship problems with peers (Zajac & Kobak, 2006). Studies confirm the buffering role of teacher child relationships for less securely attached children in predicting social competence and cognitive skills (O'Connor & McCartney, 2006) while teacher child closeness is also associated with lower levels of aggressive behaviour problems (Pianta & Steinberg, 1992; Pianta, 2003).

Previous attachment theorists (Goossens & van IJzendoorn, 1990; Lynch & Cicchetti, 1992; Pianta & Steinberg, 1992) concur that high-quality teacher child relationships may buffer children against risk due to the experience of early adverse care. Goossens & van IJzendoorn (1990) investigated the quality of infant attachments to day care staff compared with parents, and identified that attachments with professionals in day care settings appeared to be independent of infant mother or infant father attachments. This finding was as expected since attachment theory asserts that infant adult attachments reflect the quality of interactions between infants and particular adults. The authors found that even when infants had insecure family attachments, they could still develop secure attachments to day care staff.

The quality of the relationship a child forms with another at any stage in time depends on the interplay between representations, based on past experience of relationships and characteristics of the current relationship, thereby confirming the mediating role of teacher and peer relationships on child adjustment (Zajac & Kobak, 2006). Due to the potential of day care providers and teachers to influence quality of attachments and developmental outcomes for children, the need to focus on the child's network of attachment relationships is suggested as these attachments may compensate for insecure parent child attachments (Goossens & van IJzendoorn, 1990; O'Connor & McCartney, 2006).

School in general is acknowledged as providing children with the opportunity to develop adaptive relationships potentially promoting children's resilience (Pianta, 1999; Hunt, 2000) while Teachers in particular are identified as important role models for children (Merdinger et al., 2005) and a source of support both academically and socially (Fernandez, 2008).

Research with clinical populations, has found evidence to support the view that in addition to parent child relationships, teacher child relationships provide important relational contexts for children at risk (Verschueren & Koomen, 2012; Zajac & Kobak, 2006). The research suggesting that children with attachment disorders display inhibited or disinhibited behaviour problems in social relationships which may impact teacher child relationships**,** yet the buffering role of these relationships for children, confirms the importance of investigating the quality of the teacher child relationship on child adjustment (Verschueren & Koomen, 2012).

Research highlights that in school, children's poor social skills can be reflected in a negative status in the classroom or lack of a reciprocal best friend (Gifford-Smith & Brownell, 2003). Children who lack developmentally appropriate awareness of the skills required across different contexts are less likely to successfully achieve adaptive skills in different contexts and relationships (Sheridan et al. 2003). Intervention research asserts that social skills interventions are not generally effective when taught in isolation from natural contexts suggesting the importance of targeting assessment and intervention in children's social settings and peer relationships (Sheridan et al. 2003).

Attachment theory highlights the role that interactions with significant others play in personality development (Bowlby, 1969; 1973; 1980; 1982). Studies examining children's relationships with adult figures outside the home have mostly focused on younger children (Howes, 1999; Howes & Hamilton, 1992; Pianta & Steniberg, 1992) while other research has investigated school age children (Lynch & Cicchetti, 1992; Murray & Greenberg, 2000; Pianta, 1999). Increasingly, attention is devoted to examining attachment relationships with multiple caregivers such as teachers and other educational professionals (Birch & Ladd, 1997; Howes, 1999; Murray & Greenberg, 2000; Oppenheim & Waters, 1995).

Studies have examined the contribution of different attachment styles to children's later adjustment and functioning (Campbell, 1990). Securely attached infants appear to experience more optimal development - socially and cognitively. Findings are mixed for insecure individuals, suggesting the resilience of some insecure infants as well as the potential importance of alternative caregivers (Cicchetti et al., 1995; Thompson, 1999). It may therefore be valuable to examine the role of a major alternative childhood figure such as the child's teacher, in providing a secure base for children's socio-emotional and academic adjustment.

A study by Vervoort et al. (2013) investigated relationship quality between teachers and children with clinically significant reactive attachment disorder and factors that differentially impact this relationship and potentially impact child school adjustment. Vervoort et al. (2013) surveyed 85 children with high RAD-scores. The Disturbances of Attachment Interview (DAI; Smyke & Zeanah, 1999) was administered to parents while teachers filled out the Student-Teacher Relationship Scale (STRS; Pianta, 2001). Children completed the Child Appraisal of the Relationship with the Teacher Scale (CARTS). More conflict in the teacher child relationship was perceived by teachers and children themselves in children with inhibited RAD-symptoms. Teachers also reported less closeness in the Teacher child relationship, more negative child behaviours and more teacher anger. Children with disinhibited RAD-symptoms revealed more dependency in their relationship while Teachers reported more closeness in their relationship with these children. Teachers also reported more positive as well as negative child behaviours in children with disinhibited RAD behaviours.

As outlined above, research with normative school samples of children with attachment insecurity as well as children with attachment disorder behaviours, has identified that improved child adjustment and positive outcomes can be achieved by positive teacher child relationship quality. Teachers can potentially influence children’s expectations of relationships and mitigate against risk of relationship problems with peers. The buffering role of teacher child relationships for children with disordered attachments and problems in peer relationships underscores the need to focus on children’s wider network of relationships and the inclusion of teacher perspectives in mental health research with children at risk and with histories of maltreating early care.

1.2.4.0 Mental Health Services for Children in Care

1.2.4.1 Correlates and predictors of mental health service use

Tarren-Sweeney& Vetere (2014) have summarised the pathways and barriers for children in care to clinical services and identified important correlates and predictors of mental health service use. A moderate correlation between children’s symptom scores on standardised checklists, and their use of mental health services has been found in a range of studies in the US and Australia (Bellamy, 2007; Burns et al., 2004; Garland et al., 1996, Leslie et al., 2000; Tarren-Sweeney, 2010; Zima et al., 2000)

Tarren-Sweeney & Vetere (2014) suggest that the relationship between children’s use of mental health services and the types of difficulties they manifest are less clear. In the Children in Care Survey in Australia (Tarren-Sweeney, 2014) mental health service use was unrelated to broad typology of DSM-IV disorders (i.e. internalising versus externalising versus ADHD disorders). Instead it was found that children with greater symptom complexity and severity were more likely to obtain services, as indicated by clinical scores across two or more of the three typologies. This contrasts with findings elsewhere that children in care who have attention / deficit/ hyperactivity symptoms are more likely to receive services than those with other symptoms or disorders (Minnis et al., 2006, Zima et al., 2000) and that foster youth with conduct problems and disruptive behaviour have greater difficulty accessing services (Kerker & Dore, 2006).

Children's ethnicity or minority status is a determinant in accessing services while older age is a further demographic predictor of access to mental health services which may serve as a marker for higher rates of disruptive behaviour (Bellamy, 2007). Studies have also found that type of maltreatment most notably sexual abuse predict higher use of mental health services, after controlling for the scale of mental health symptoms, whereas children who experience neglect are much less likely to receive services (Bellamy, 2007). Tarren-Sweeney & Vetere (2014) question whether valid distinctions can be made between forms of abuse and neglect in children with histories of severe, complex and chronic maltreatment. Authors also suggest (Tarren-Sweeney & Vetere, 2014) that differences within care systems account for a lot of the variation in mental health service use of children in care and local data is needed within car jurisdictions on access to mental health services when planning delivery of specialist services.

1.2.4.2 Concordance in service use and mental health need

Studies confirm high rates of psychopathology in looked after children (Minnis et al., 2006) and inadequacy of services to meet the complex needs of this population (De Jong, 2010). As the mental health needs of looked after children are neither well recognised nor well met by traditional mental health agencies (Golding, 2010), significant numbers of children who experience clinical levels of mental health problems are not receiving adequate clinical assessment or referral for the services and supports required (Kerker & Dore, 2006; Minnis et al., 2006; Sawyer et al., 2007; Tarren-Sweeney, 2010).

Research examining concordance of service use and mental health need in looked after children has identified variability in service access in care jurisdictions in the United Kingdom (Minnis et al., 2006), the United States (Bellamy et al., 2014; Burns et al., 2004) and Australia (Tarren-Sweeney, 2010).

Bellamy et al., (2014) identified that children in care used mental health services in the US at a 5 to 8 times higher rate than other children (Landsverk et al., 2002; Stahmer et al., 2005) while data from the US National Survey of Child and Adolescent Well being (NSCAW; 2002) confirmed that children’s scores on mental health measures were moderately correlated to service access (Burns et al., 2004). Other US studies found that service use was poorly matched to need. Leslie et al. (2005) observed that although children were more likely to access mental health services following entry to care than in the care of their parents, rate of service use was still below estimates of those requiring mental health interventions.

In Scotland, Minnis et al. (2006) assessed prevalence of mental health problems in children in care (n = 182) and service use and found that while 60% had evidence of mental health problems, 93% had contact with social work with only 8% contacts with child psychiatry. The authors concluded that children with the highest scores for mental health problems were attracting support from other agencies including social work in particular, but problems were not successfully targeted by CAMHS. A further Scottish study by Minnis & Del Priore (2001) similarly found associations between scores on children’s hyperactivity and referral to community paediatrics, but not to child psychiatry

A UK study by Stanley et al. (2005) identified mental health needs in half the sample of children in local authority care and high rate of referral (82.5%) for specialist assessment. In comparison to the above findings of Minnis et al. (2006) and Minnis & Del Priore (2001), Stanley et al. (2005) found those with the highest level of need were more likely to be seen by child psychiatry than any other professional. However, only two thirds of children in the high needs group received long term interventions from CAMHS following initial assessment. Almost 50% of children were referred to educational psychology, 40% to clinical psychology and some children were referred to more than one service. As the most common intervention in virtually all (95%) of the sample was social work input, the authors concluded the need for social workers to have skills in supporting children with mental health needs. One third of the sample in Stanley et al.(2005) received CAMHS intervention which led the authors to conclude that CAMHS could be better targeted for children in care such as professionals in CAMHS undertaking more consultative and educational roles with social workers, residential/ foster carers and schools to achieve wider impact. The authors suggested that this approach had already been achieved in other local authority areas by CAMHS teams with an explicit remit for looked after children.

High concordance of service use was identified in the Children in Care Survey (CICS) carried out in New South Wales, Australia (n=347) where three quarters of children with clinically significant mental health needs received mental health services (Tarren-Sweeney, 2010) with 26% engaged with CAMHS. Mental health service use was unrelated to type of DSM-IV disorder (internalizing versus externalising versus ADHD disorders) and instead children with greater symptom complexity and severity were more likely to access services, as indicated by clinical scores on two or more of three typologies (Tarren-Sweeney, 2010). This finding contrasts with evidence elsewhere that children with attention deficit/hyperactivity symptoms were more likely to receive specialist mental health services than children with other symptoms or disorders (Minnis et al., 2006; Zima et al., 2000). Overall, Tarren-Sweeney (2010) found low level of unmet need for mental health services with just 12% of carers reporting they were unsuccessful in accessing services. It was suggested that findings could be partially explained by the high provision of psychology services in the child welfare area where the study was carried out and access to CAMHS and other clinical services may have been facilitated by the introduction of legislation in Australia prioritizing access to services by children in child welfare agencies (Children and Young Persons Care & Protection Act (NSW) 1998). Tarren-Sweeney's (2010) findings represent a more favourable picture than in most other care jurisdictions although carers in the study did not seek mental health services for about a quarter of children with clinically significant mental health problems, supporting Tarrren-Sweeney' (2010) assertion that foster carers represent a critical gateway to mental health services

A dearth of data exists on concordance of mental health needs and service use of children in care in Ireland. One study by Mc Nicholas et al. (2011) of children in foster and residential care (n=174) found that although high rates of psychiatric disorder were identified with over half (53.6%) of those in foster care and 88.9% in residential care presenting with behavioural problems, just 28.7% of the total sample attended CAMHS. 35.1% of children had a child psychiatry assessment and 34.1% had a psychological assessment as part of their care planning. Significantly 16.7% of children had no social worker and 37.7% had no GP.

This low social work provision is consistent with a report by the Health Information and Quality Authority (HIQA; 2012) in Ireland which found that almost half of children in care had no social worker.

Writers have highlighted the important role of social workers in strengthening professional decision making to ensure stability of children in care (Fernandez, 2008). The lead social workers take in initiating referrals to second tier services and the fact that social work is the most immediate and accessible support to carers and front line residential staff underscores the importance of social work provision to all children in care (Fernandez, 2008). The discontinuity in social work provision to children in care in Ireland identified by Mc Nicholas et al. (2011) and in the HIQA (2012) report, implies the potential for failure of systems at all of these various levels of protection and support to children in Irish state care.

Low level of access of children in Irish state care to CAMHS is indicated. CAMHS reported that only 10% of children who were in contact with social services attended CAMHS in 2010-2011. This figure had risen to 20% of children in contact with social services attending CAMHS during 2011-2012 (HSE, 2011; HSE, 2012b). However, during 2012-2013 the numbers of children attending CAMHS who had contact with social services (Child and Family Agency) had fallen (HSE, 2014). In this most recent CAMHS report 18 % of children who attended community CAMHS teams were either in contact with or in the care of social services (Child and Family Agency), a further 5.65% had a history of contact with social services (Child and Family Agency), of which 73.2% were in contact only with social services, 5.1% were in relative foster care, 15.3% were in non-relative foster care, and 4.1% were in residential care These figures in this CAMHS report (HSE, 2014) were largely consistent across the four Health Service Executive (HSE) regions in Ireland. Beyond the decrease in numbers attending CAMHS who were in contact with the Child and Family Agency from the 2011 CAMHS survey to the 2012-2013 reported figures, little other information is available such as prevalence or typology of mental health problems in this population or treatments or interventions provided.

Various explanations are proposed to account for the low level of access of children in care to CAMHS such as narrow referral criteria, pessimism about ability to gain access to services, mobility of children in care and poor problem recognition (De Jong, 2014; Minnis et al., 2006). Referral to CAMHS is not always made on the basis of symptomology or severity of mental health need (Minnis et al. 2007; De Jong, 2010) and studies have identified high rate of referral and assessment at CAMHS but low follow up intervention (Stanley et al., 2005).

Other writers highlight that it cannot always be assumed that children need ongoing professional input and problems can resolve over time with the provision of appropriate care. Tarren-Sweeney (2014) has highlighted the potential of foster placements to facilitate ‘natural recovery’ without psychotherapeutic input and for many, mental health recovery occurs slowly and naturally over several years if children are fortunate to have sensitive and committed caregivers. Therefore children requiring initial CAMHS intervention may not require ongoing specialist treatment.

Bellamy et al. (2010; 2014) agree that formal mental health services are not always required for children in care despite high level of clinical need and many with significant mental health problems who do not receive services often improve without treatment (Burns et al., 2004). Research in the general population in Ireland has identified that primary care services are often expected to meet the mental health needs of the general population because of low referral to mental health agencies (Mc Hugh et al., 2013). Studies have also examined factors determining low uptake of services that are provided. Brierley (2012) carried out an audit of children in care and found that a key issue was the number of children referred to mental health services who did not engage. Mc Elvaney et al. (2013) assert that where children fail to attend services available, the type of services being provided to children with complex histories and mental health needs requires scrutiny.

1.2.4.3 Conclusion

The above section of the literature review outlines variability in care jurisdictions in concordance in mental health need and service use. Studies confirming low rate of access to services relative to need offer a number of explanations such as the perceived inability of services to deliver specialist interventions, low problem recognition and care system factors related including moves in care and gaps in social work provision which may mitigate against referral to services. Research has found that referral to services can be unrelated to symptomology or severity of psychopathology. A body of literature asserts that specialist intervention is not always needed and mental health problems in children in care can and do resolve over time when good care is provided. The role of social workers and foster carers as a critical gateway to children's access to mental health agencies is agreed. Teachers also have a vital role to play in identifying indicators of mental health and wellbeing in children in care in school and the potential contribution school can make in the psychosocial adjustment of looked after children is undisputed.

A paucity of information is available on access of children in care in Ireland to mental health services. The limited data which are available suggests that CAMHS are not sufficiently targeting this group. The discontinuity in social work provision to children in Irish state care suggests the likelihood that mental health supports and services are not being provided. Research investigating prevalence of mental health problems in looked after children in Ireland and the match between service use and mental health need is required. There has been no research in Ireland that has systematically investigated the mental health of children in Irish state care or the relationship problems experienced by children despite the known prevalence of psychopathology in the looked after population and the impaired relationship functioning of children exposed to early adverse care. There has been no research that has studied the mental health of children in care in school in Ireland based on teacher report using standard survey instruments or explored children's relationship problems in the school context. There has been no investigation of the mental health supports or services provided to children in care in this county. The present study will address each of these areas.

Chapter Two

Rationale for the study and research questions

2.0 Introduction

This chapter will summarise current knowledge in this area relevant to the present study by integrating the research literature. The gaps in current knowledge will be highlighted and the rationale for the present study will be outlined. The next section will propose the aims of the study. The final section will outline the research hypotheses that the study will address.

2.1.0 Current knowledge

2.1.1 The mental health of children in care

There is a wealth of evidence confirming that children in care have much higher rates of mental health problems than others (Ford et al., 2007; Burns et al., 2004; Tarren Sweeney & Hazell, 2006; Minnis et al., Stanley et al., 2005, Tarren Sweeney & Vetere, 2014) with estimates suggesting that psychopathology is four times more likely in looked after children than in the general child population (Millburn et al., 2008). Notwithstanding the inadequacy of assessment tools developed for ordinary clinic practice to measure the complex psychopathology of this population (O'Connor & Rutter, 2000; Minnis et al. 2006; De Jong, 2010) and the different methodologies used to measure mental health problems in the looked after populations, it has been possible to identify as many as one quarter of children in care with severe and complex trauma and attachment related disorders (Tarren-Sweeney, 2014). More developmental and physical health problems are identified in children in care than others (Kerker & Dore, 2006; Sawyer et al., 2007; Minnis et al., 2006; Nathanson & Tzioumi, 2007). Large scale research using multi informant structured interview methods and diagnostic criteria (ICD-10) confirms more conduct disorders (rule breaking and aggression) emotional disorders (anxiety and depression) and hyperactivity in children in care than in the general population (Meltzer et al., 2003).

Other large scale research (Burns et al., 2004) (Achenbach & Rescorla, 2001) on foster carer report on standardized ratings confirmed clinically significant emotional or behavioural problems on the CBCL in almost half of looked after children compared with estimates of one in five in the general population with clinically significant mental health problems.Tarren-Sweeney & Vetere (2014) confirm approximately half of children in care in the clinical range on one or more CBCL broadband or syndrome scale, while around three-quarters scored above one or more borderline range cut off points with high prevalence of DSM Conduct Disorder, Attention-deficit Hyperactivity Disorder, Depression, Post-Traumatic Stress Disorder and Anxiety Disorder identified in mixed samples. Some studies report more problems in children in care compared to others on Externalizing and Total behaviour problem scales in particular (Jiménez & Palacios, 2009; Keller et al., 2011; Lawrence et al., 2006; Shore et al., 2002; Tarren-Sweeney, 2008a; Tarren-Sweeney & Vetere, 2014), while others report Internalizing as well as Externalizing problems (Fernandez, 2008; Keller et al., 2011)

Research examining gender differences in psychopathology of children in care has yielded mixed findings. While most assert that more boys in care have mental health problems than girls (Keller et al., 2001; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006) others report no differences (Heflinger et al., 2000; Jiménez & Palacios, 2009). Where gender differences exist, boys have more externalizing behaviour problems than girls. Tarren-Sweeney (2008) and Tarren-Sweeney & Hazell (2005) found more boys than girls had at least one CBCL scale score in the clinical range, while Minnis & Del Priore (2001) found more boys in care had mental health problems, got into more fights, had more trouble concentrating, and difficulties socializing compared with girls. Although Fernandez (2008) confirmed more aggressive behaviour in boys in care than girls, more social and attention problems were identified in girls in care compared with boys. Some studies suggest a normalizing view of mental health in looked after samples such as Bernedo et al., (2012) who only partially support the view that children in care have higher rates of psychopathology than peers, with the finding that more problems are identified in foster boys and differences exist on Externalising (aggressive behaviour and rule-breaking) and Total problem behaviour scales only. Writers assert that girls may experience equal levels of mental health problems but these may present in more difficult to detect internalising psychopathology (Rosenthal & Curiel, 2006).

Research examining age as a factor in mental health problems in looked after children has identified more behaviour problems in older than younger children (Heflinger et al., 2000; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006) while others found no age differences (Bernedo et al., 2012). Age is confounded with length of time in care and age at entry to care. Some authors suggest that the behavior problems of children in long term care who have lived with their current foster family for an extended period may gradually disappear over time (Bernedo et al. 2012). Others assert that while older age is associated with poorer mental health in children in care, as evidenced by differences in CBCL scores (Armsden et al., 2000; Dubowitz et al., 1993; Heflinger et al., 2000), age effect is confounded by age at entry to care where older children with greater mental health problems are more likely to have entered care with poor pre-existing mental health (Tarren-Sweeney, 2008c). Typology of mental health problems in children in care and age and gender differences in mental health in this population requires further research exploration.

2.1.2 Mental health of children in care in school

Although less is known of the mental health of children in care in school settings, available research suggests children in care have less favourable educational outcomes and more difficulty remaining engaged with school systems than peers (Stanley et al., 2005; Mc Nicholas et al., 2011). 60% of children in care have been identified with marked difficulty in educational attainments (Meltzer et al., 2003) while other studies (Fernandez, 2008) indicate that 20 % of children are behind their age-appropriate grade. Children in care experience more rule breaking, aggression, anxiety and depression (Shore, 2002) and poorer academic achievement (Mitic & Rimer, 2002) than others. Teacher informant ratings on standardised measures confirm higher levels of emotional and behavioural problems and hyperactivity in looked after children than others (Jimenez & Palacios, 2009). Fernandez (2008) found more social and attention problems in girls in care and aggression in boys in care on Teacher ratings in school with overall findings suggesting 20% of children in the clinical range on Externalizing problems, 16% on Total problems than 13% in the clinical range on Internalising problems. Some studies assert that internalising problems may go undetected in children in care in school, especially in girls (Minnis & Del Priore, 2001) while other research suggests a more normalising view of mental health in the population asserting that only foster boys rather than children in care in general present with higher Externalising and Total behaviour problems than peers (Bernedo et al., 2011).

It is agreed in the literature that risks and reasons for educational challenges in children in care are multifaceted and engagement of children and young people in education is a critical issue warranting equal level of attention as other aspects of wellbeing (Fernandez, 2013). The evidence documented for emerging gains in academic and emotional and behavioural outcomes as children progressed in care (Fernandez 2008) supports the view of school and the educational process as offering structure and security to children and confirms the importance of school in furthering children’s well-being and self-efficacy. Involvement of schools in mental health research in alternate care populations is understood as an imperative (Fernandez, 2013).

2.1.3 Relationship Problems in Children in Care

Less research has investigated the impaired relationship functioning of children in alternate care although writers acknowledge the detrimental consequence of early adverse care and relational trauma on children’s long term adjustment (Schore, 2003; Howe, 2005). It is known that relationship functioning is particularly impacted which has led to the assertion that social and interpersonal relationship problems are the hallmark features of children in care (Tarren-Sweeney, 2014). Studies identify that psychopathology in looked after samples differs from that found in other clinical samples (Minnis et al. 2009) and pervasive deficits in children’s ability to establish relationships with others are documented (Green 2007).

Studies that identify co existing psycho social and educational risk in children in care (Mitic & Rimer, 2002; Stanley et al., 2005; Jimenez & Palacios, 2009; Mc Nicholas et al. 2011) highlight the importance of involving schools and obtaining teacher perspectives in mental health research in this population. The problems documented in children’s peer and Teacher relationships (Stanley et al., 2005; Minnis & Del Priore, 2001; Mc Nicholas et al., 2011) alongside the protective role of school in the mental health of children in care (Colton et al., 2003; Bernedo et al. 2010; Buyse et al., 2008; Mc Elvaney et al., 2013, Fernandez, 2008, 2013) underscores the importance of involving educational systems in research investigating mental health in children in care and in children’s care planning (Mc Nicholas et el. 2011).Research using relationship specific measures – the Relationship Problems Questionnaire (RPQ) (Minnis et al., 2007) confirms impaired relationships in children in care and symptom presentations consistent with attachment disorder behaviours (Vervoort et al., 2013). The significant associations found between the RPQ and measures of global mental health distress (SDQ) (Minnis et al., Vervoort et al., 2013) underscore the need to investigate the relationship problems of children in care indicative of attachment disturbance in overall mental health assessment. The good internal consistencies identified by Vervoort et al., (2013) in Teacher versions of the RPQ and correlations with disturbed attachments confirms the use of the RPQ as a multi-informant instrument to identify attachment disorder symptoms in children with severe emotional and behavioural problems in foster care and in school.

2.1.4 Concordance in service use and mental health need

An important area of inquiry in the research literature in children in care is the level of unmet mental health need in the population. Research has consistently found that many looked after children with mental health problems do not receive adequate clinical assessment and are not referred for the supports required (Kerker & Dore, 2006; Minnis et al., 2006; Sawyer et al., 2007; Tarren- Sweeney, 2010). It is also asserted that the threshold for taking children into care is high (Hardy & Murphy, 2014) and referral to mental health agencies is unrelated to typology of mental health disorder (Minnis et al., 2006). Differences are reported in care jurisdictions in the match between service use and mental health need, with low level of unmet need identified by some (Tarren-Sweeney, 2010) and low rate of access to services despite high level of mental health need identified by others (Stanley et al., 2005; Minnis et al., 2006).

Published information in Ireland on access of children in care to mental health services emanates from CAMHS reports with most recent CAMHS figures (HSE, 2014) demonstrating a fall in numbers of children attending that service, from 20% of children who were either in contact with or in the care of the Child and Family Agency attending CAMHS in 2011-2012 to 18% attending CAMHS in 2012-2013. Beyond the decrease in numbers attending CAMHS from the 2011 CAMHS survey little other information is available on mental health needs and access to services of children in care in Ireland.

What is known of the mental health of children in care is that mental health agencies are poorly matched to the needs of the population (Golding, 2010; Tarren-Sweeney, 2014) and significant numbers with mental health problems are not referred for the supports required (Kerker & Dore, 2006; Minnis et al., 2006; Sawyer et al., 2007; Tarren- Sweeney, 2010) suggesting this is an area warranting research investigation. Research has found that foster carers (Tarren-Sweeney, 2014) and social workers (Stanley et al., 2005; Fernandez, 2008) represent important gateways to services for children. The discontinuity identified in social work provision to children in care (Mc Nicholas et al., 2011; HIQA, 2012) suggests a high probability that children are not receiving supports required suggesting this is a much needed area of research inquiry given the critical need for mental health provision to children in alternate care.

2.2.0 Gaps in Current Knowledge

2.2.1 Prevalence and type of psychopathology in children in care in Ireland

Limited information is available on the mental health of children in care in Ireland. No studies have systematically measured foster carer report of children’s psychopathology on standardized mental health assessment measure such as the Child Behaviour Checklist (CBCL) (Achenbach & Rescorla, 2001) used in other empirical studies nor has comparative research been conducted in Ireland investigating the mental health of children in care with that of school peers. This constitutes a gap in knowledge of level and typology of mental health problems in children in Irish state care.

2.2.2 Mental health of children in care in school

No published studies in Ireland have examined the mental health of school going children in foster care utilizing Teacher report on standardized mental health assessment measures such as the Teacher Report Form (TRF) (Achenbach & Rescorla, 2001). This represents a significant gap in knowledge in the area and warrants research investigation in view of the importance of school as a mediating factor in children's mental health and wellbeing.

2.2.3 Relationship problems of children in care in Ireland

Problems in relationships characterise the looked after population of children. Relationships are associated with positive mental health and have a buffering role in psychological wellbeing yet a dearth of research exists on this area of functioning. No studies in Ireland have systematically investigated relationship problems of children in care or associations between mental health and relationships despite the known effect of early adverse care on later mental health and impaired relationship functioning in particular.

2.1.4 Concordance in service use and mental health need

There is substantial research literature demonstrating the failure of traditional mental health agencies in meeting the needs of children in care and shortcomings in supports available. A paucity of information exists in Ireland on services accessed by children in care and no systematic study has explored the type of services accessed by children in care or the match between children's mental health needs and service use. This represents a significant gap in the literature and in current knowledge.

2.3.0 Aims of the Study

The study aimed:

1. To measure the prevalence of mental health problems in a sample of children between the ages of 8 and 13 in family foster care from the perspective of foster carers using the the Child Behaviour Checklist (CBCL) parent form of the Achenbach System of Empirically Based Assessment (ASEBA) (Achenbach & Rescorla, 2001). To identify the type of mental health problems occurring in children in foster care placements according to carers compared with parent ratings of a comparison group of non in care peers.

2. To identify the mental health problems occurring in school in the sample of children in care based on Teacher ratings on the Teacher Report Form (TRF) of the ASEBA alongside that of school peers.

3. To explore relationship problems in children in care in foster placement and school based on carer and Teacher report, using the Relationship Problems Questionnaire (RPQ) (Minnis et al. 2002) parent (RPQ-P) and Teacher (RPQ-T) versions in order to determine prevalence of relationship problems consistent with attachment disorder behaviours in the sample. To explore associations between mental health and relationship problems compared with school peers.

4. To identify the rate and type of services and supports accessed by children in care and determine the match between mental health need and service use using a questionnaire: the Contact with Services Questionnaire (CWS) modified for use in the present study from a measure used in previous research on service access (Minnis et al., 2006).

The study compared a sample of children in foster care with a matched control of school peers similar in age, gender and socio economic background. Based on a review of the existing literature regarding the mental health, relationship problems and access to services of children in care, the following research hypotheses are outlined:

2.4.0 Research Hypotheses

The present study hypothesized the following:

- Higher levels of overall mental health problems in children in care than controls as measured on CBCL (parent/carer) and Teacher (TRF) mental health ratings
- Higher Externalising problems (Rule Breaking and Aggression) and Internalising (Anxiety and Depression) problems on parent (CBCL) and Teacher (TRF) ratings for children in care than controls
- Higher Externalising problems (Rule Breaking and Aggression) on parent (CBCL) and Teacher (TRF) ratings for boys in care than girls in care
- Higher Internalising (Anxiety and Depression) problems on parent (CBCL) and Teacher (TRF) ratings for girls in care than boys in care
- Higher Attention / Concentration & Thought Problems in children in care on Teacher (TRF) ratings than controls.
- Higher social problems in children in care than peers on Social Problems parent (CBCL) and Teacher(TRF) mental health ratings
- Higher clinical scores on parent (RPQ-P) and Teacher (RPQ-T) relationship problem measures in children in care than controls.
- Association between mental health problems on parent (CBCL) and Teacher (TRF) ratings and relationship problems on parent (RPQ-P) and Teacher (RPQ-Teacher) relationship problem measures
- Associations between mental health problems on CBCL & TRF ratings and contact with services as measured by high frequency of contact on the Contact with Services Questionnaire (CSQ)

Chapter Three

Methodology

3.0 Introduction

The study surveyed the mental health, relationship problems and access to services of a sample of looked after children under the guardianship of a Social Work Department in a Health Service Executive (HSE) area in Ireland. All children resided in foster care. The study design included a comparison group of children matched for age and gender and broadly similar regarding socio economic status, attending mainstream school in a town in the surrounding catchment area.

3.1.0 Children in care sample

3.1.1 Sampling frame

The sampling frame aimed to randomly recruit approximately 10% (n=44) of the total number (N= 440) of children on social work department's Child Protection Register. Children between the ages of 6 and 10 years likely to remain in care for the forthcoming year from the start of data collection were to be recruited with the objective that the sample would be representative of children in medium and long term foster care.

3.1.2 Recruitment procedure

A meeting was held with the two Principal Social Workers in North Lee Social Work Department to obtain support and consent for the research to take place and agree methods of data collection. The investigator was invited to attend a follow up Social Work Department meeting of all staff to explain the rationale for the research and enlist the cooperation of the social work team. Following agreement by the social work team to participate in the research and facilitate data collection regarding children on their caseloads, it was agreed with the Principal Social Workers that informing parents and foster carers of the purpose of the study and obtaining cooperation and consent to participate would be managed within social work department and that social workers would establish contact via telephone or home visit with birth parents and foster carers. It was agreed that written information regarding the study would be provided to birth parents of children in voluntary care (Appendix 1) and consent to participate obtained(Appendix 11). While consent from parents of children in statutory care was not a legal requirement, it was deemed appropriate and ethical that social workers would discuss the research with these parents and seek their cooperation.

3.1.3 Data collection

The study methodology comprised a postal survey. Questionnaire packs were distributed by Social workers to foster carers containing explanatory letters outlining the research (Appendix 111), questionnaires, Consent Forms to opt in to the study (Appendix 1V) and Child Assent Forms (Appendix V). As the research design was multi informant and included school report, questionnaire packs for Teachers were contained within the foster carer packs to enable ease of distribution by foster carers to the fostered child’s Class Teacher with cover letter to Teachers explaining the purpose of the research (Appendix V1). To speed up data collection and maximise return of questionnaires stamped addressed envelopes were also enclosed.

In this data collection phase 60 questionnaire packs were distributed to carers and 19 were returned, representing 31.6 % response rate. Due to the low response, the researcher and Principal Social Workers jointly identified a further 40 children for inclusion. These cases were selected from the long term child protection register, were deemed by Principal Social Workers to be in more stable care and whose foster carers were most likely to cooperate with the research and return questionnaires. In this second phase of data collection, it was agreed between the researcher and the Principal Social Workers, that individual social workers would make initial contact with these carers, explain the purpose of the study, gain cooperation to participate, and provide questionnaire packs however, return of questionnaires in this second recruitment phase would be managed by the researcher. A further 22 questionnaires were returned from this second phase of data collection representing a 41% response rate and total n=41 participating cases.

3.2.0 School Control Sample

Following a meeting with the School Principal of the comparison sample, it was agreed that the researcher and the school's educational psychologist would co- deliver an information sharing talk to school staff explaining the purpose of the study and providing psycho educational information on mental health and peer relationships of school age children. To ensure ethical standards in the research and gain cooperation from parents to participate in the study, the researcher and school psychologist delivered a similar presentation to representative parents on the parent's council. When consent was secured from parents to 'opt in' to the study, the School Principal undertook to distribute and follow up on return of questionnaire packs containing explanatory letters regard the study (Appendix V11) to parents of 2nd up to 5th class pupils. Ninety questionnaire packs were distributed with a total n =39 returned, representing 43% response rate of controls.

3.3.0 Ethical Considerations

As a requirement of City University, ethical approval was sought from the Senate Research and Ethics Committee of the University to carry out the study. Additionally, as a requirement of the Health Service Executive area where the research was carried out, ethical approval was sought from Cork University Hospital Research and Ethics Committee. It was stated in the ethics application form for both City University and Cork University Hospital that all data collected would be fully anonymised and agreed with the Principal Social Workers in North Lee Social Work Department that on completion of the research, all information pertaining to participants would remain in the possession of, and stored confidentially by Social Work Department.

3.4.0 Epistemological approaches to social research

Epistemology is the branch of philosophy concerned with the theory of knowledge and attempts to provide answers to questions how and what can we know (Willig, 2008). Epistemology requires us to think about the nature of knowledge and the validity and reliability of what we can claim to know. Research methods offer ways of approaching research questions and aim to answer questions. In research we need to first identify a goal and be able to justify our choice. We need to be clear about the objectives of the research and have a sense of what kinds of things it is possible for us to find out. Put another way, Willig (2008) suggests we need to adopt an epistemological position.

Positivism is one epistemological position which suggests that there is a straightforward relationship between the world (objects, events, phenomena) and our perception and understanding of it. Positivists believe that it is possible to describe what is out there, and to get it right (Willig, 2008). A positivist epistemology implies that the goal of research is to produce objective knowledge that is impartial and unbiased, based on a view from the outside without personal involvement or vested interests of the researcher. It is now generally accepted that observation and description are necessarily selective and our perception and understanding of the world is partial at best (Willig, 2008). What researchers disagree on is the extent to which our understanding of the world can approach objective knowledge or some kind of truth about the world.

There is a post positivist view, however that recognizes and attempts to come to terms with the force of criticisms made against positivism (Robson, 2002). For example while positivists hold that the researcher and the researched person are independent of each other, there is an acceptance by post positivists that the theories , hypotheses, background knowledge and values of the researcher can influence what is observed (Reichardt & Rallis, 1994). In the post positivist view there is still a commitment to objectivity, by recognizing the possible effects of these likely biases. This view holds that while a reality does exist it can only be known imperfectly and probabilistically because of the researcher’s limitations (Robson, 2002).

The epistemological position of constructivism is referred to as the heir to the relativist tradition and one of a number of labels describing the current position of qualitative research which maintains a basic tenet that reality is socially constructed (Robson, 2002). Constructivist researchers have serious difficulties with the notion of an objective reality which can be known. They view the job of the researcher is to understand the multiple social constructions of meaning and knowledge. Hence they tend to use research methods such as interviews and observation which allow them to acquire multiple perspectives. The research participants are viewed as helping to construct the reality with the researcher and because there are multiple realities, the research questions cannot be fully established in advance of the process. Robson (2002) suggests in this long running debate in this branch of epistemology, some constructivists accept the valid criticisms of full blown relativism that debar it from any claims to scientific credibility.

The further epistemological view of critical realism can provide a framework not only for post positivism and constructionism (Robson, 2002). The realist epistemology has a long tradition in the philosophy of science and social science (Manicas, 1987) and while early forms of this approach attracted severe criticism, more recent formulations have a strong current position in the philosophy of natural and social science Realism offers a model of scientific explanation which avoids positivism and relativism and is an attractive choice for social researchers who characterize what they are doing as scientific (Robson, 2002).

Several writers (Pawson & Tilley, 1997; Bhaskar, 1989; Harrè, 1986) have been influential in advancing the epistemological position of critical realism, which emphasises the fallibility of knowledge, of getting it wrong and having our expectations confounded, that justifies researchers to believe that a world exists regardless of what we happen to think about it (Robson, 2002). Critical realism incorporates emancipatory approaches to research, such as taking note of the perspectives of participants, and promoting social justice and as such is particularly appropriate for research in practice and value based professions such as psychology and social work (Anastas, 1998). At the heart of the approach is the assumption that there is a reality which exists independently of our awareness of it (Robson, 2002). Realism accepts that there are fundamental differences between natural and social phenomena. This means that different methods have to be used for different subject matters. However, although procedures differ, natural and social sciences share common principles. For realists there are social objects which can be studied scientifically, but the methods chosen must fit the subject matter and as such realism permits an integration of what are typically referred to as subjectivist and objectivist approaches in social theory (Robson, 2002).

It is suggested that researchers need to attend to theorization on the subjective which includes the researcher's motivation and practice and the respondent's expectations and behaviour and the relevance of both of these processes to the production of knowledge (Letherby et al., 2013). As it is now widely accepted that power is a fundamental aspect of all research relationships, an emancipatory approach recognizes the power imbalance and strives to empower respondents through the research process (Letherby et al., 2013). The critical realist stance maintains that there is no unquestionable foundation for scientific knowledge, no facts that are indisputable and the real world is not only very complex but stratified into different layers and social reality at individual, group and societal level (Robson, 2002). Embeddedness in research means that human actions can only be understood in terms of their place in these different strata and layers of social reality and to explain what is going on in social systems we need to call on mechanisms at various levels - micro and macro, group and organisational (Robson, 2002). To illustrate, Robson (2002) uses the example of how teachers and pupils bring their own background and experiences to the classroom setting and suggests that the critical realist researcher looks for possible contexts and mechanisms at different levels within complex social systems. The critical realist stance, offers a third position between positivism and relativisim and an approach which helps fulfil the emancipatory potential of social research (Robson, 2002).

3.5.0 Epistemological orientation of this study

A critical realist epistemology (Pawson & Tilley, 1997; Bhaskar, 1989; Harrè, 1986) will be assumed in this research in its aim to identify mental health and social functioning in children in family foster care on measures of emotional, behavioural and relational functioning compared with a group of non in care peers. A further objective of the study was to examine the services and supports accessed by children to determine if unmet needs exist for this population of children who have complex needs that require multi level response from social, health and educational sectors. It was anticipated that the research would generate data in a population that has received little research attention in Ireland and would be informative for stake holders in highlighting need and best practice in the area that might be incorporated into future policy and planning for looked after children to achieve best outcomes.

A critical realist stance is adopted in the recognition that research has its flaws, partly due to problems of measurement, reliability of methods, or mechanisms operating at different levels within embedded social systems (Robson, 2002) including foster care and schools where information was sought to inform the research from carers and teachers respectively. A critical realist epistemological position which has relevance at multiple contextual levels i.e. micro, macro, group and organisational level (Robson, 2002) informs this study which involves multiple systems at individual child, foster setting, school and social care level. Within the critical realist stance it is aimed that an emancipatory potential is fulfilled in seeking to represent and empower a marginalised group (Lather, 1991) such as looked after children by bringing the needs of this population in the Irish care context to the attention of stakeholders across the intersecting sectors involved in children's education, health and care.

3.6.0 Measures

In order to survey mental health in a way that would take account of the full spectrum of clinical symptoms, multi informant information was obtained from parents and teachers on social, emotional and behavioural functioning on standardised screening measures in conjunction with a relationship problem questionnaire specifically investigating problems indicative of attachment disturbance. Access to mental health and social and educational services was investigated to establish concordance in identified mental health need and service use.

3.6.1 Assessment of Mental Health

- **Child Behaviour Checklist for Ages 6-18 CBCL and Teacher's Report Form for Ages 6-18**

Mental health was investigated using a standardised parent/ caregiver report checklist, the Child Behaviour Checklist for Ages 6-18 CBCL (Achenbach, 1991; Achenbach & Rescorla, 2001) and corresponding Teacher's Report Form for Ages 6-18 (TRF) (Achenbach, 1991; Achenbach & Rescorla, 2001). These measures form part of the Achenbach System of Empirically Based Assessment (ASEBA) which enables professionals to assess diverse aspects of children’s adaptive and maladaptive functioning.

As functioning may vary from one context to another and interaction partner to another, comprehensive assessment requires data from multiple sources. The CBCL is completed by parents, parent surrogates and others who see children in home like environments. The TRF is completed by teachers and other school staff familiar with children’s functioning in the school setting.

Authors (Achenbach & Rescorla, 2001) note that the ASEBA instruments are designed to provide standardized descriptions of functioning and do not automatically equate with a particular diagnosis or disorder. It is recommended instead for professionals to integrate ASEBA data with other types of data to provide comprehensive evaluation of functioning. Eight empirically derived syndrome scales are obtained on the ASEBA; Anxious/ Depressed, Withdrawn/ Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule Breaking Behaviour and Aggressive Behaviour. Scores can fall within Normal, Borderline or Clinical Ranges. The borderline clinical range spans from the 93rd to the 97th percentile and scores in this range are high enough to be of concern, but are ‘not so clearly deviant’ (Achenbach & Rescorla, 2001) as scores that are above the 97th percentile i.e. in the clinical range. Scores below the 93rd percentile are in the normal range. Two higher order scales are produced approximating spectrums of depressive/anxious Internalising symptoms (Anxious/ Depressed, Withdrawn/Depressed and Somatic Complaints) and disruptive behavioural Externalising symptoms (Rule-Breaking and Aggressive Behaviour) along with a Total Problems scale.

Extensive data on the ASEBA is available regarding standardization, norms, reliability, validity and clinical and research applications (Shore et al., 2002; Fernandez, 2008; Bernedo et al., 2012; Vervoort et al., 2013; Tarren Sweeney & Vetere, 2014).

3.6.2 Assessment of relationship problems

- **Relationship Problems Questionnaire (RPQ)**

The Relationship Problems Questionnaire – Parent (RPQ- P) and Teacher (RPQ –T) forms (Minnis, et al., 2007) (Personal communication, reproduced with authors permission) (Appendix V111) were completed by parents/ carers and teachers respectively The RPQ's are a modification of an 18 item questionnaire developed in a previous study by Minnis et al. (2002) to identify Reactive Attachment Disorder (RAD) symptoms in looked after children.

The Relationship Problem Questionnaire – Parent (RPQ –P) is a 10-item parent-report questionnaire with good internal consistency (Cronbach's alpha 0.85). The RPQ-P has four possible responses (Not at all like my child', 'A bit like my child', 'Like my child' and 'Exactly like my child') scored 0,1,2 and 3. In a large general population sample, the RPQ had good internal consistency (Cronbach's alpha .85) (Minnis et al., 2007). Individual items concern attachment- related behavioural difficulties such as 'is too cuddly with people s/he doesn't know well', 'has no conscience', 'is too friendly with strangers' or 'sometimes looks frozen with fear, without an obvious reason'. The Relationship Problems Questionnaire- Teacher (RPQ-T) (Appendix IX) includes the 10 items of the RPQ Parent with 4 additional attachment related school behaviour problems such as 'will not admit they cannot do tasks' , 'will not ask for help with tasks', 'tends to copy other children' and 'is too keen to get to know school staff; teachers, janitor playground supervisor'. The RPQ – Teacher has an internal consistency of .92 (Cronbach's Alpha).

3.6.3 Assessment of Contact with Services

- **Contact with Services Questionnaire (CSQ)**

Foster carers completed the Contact with Services Questionnaire (Appendix X). This 16 item survey form is a modification of a foster carer report questionnaire developed in a previous study (Minnis et al 2006) which records the service utilisation patterns of children in foster care in the domains of statutory sector social services, health, youth, justice and education services with the aim to investigate whether or not incidence of mental health difficulties relates to uptake of services in each of the service domains.

Questions survey contacts ‘in the past six months’ and are in ‘yes’ ‘no’ format; Regarding this child, have you or the child seen an educational psychologist in the past six months? And ‘have you taken this child to his/her GP in the past six months?’ ‘have you or the child seen a clinical psychologist in the past 6 months?’ Questions 1, 11, 14 & 15 are foster care specific questions and relate to contacts with social work and other foster carers e.g. ‘ have you phoned another foster carer about your child in the past six months’ ‘have you met another foster carer to talk about this child in the past six months’

Following data entry on SPSS, questionnaire responses were subsequently recoded as the initial questionnaire was coded as 1=yes and 2=No, for each question where it asked about contact in the last 6 months. However, if a respondent said ‘yes’ twice this would provide the same number as ‘no’ response once. Following recoding and allocating 1=yes and 0=No, new variables were entered for all responses included in the analysis. The questions relating to services used in the last six months were scored as 1=yes, “I have used the service within the last six months”; 2= No, “I have not used this service in the last six months”. A total score was calculated for each participant, with a higher total score (min =0, max=14) indicating more services used. Questions 1, 11, 14 & 15 were omitted from the statistical analysis as these were deemed to be specific to foster care.

Statistical analyses were undertaken using Statistical Package for Social Sciences (SPSS) Version 21 and results are outlined in the following Chapter 4 Results Section.

Chapter Four

Results

4.0 Introduction

The results of this study are described in the following five main sections. The first section introduces the data management plan, identifies the rationale for use of parametric and non-parametric statistical methods and summaries the type of statistical analyses carried out. The second section describes the characteristics of the study sample of children in care and the comparison group of school controls. The following sections address the hypotheses outlined in Chapter 2. Section Three investigates the mental health of children in foster care placement and in school according to carer and Teacher ratings and compares children's psychological well-being with that of school peers. Section Four examines the relationship problems of children in care compared with school peers and associations between relationship problems and mental wellbeing. The final section; Section Five, explores the services accessed by children in care to determine if concordance in level of mental health need is matched to children's use of services.

4.1.0 Data management plan

All data were entered into a Windows Excel spreadsheet and then entered into Statistical Package for Social Sciences (SPSS) Version 19. Data were checked for errors and omissions and the necessary corrections were made. Cronbach alpha reliabilities were assessed for measures used. Preliminary descriptive statistics were performed to verify assumptions underlying the use of parametric and non parametric tests. The quantitative variables under consideration investigating children's mental health and relationships met the assumptions of normality and homogeneity of variance and therefore parametric methods were employed for these analyses.

A series of t-tests were used to test the main hypotheses and investigate Parent and Teacher informant mental health ratings for children in care compared with controls.

A further series of t-tests then compared Parent and Teacher informant relationship problem ratings for children in care versus controls.

A series of Forward Stepwise Logistic Regression analyses were then carried out to establish the importance of a range of variables for children in both foster care and control groups while controlling for the impact of other variables.

A series of correlations were conducted to investigate associations between mental health and relationship problems and determine if problems in children's relationships correlate with their social problems as well as their overall mental health. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity.

Finally, the data pertaining to concordance of mental health problems and service use was analysed to determine if rate of mental health problems related to children's use of services. As the data were positively skewed with unequal variance between groups and so did not meet the assumptions for a Parametric Test, the Man-Whitney U test was employed to compare foster care and controls in relation to services used.

4.1.1 Characteristics of the sample

Data was collected from a total of 79 participants for this study. 41 children were in foster care and 38 children were in a matched school control group. The 41 participating children in care represented 9.3 % of the total number of children in care (n=440) in the Local Health Service Area where the study was carried out.

4.1.2 Gender

Twenty-six out of 41 (64 %) of the sample of children in care were male and 15 (36%) were female. The school control group comprised equal numbers (50%) of males and females. There was no statistically-significant difference between groups ($p=0.308$, $\chi^2 = 1.039$).

Table 1 illustrates numbers and percentages of males and females in foster care and in controls.

Table 1. Numbers and percentages of males and females in foster care and control groups

Demographic Characteristics	Group	N	%
Foster Care	**Males**	26	64
	Females	15	36
	Total	41	
Controls	**Males**	19	50
	Females	19	50
	Total	38	

4.1.3 Age

In this sample population children ranged in age from 5 to 13 years, with a mean age of 7.9 (SD 1.64). As can be seen in Table 2, children in care ranged in age from 6 to 13 years with mean age of 8.4 (SD 1.63). Children in the control group ranged in age from 5 to 11 years, with a mean age of 7.5 (SD 1.54), giving a statistically-significant mean difference in age between groups of 0.9 years (95% CI.0.188-1.612 years, p=0.014)

Table 2. Mean age and standard deviation of children in foster care and controls

	Group	N	Minimum	Maximum	Mean	Std. Deviation
Age	**Foster Care**	41	6	13	8.4	1.63
	Control	38	5	11	7.5	1.54
	Total	79	5	13	7.9	1.64

4.2.0 Mental health

Prevalence of mental health problems in the sample was surveyed via parent ratings on the Child Behaviour Checklist for Ages 6-18 (CBCL6-18) and Teacher ratings on the Teacher's Report Form for Ages 6-18 (TRF6-18).

Table 3 Illustrates mental health ratings of children in foster care and controls by parents on the Child Behaviour Checklist (CBCL) and Teachers on the Teacher's Report Form (TRF)

Table 3. Mental health ratings of children in foster care and controls on the Child Behaviour Checklist For Ages 6-18 (CBCL) and the Teacher's Report Form For Ages 6-18 (TRF)

	Group	N	Minimum	Maximum	Mean	Std. Deviation
CBCLT	**Foster Care**	41	2	111	33.63	22.36
	Controls	38	0	85	18.53	18.97
	Total	79	0	111	26.37	22.02
TRFT	**Foster Care**	41	0	115	31.71	26.88
	Controls	38	0	67	16.61	19.66
	Total	79	0	115	24.44	24.73

CBCLT= Child Behaviour Checklist Total Score

TRFT= Teacher Report Form Total Score

As can be seen in Table 3, the mean standard CBCL parent Total problem rating for the sample was 26.37 (SD 22.02). The mean standard TRF Teacher Total problem rating was 24.44 (SD 24.73) indicating similar mean mental health problem ratings by parents and Teachers for children in foster care and controls (p=0.605).
The mean mental health problem rating for children in foster care according to parents was 33.63 (SD 22.36) compared with mean of 18.53 (SD 18.97) for controls (p=0.002). The mean mental health problem rating for children in foster care according to Teachers was 31.71 (SD 26.88) compared with a mean of 16.61 (SD 19.66) for controls (p=0.005). Results indicate that both parents and teachers rate significantly-different mental health problems in children in foster care compared with controls. The mental health problem ratings for children in foster care did not differ between parents and Teachers (p=0.726)

Table 4. Mental Health Problem scores above clinical cut off of 65 on Teacher Report Form (TRF) and Child Behaviour Checklist (CBCL) in percentages. The number of children scoring above T score of 65 in each group are in parentheses

	Total	**TRF**	**CBCL**
Foster Care	11.4 % (9)	12.2 % (5)	9.8 % (4)
Controls	2.5 % (2)	2.6 % (1)	2.6 % (1)

As can be seen in Table 4, 11.4% (9) children in foster care were rated above the clinical cut-off for mental health problems compared with 2.5% (2) controls. Moreover, ratings by Teachers included slightly higher numbers i.e. 12.2% (5) of children in foster care rated as having mental health problems compared with 9.8 % (4) rated by parents.

In a more detailed breakdown, Table 5 below shows that 13.3 % of girls in foster care and 7.7 % of boys in foster care were rated with clinically significant Total Mental Health problems above 93rd percentile compared with 5.3 % of male and no female controls according to parents.

Mental Health Problems on the Child Behaviour Checklist (CBCL) & Teacher Report Form (TRF) comprise Internalising, Externalising and Total Problem Scales. The Internalising Scale is made up of Three Subscales; Anxious/ Depressed, Withdrawn Depressed and Somatic Problems. The Externalising Scale is made up of Two Subscales; Rule Breaking and Aggression. The Total Problem Scale comprises the Five Internalising and Externalising individual Subscales plus Four additional Scales: Attention Problems, Social Problems, Thought Problems and the category 'Other' Problems.

Table 5. Percentages of groups which demonstrated a score above the 93rd percentile within the clinical range on Scales: Internalising, Externalising and Total Mental Health Problems.

		TRF Total	**CBCL Total**	**TRF Intern.**	**TRF Extern.**	**CBCL Intern.**	**CBCL Extern.**
Foster Care	**Males**	15.4	7.7	38.5	42.3	19.2	53.8
	Females	6.7	13.3	20	33.3	26.7	60
Controls	**Males**	5.3	5.3	21.1	15.8	15.8	26.3
	Females	5.3	0	0	26.3	15.8	42.1

Note. The scores represent what numbers and percentages of a particular group were rated above the 93rd percentile. TRF = Teacher Report Form; CBCL = Child Behaviour Checklist; Intern. = Internalizing; Extern. = Externalizing.

According to parents on the CBCL Internalising Problems Scale, 19.2 % of boys in foster care and 26.7% of girls in foster care fell within the clinical range compared with 15.8 % of male and female controls. According to parents on the CBCL Externalising Problems Scale, 53.8 % boys and 60% girls in foster care fell within the clinical range compared with 26.3 % male and 42.1 % female controls.

According to Teachers on the TRF Internalising Problems Scale, 38.5 % of boys and 20% of girls in foster care fell within the clinical range compared with 21.1% male and no female controls. According to Teachers on the TRF Externalising Problems

Scale, 42.3 % of boys and 33.3% of girls in foster care fell within the clinical range compared with 15.8% of male and 26.3 % of female controls.

Results suggest that according to parents, girls in foster care have higher levels of internalising and externalising problems compared with boys in foster care whereas the opposite is observed in school where according to Teachers, boys in foster care have higher levels of internalising and externalising mental health problems compared with girls in foster care. According to parent and Teacher ratings overall, both boys and girls in foster care have higher levels of internalising and externalising mental health problems compared with school peers

Table 6. Outlines Individual Subscale scores on Internalising Problems i.e. Anxious/ Depressed, Withdrawn / Depressed and Somatic Problem Scales for children in foster care and controls.

Table 6. Percentages of groups which demonstrated a score above the 93rd percentile in the clinical range on Scales: Anxious/Depressed, Withdrawn Depressed & Somatic Problems.

		TRF Anx./Dep.	**CBCL Anx./Dep.**	**TRF With./Dep.**	**CBCL With./Dep.**	**TRF Som.**	**CBCL Som.**
Foster Care	**Males**	23.1	3.8	3.8	3.8	7.7	3.8
	Females	13.3	13.3	6.7	6.7	0	0
Controls	**Males**	10.5	10.5	0	0	0	5.3
	Females	5.3	0	0	0	0	10.5

***Note*.** The scores represent what numbers and percentages of a particular group were rated above the 93rd percentile. TRF = Teacher Report Form; CBCL = Child Behaviour Checklist; Anx./Dep. = Anxious/Depressed, With./Dep. = Withdrawn/Depressed; Som. C. = Somatic complaints.

According to parents, 3.8% of boys in foster care and 13.3 % of girls in foster care were rated as Anxious/Depressed compared with 10.5 % of male and no female controls while 3.8% of boys and 6.7 % of girls in foster care were rated by parents as Withdrawn/Depressed. No male or female controls were rated by parents as

Withdrawn /Depressed. According to teachers, 23.1 % of boys and 13.3 % of girls in foster care were rated as Anxious/Depressed compared with 10.5 % of male and 5.3 % of female controls while 3.8% of boys and 6.7 % of girls in foster care were rated as Withdrawn / Depressed. No male or female controls were rated by teachers as Withdrawn/Depressed.

According to Parents, 3.8% of boys in foster care and none of the girls in foster care were rated with Somatic Problems compared with 5.3 % of male and 10.5% of female controls. According to teachers, 7.7 % of boys in foster care and no girls in foster care were rated with Somatic Problems. No male or female controls were rated with Somatic Problems according to teachers.

Table 7. Outlines Individual Subscale Scores on Externalising Problems: Rule Breaking Behaviour and Aggressive Behaviour for children in foster care and controls.

Table 7. Percentages of groups which demonstrated a score above the 93rd percentile in the clinical range on Scales: Rule Breaking and Aggressive Behaviour.

		TRF Rule-break.	**CBCL Rule-break.**	**TRF Agg. Beh.**	**CBCL Agg. Beh.**
Foster Care	**Males**	19.2	19.2	26.9	19.2
	Females	6.7	**40***	6.7	**46.7***
Controls	**Males**	0	5.3	5.3	5.3
	Females	5.3	0	5.3	5.3

Note. The scores represent what numbers and percentages of a particular group were rated above the 93rd percentile. TRF = Teacher Report Form; CBCL = Child Behaviour Checklist; Rule-break. = Rule-breaking behaviour; Agg. Beh. = Aggressive behaviour.

* = $P > 0.001$

According to parents, 19.2% of boys in foster care and 40% of girls in foster care fell within the clinical range on Rule Breaking Behaviour compared with 5.3 % of male controls. No female controls were rated by parents with Rule Breaking Behaviour.

According to Teachers, 19.2% of boys in foster care and 6.7 % of girls in foster care fell within the clinical range on Rule Breaking Behaviour compared with 5.3% of female controls. No male controls were rated by Teachers with Rule Breaking Behaviour.

According to Parents, 19.2 % of boys in foster care and 46.7 % of girls in foster care were rated with Aggressive Behaviour compared with 5.3 % each of male and female controls. According to Teachers, 26.9 % of boys in foster care and 6.7 % of girls in foster care were rated with Aggressive Behaviour compared with 5.3% of male and female controls.

Results indicate that according to parent ratings, girls in foster care are particularly at risk for rule breaking and aggressive behaviour problems compared with boys in foster care and compared with school peers According to Teachers, boys in foster care are particularly at risk for rule breaking and aggressive behaviour problems compared with girls in foster care and compared with school peers. Table 8 Outlines Individual Subscale scores for Social Problems, Thought and Attention Problems for groups.

Table 8. Percentages of groups which demonstrated a score above the 93rd percentile on Scales: Social Problems, Thought Problems and Attention Problems.

		TRF Social pr.	**CBCL Social pr.**	**TRF Thought pr.**	**CBCL Thought pr.**	**TRF Attention pr.**	**CBCL Attention pr.**
Foster Care	**Males**	30.8	65.4	11.5	30.8	11.5	0
	Females	6.7	53.3	0	40	6.7	0
Controls	**Males**	5.3	26.3	5.3	26.3	0	0
	Females	5.3	5.3	5.3	10.5	5.3	0

Note. The scores represent numbers and percentages of a particular group rated above the 93rd percentile. TRF = Teacher Report Form; CBCL = Child Behaviour Checklist; Social pr. = Social problems; Thought pr. = Thought problems; Attention pr. = Attention problems.

According to parents, 65.4 % of boys in foster care and 53.3 % of girls in foster care were rated with Social Problems compared with 26.3 % of male and 5.3 % of female controls. According to Teachers, 30.8 % of boys in foster care and 6.7% of girls in foster care were rated with Social Problems compared with 5.3 % of male and 5.3 % of female controls.

According to Parents on the CBCL, 30.8 % of boys in foster care and 40% of girls in foster care were rated with Thought Problems compared with 26.3 % of male and 10.5% of female controls. According to Teachers on the TRF, 11.5 % of boys in foster care and none of the girls in foster care were rated with Thought Problems, compared with 5.3 % of male and 5.3% of female controls.

According to Teachers, 11.5 % of boys in foster care and 6.7 % of girl in foster care were rated with Attention Problems compared with 5.3% of female and no male controls. No Attention problems were reported by parents for either boys or girls in foster care or for controls.

Results indicate that while girls in foster care are at more at risk for Social Problems in their foster placement, boys in foster care are more at risk for Social Problems in school. Teachers rated Thought problems in boys in foster care but not in girls and more Attention problems in boys in foster care than girls.

4.2.1 Analysis of Variance (ANOVA) Comparing mental health of children in care and controls

An analysis of variance (ANOVA) was conducted on the Child Behaviour Checklist (CBCL) total mental health ratings for children in the foster care group compared with the CBCL total mental health ratings for children in the control group. There was a statistically significant difference in ratings for the children in foster care group (M

= 33.63, SD = 22.356) and control group (M = 18.53, SD = 18.97), [F= 10.406, df = 1, p = 0.002]. According to Cohen's (1988) Conventions this was a large effect size (eta squared = 0.17).

The Teacher Report Form (TRF) total mental health scores for children in the foster care group was compared with the TRF total mental health scores for children in the control group. The analysis indicated a statistically significant difference between the children in care group (M = 31.71, SD = 26.876) and the control group (M = 16.61, SD = 19.664), [F= 8.017, df= 1, p= 0.006. A moderate effect size (eta squared = 0.09) was reported.

Results indicate that children in foster care have statistically significant higher overall mental health problems than controls as rated by Teachers and carers.

4.2.2 Logistic Regression Research Questions addressed

- Will mental health scores predict whether a child is more likely to be in foster care or control?
- Moreover, are the mental health ratings by Teachers or parents the better predictor of whether a child is in foster care or in control?
- Can we predict how to classify a child into foster care based upon their Attention problems?

4.2.3 Forward Stepwise Logistic Regression 1

Outcome Variable:	Group (foster care, control)
Predictors:	Child Behaviour Checklist Total Score Teacher Report Form Total Score Age Gender

Forward Stepwise Logistic Regression analysis was performed to assess the impact of a number of factors on the likelihood that the child was in foster-care (versus controls). The model contained 4 independent variables (CBCL Total, TRF Total, Age, Gender). The full model containing all predictors was statistically-significant, χ^2 (1,n=79) 10.63, p=.001, indicating that the model was able to distinguish between children who were in foster-care or who were controls. The model as a whole explained between 13% (Cox and Snell R squared) and 17% (Nagelkerke R squared) of the variance in care status. Only 1 of the 4 variables, CBCL Total, made a unique statistically-significant contribution to the model (p=0.04).

The only significant predictor of Group was CBCL Total score (see Table 11. for results). In other words, parent mental health rating is a better predictor of classifying a child into foster care compared to Teacher rating, and also better compared to knowing a child's Age or Gender.

Table 9. Forward Stepwise Logistic Regression

	B	**SEB**
Constant	.92*	.41
CBCL total score	-.04**	.014

Note: R^2=.13 (Cox & Snell); .17 (Nagelkerke). Model $X^2(1)=10.63$, $p=.001$. * $p < .05$, ** $p < .01$

4.2.4 Forward Stepwise Logistic Regression 2

Outcome Variable:	Group (foster care, control)
Predictors:	CBCL Internalizing, CBCL Externalizing TRF Internalizing, TRF Externalizing
	Age
	Gender
	CBCL Attention Problems
	TRF Attention Problems

A second Forward Stepwise Logistic Regression analysis was performed to assess the impact of Internalizing, Externalizing, and Attention Problems for both Teacher and parent ratings on the likelihood that the child was in foster care versus controls. This Forward Stepwise Logistic Regression demonstrated two significant predictors of foster care classification, namely CBCL Attention Problems and CBCL Internalizing Scores The better of these two was CBCL Attention problems, explaining 22% (Cox and Snell R squared) & 30 % (Nagelkerke R^2) of the variance in care status – foster care vs. control group ($p<.001$. * $p < .05$, ** $p < .01$, ***p<.001). (See Table 12 for results).

Table 10. Forward Stepwise Logistic Regression

	B	**SEB**
Constant	.82*	.38
CBCL Attention Problems	-.37***	.10
CBCL Internalizing Problems	.13*	.06

Note: R^2=.22 (Cox & Snell); .30 (Nagelkerke). Model $X^2(2)=20.03$, $p<.001$. * $p < .05$, ** $p < .01$, ***p<.001

4. 2. 5 Forward Stepwise Logistic Regression 3

Outcome variable:	Group (foster care, control)
Predictors:	CBCL Social Problems
	TRF Social Problems
	CBCL Attention Problem
	TFR Attention Problems
	Age
	Gender

A third Forward Stepwise Logistic Regression analysis was performed to assess the impact of Social Problems for both Teacher and parent ratings on the likelihood that the child was in foster care versus controls. This Forward Stepwise Logistic Regression demonstrated that Social Problems were not good predictors of Group classification whilst similar to Regression 2, parents ratings on Attention Problems were a significant predictor explaining 18 % (Cox and Snell R squared) & ?? (Nagelkerke R^2) of the variance in care status – foster care vs. control group ($p<.001$. * $p < .05$, ** $p < .01$, ***p<.001) (see Table 13 for results).

Table 11. Forward Stepwise Logistic Regression

	B	**SEB**
Constant	.99**	.38
CBCL Attention Problems	-.26**	.08

Note: R^2=.18 (Cox & Snell); 240 (Nagelkerke). Model $X^2(1)$=15.48, $p<.001$. * $p < .05$, ** $p < .01$, ***p<.001

4.2.6 Summary of Logistic Regression Analyses

In summary, Logistic Regression Analyses demonstrated

- CBCL ratings are better compared to the TRF ratings overall (**Regression 1**) whereby only CBCL Total Scores significantly predicted Group classification.
- Analysis of the different Subscales (**Regression 2**) demonstrated CBCL Attention problems to be the best predictor followed by CBCL Internalizing. The predictors Age, Gender, TRF Internalizing, TRF Externalizing, and CBCL Externalizing were not significant predictors of Group classification.
- A final Regression analysis (**Regression 3**) investigated the effects of Social Problems versus Attention Problems and found only Attention problems rated by parent significantly predicted group classification. Taken together, parent ratings are superior to Teacher ratings when classifying children into foster care or control groups. The best predictors are Attention Problems and Internalizing scores, as rated by parents.

Results indicate that whereas Teachers may rate more children with mental health problems, Regression analyses demonstrate however that parent ratings are more accurate as the various CBCL predictors were significant compared with the TRF predictors.

4.3.0 Relationship Problems

Children's attachment relationship problems were measured on the Relationship Problems Questionnaire- Parent form (RPQ- P) and Relationship Problems Questionnaire -Teacher form (RPQ-T). Table 9 outlines the scores for relationship problems for children in foster care and controls as measured by parents and Teachers.

Table 9. The Relationship Problem Questionnaire – Parent form (RPQ-P) and the Relationship Problem Questionnaire – Teacher form (RPQ-T) mean and standard scores and standard deviations for children in foster care and controls

	Group	**N**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**
RPQ P	**Foster Care**	40	0	18	2.93	4.43
	Controls	36	0	12	0.72	2.08
RPQ T	**Foster Care**	41	0	13	2.73	3.61
	Controls	38	0	16	0.92	2.83

RPQPT= Relationship Problem Questionnaire – Parent Total Score

RPQTT= Relationship Problem Questionnaire – Teacher Total

As displayed in Table 9, The Relationship Problem Questionnaire – Parent (RPQ-P) had a mean standard score of 2.93 (SD 4.43) for children in foster care compared with a mean standard score of 0.72 (SD 2.08) for controls (p=0.006). The Relationship Problem

Questionnaire – Teacher (RPQ-T) had a mean standard score of 2.73 (SD 3.61) for children in foster care compared with a mean standard score of 0.92 (SD 2.73) for controls (p=0.015)

4.3.1 RPQ cut off for clinical significance

On the Relationship Problems Questionnaire, 20 % (8) children in foster care reached the clinical cut off relationship problems (obtained a score of 6 or above) according to parents while 22% (9) children in foster care reached the clinical cut off for relationship problems according to Teachers. Parents and Teachers each rated only (3%) i.e. one control as reaching the clinical cutoff for relationship problems on the RPQ (obtaining a clinical cut-off score of 6 or above) (See Table 10.)

Table 10. The RPQ clinical cut- off on The Relationship Problems Questionnaire – Parent (RPQ-P) and the Relationship Problem Questionnaire – Teacher (RPQ-T) for children in foster care and controls

	RPQ-P score > 6		RPQ-T > 6	
	N	%	N	%
Foster care	8	20%	9	22%
Controls	1	3%	1	3%

Results indicate similarity in ratings by parents and Teachers in numbers of children obtaining a cut-off score of 6 or above. (See **Appendix 12** for Histogram of distribution of participant scores above and below the clinical cut off).

4.3.2 ANOVA comparing relationship problems in foster care and controls

An Analysis of Variance (ANOVA) was conducted to compare the mean scores of the Relationship Problems Questionnaire- Parent (RPQ- P) in both children in foster care and controls. A statistically significant difference was found between the mean scores for the children in foster care group (M = 2.93, SD=4.434) and the control group (M= .72, SD = 2.079; [F=7.411, df=1, p=0.008). A large effect size was reported (eta squared = 0.11).

A second Analysis of Variance (ANOVA) was conducted to compare the mean scores of the Relationship Problems Questionnaire -Teacher (RPQ -T) in both children in foster care and controls. A statistically significant difference was found between the mean scores for the children in foster care group (M = 2.73, SD = 3.606) and the control group (M = 0.92, SD = 2.832); [F=10.857, df= 1, p= 0.002). A moderate effect size was reported (eta squared = 0.13). Results indicate agreement in parent and Teacher ratings of higher levels of relationship problems among children in foster care compared with controls.

4.3.3 Relationship Problems and mental health

A series of correlations were conducted to investigate associations between mental health and social and relationship problems to determine if problems in children's relationships correlate with their social problems and overall mental health. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity.

Table 14. Correlations between Relationship Problems Questionnaire – Parent form (RPQ-P) & the Relationship Problems Questionnaire –Teacher form (RPQ-T) & key variables for foster care group only

	r	**n**	**p**
RPQ-P & CBCL Total	0.30	41	.057
RPQ-P & CBCL Social Problems	0.33	41	.05
RPQ-T & TRF Total	0.57	41	.001
RPQ-T & TRF Social Problems	0.42	. 41	.01

Note **RPQP= Relationship Problem Questionnaire- Parent**
RPQT= Relationship Problem Questionnaire -Teacher
CBCL=Child Behaviour Checklist
TRF=Teacher Report Form

Correlations were conducted between scores on the RPQ Parent and Teacher Questionnaires and CBCL Parent & TRF Teacher mental health ratings to investigate whether relationship problems correlate with other mental health problems. These correlations analysed the foster care group only and not the control group. (See Table 14)

The first correlation investigated the association between relationship problems reported by parents on the Relationship Problem Questionnaire –Parent form (RPQ-P) and mental health problems as rated by parents on the Child Behaviour Checklist (CBCL). While there was a borderline positive correlation between the two variables [r=.30, p=.056 (2-tailed)], with higher levels of relationship problems associated with higher levels of mental health problems, this did not achieve statistical significance. (See scatter plot Appendix X11).

A strong, positive correlation which was statistically significant was found between relationship problems reported by Teachers on the Relationship Problem Questionnaire – Teacher form (RPQ- T) and mental health problems as rated by Teachers on the Teacher Report Form (TRF) [r=.57, p=.001 (2-tailed)]

A medium positive correlation which was statistically significant was found between relationship problems as measured by the Relationship Problem Questionnaire- Parent form (RPQ-P) and Social Problems Scale as reported by parents on the Child Behaviour Checklist (CBCL) [r=.33, p=.05 (2-tailed)] with higher levels of relationship problems associated with higher levels of social problems.

A strong, positive correlation which was statistically significant was also found between relationship problems as measured by the Relationship Problem Questionnaire –Teacher form (RPQ- T) and Social Problems Scale as reported by Teachers on the Teacher Report
Form (TRF) [r=.42, p=.01 (2-tailed) with higher levels of relationship problems associated with higher levels of social problems (See scatter plot: Appendix X111).

Results indicate that children in care with relationship problems had problems socially in school and foster placement according to Teachers and carers. Teachers and carers alike identified that children in care with relationship problems had mental health problems with stronger evidence for this association found in children in care in School.

4.4.0 Contact with Services

The Contact with Services Questionnaire (CWSQ) investigated the contact children in foster care and controls had with a range of possible services and agencies in the past 6 months.

The questions relating to services used in the last six months (CWSQ Items: 5,7,9,11,13,15,17,22,24,27,29,31, &, 33) were scored as 1=yes, “I have used the service within the last six months”; 2= No, “I have not used this service in the last six months”. A total score was calculated for each participant, with a higher total score (min 0 & max 14) indicating more services used.

The data did not meet the assumptions for a Parametric Test as they were positively skewed with unequal variance between groups. To compare the foster care group vs. controls in terms of services used the Man-Whitney U test was employed. This analysis demonstrated the foster care group (mean rank=53.60, n=41) used significantly (U=221.50, p<.001) more services in the last six months compared to controls (mean rank=25.33, n=38). The foster care group used on average 2.05 (SD. 1.43) services (max. 13) in the past 6 months whilst the control group used on average 0.45 (SD. 0.69) services in the past 6 months.

Table 15. Contact with Services for Foster Care and Control Groups: number and percentage contacts in the past 6 months

Type of Services	**Contact with Services**			
	Foster Care		**Controls**	
	Number	**Percentage**	**Number**	**Percentage**
Have you seen a social worker or link worker regarding this child in the past 6 months?	32	78%	2	5.3%
Have you taken this child to his/her GP in the past six months?	27	65.9%	10	26.35%
Regarding this child, have you or the child seen a clinical psychologist in the past 6 months?	4	9.8%	1	2.6%
Regarding this child, have you or the child seen any other type of Psychologist in the past 6 months?	1	2.4%	0	0%
Regarding this child, have you or the child seen a Child Psychiatrist during the past 6 months?	1	2.4%	0	0%
Regarding this child, have you or the child seen a Pediatrician in the past 6 months?	1	2.4%	2	5.3%
Does this child receive any kind of school support?	15	36.6%	4	10.5%
Has this child had any Garda involvement in the past 6 months?	1	2.4%	0	0.0%
Has this child been a Hospital inpatient in the past 6 months?	0	0.0%	1	2.6%
Have you had any other help for this child in the past six months? (e.g., from other professionals, support at home?)	14	34.1%	2	5.3%

Note. Number refers to how many responded yes out of the total sample. The percentage refers to the proportion of respondents in each group who responded yes to the question. All questions required yes or no answers.

The question relating to contact with Social Worker demonstrated a significant difference between foster care contacts where 78% of children in care had contact in the previous 6 months with social work compared with 5.3% of controls. However this result was not included in the Mann Whitney analysis as the question pertaining to contact with Social Worker was skewed towards foster care.

Of note was the finding in relation to contacts with G.P. where 65.9 % of children in foster care visited their GP in the previous 6 months compared with 26.35 % of controls.

In relation to school based supports, more children in foster care i.e. 36.60% received school based supports in the previous 6 months compared 10.50% of controls. 9.8% of children in care had contact with clinical psychology in the past 6 months compared with 2.6% of controls.

4.4.1. Contact with Services Standard Entry Multiple Regression

4.4.2 Research Questions Addressed

A series of Standard Entry Multiple Regression analyses were conducted using total scores from the Contact With Services Questionnaire (CWSQ) excluding 3 Questions which were skewed towards contacts children in foster care would be more likely to have with services i.e. questions regarding contact with Social Workers, with other foster carers and the question relating to the child availing of residential care.

4.4.3 Standard Entry Multiple Regression Analysis 1

Outcome variable:	Contact with Services
Predictors:	Relationship Problems Questionnaire–Teacher form (RPQ-T)
	Teacher Report Form (TRF)
	Age
	Gender

A Standard Entry Multiple Regression analysis was conducted with the predictors: Relationship Problems as measured by the Relationship Problems Questionnaire-

Teacher form (RPQ-T), Mental Health as measured by Teacher Report Form (TRF) Total Scores, Age, and Gender and the outcome variable; Contact with Services.

The predictors: Relationship Problems Questionnaire- Teacher (RPQ-T) and Teacher Report Form(TRF) accounted for 13% of the variance in Outcome variable : Contact with Services. This regression equation was not statistically significant, i.e. yielded no significant association between predictors i.e. RPQT & TRF and the outcome variable: Contact with Services. $R^2=.13$, Adjusted $R^2 .033$ F (4,36) = .274 ($p>.05$). (See Table 16 for results).

Table16. Standard Entry Multiple Regression Analysis 1

	B	***SEB***
Constant	.36	1.08
TRF	.007	.011
RPQT	.076	.08

$R^2=.13$, Adjusted $R^2 .033$ F **(4,36) = .274** ($p>.05$)

4.4.4 Standard Entry Multiple Regression Analysis 2

Outcome variable:	Contact with Services
Predictors:	Relationship Problems Questionnaire -Parent form (RPQ-P) Child Behaviour Checklist (CBCL) Age Gender

Table17. Standard Entry Multiple Regression Analysis 2

	B	***SEB***
Constant	.44	1.08
CBCL	.04*	.02
RPQP	.08	.08

R^2=.20, Adjusted R^2.11. (=$p<.05$)

A second Standard Entry Multiple Regression analysis was conducted with the predictors relationship problems as measured by the Relationship Problem Questionnaire- Parent (RPQ-P), Mental Health problems as measured by the Child Behaviour Checklist (CBCL), Age, and Gender and the outcome variable; Contact with Services.

This analysis demonstrated that the predictor variables: CBCL and RPQ-P accounted for 20 % of the variance in the outcome variable: Contact with Services. The regression equation was statistically significant, R^2= 0.2 adjusted R^2= 0.11, F (4,35) = .089, $p<.05$

That is, mental health and relationship scores reported by parents, emerged as significant predictors of contacts of children in foster care with services

4.5.0 Summary of Results

Table 18 outlines an overall summary of results of analyses and hypotheses which were upheld and not upheld

Table 18.

	Research Hypothesis	**Hypothesis upheld/not upheld**
1	Higher levels of overall mental health problems in children in care than controls as measured on CBCL (parent/carer) and Teacher (TRF) mental health ratings	Upheld
2	Higher Externalising problems (Rule Breaking and Aggression) and Internalising (Anxiety and Depression) problems on parent (CBCL) and Teacher (TRF) ratings for children in care than controls	Upheld
3	Higher Externalising problems (Rule Breaking and Aggression) on parent (CBCL) and Teacher (TRF) ratings for boys in care than girls in care	Not upheld
4	Higher Internalising (Anxiety and Depression) problems on parent (CBCL) and Teacher (TRF) ratings for girls in care than boys in care	Not upheld
5	Higher Attention / Concentration & Thought Problems in children in care on Teacher (TRF) ratings than controls.	Upheld
6	Higher social problems in children in care than peers on Social Problems parent (CBCL) and Teacher(TRF) mental health ratings	Upheld
7	Higher clinical scores on parent (RPQ-P) and Teacher (RPQ-T) relationship problem measures in children in care than controls.	Upheld
8	Association between mental health problems on parent (CBCL) and Teacher (TRF) ratings and relationship problems on parent (RPQ-P) and Teacher (RPQ-Teacher) relationship problem measures	Upheld
9	Associations between mental health problems on CBCL & TRF ratings and contact with services as measured by high frequency of contact on the Contact with Services Questionnaire (CSQ)	Upheld

Chapter 5

Discussion

5.0 Introduction

This chapter begins with an initial summary in Section One of the key findings of the research study. Section Two links research findings with the Literature Review in Chapter One exploring possible explanations for these findings. Section Three offers a critical evaluation of the research highlighting study limitations while Section Four identifies the particular strengths of the study. Section Five outlines implications for future research and clinical practice. Section Six, the final Section, identifies key themes of the study and is the concluding Section of this Chapter.

5.1.0 Section 1 -Summary of Key Findings

5.1.1 Mental health of children in foster placement

The present study explored the mental health of children in care based on foster carer reports and found 9.8% of children in care had mental health problems compared with 2.6 % of peers.

- **Emotional and behavioural problems**

19. 2% of boys in care and 26.7 % of girls were reported by foster carers to have emotional problems compared with reported emotional problems in 15.8 % of male and 15.8 % of female peers. 53.8% of boys in care and 60% of girls had behavioural problems according to foster carers compared with 26.3% of male and 42.1 % of female peers.

- **Social problems**

Social problems were the most frequently occurring mental health problem according to foster carers and were reported in 65.4% of boys and 53.3 % of girls in care compared with 26.3% of male and 5.3% of female peers.

- **Rule breaking and aggression**

19.2% of boys in care and 40% of girls had rule breaking behaviour according to foster carers compared with 5.3% of male peers. No female peers were rated with rule breaking behaviour. 19.2% of boys in care and 46.7 % of girls had aggressive behaviour compared with 5.3% of male and female peers.

- **Thought and attention problems**

30.8% of boys in care and 40 % of girls had Thought problems according to foster carers compared with 26.3% of male and 10.5 % of female peers. Attention problems were not reported in children in care by foster carers, or in their peers.

- **Anxiety and depression**

3.8% of boys in care and 13.3 % of girls were Anxious/ Depressed according to foster carers compared with 10.5% of male peers. No female peers were Anxious/ Depressed. 3.8% of boys in care and 6.7% of girls were Withdrawn/Depressed according to foster carers. No male or female peers were Withdrawn/Depressed.

- **Somatic problems**

3.8% of boys in care were reported with Somatic problems by foster carers. No Somatic Problems were reported in girls in care. Somatic problems were reported in 5.3% of male and 10.5 % of female peers.

5.1.2 Mental health of children in care in school

The study investigated the mental health of children in care in school based on Teacher reports and found 12.2% of children in care had mental health problems compared with 2.6 % of peers.

- **Emotional and Behavioural problems**

According to Teachers, 38.5% of boys and 20 % of girls in care had emotional problems compared with 21.1 % of male peers. No emotional problems were identified in female peers. 42.3% of boys in care and 33.3 % of girls had behavioural problems according to Teachers compared with 15.8 % of male and 26.3 % of female peers.

- **Social problems**

30.8% of boys in care and 6.7% of girls had Social problems in school according to Teachers compared with 5.3% of male and female peers.

- **Rule Breaking and Aggression**

19.2% of boys in care and 6.7% of girls had Rule Breaking Behaviour according to Teachers compared with no male and 5.3% of female peers. 26.9 % of boys in care and 6.7% of girls had Aggressive Behaviour according to Teachers compared with 5.3% of male and female peers.

- **Thought and Attention problems**

11.5% of boys and no girls in care had Thought problems according to Teachers compared with 5.3% of male and female peers. 11.5% of boys in care and 6.7% of girls had Attention problems according to Teachers compared with no male and 5.3% of female peers.

- **Anxiety and Depression**

23.1 % of boys in care and 13.3% of girls according to Teachers were Anxious/Depressed compared with 10.5% and 5.3% of male and female peers.
3.8% of boys in care and 6.7% of girls according to Teachers were Withdrawn/ Depressed. No male or female peers according to Teachers were Withdrawn/Depressed.

- **Somatic problems**

7.7% of boys in care and no girls in care had Somatic problems according to Teachers. No male or female peers had Somatic problems according to Teachers.

5.1.3 Relationship problems

- **Relationship Problems**

The study explored relationship problems in the sample according to Teachers and carers and found in one in four and one in five had relationship problems in School and foster placement respectively while Teachers and carers similarly identified relationship problems in only one school peer.

- **Relationships and mental health**

Children in care with relationship problems also had mental health problems according to Teachers but this association was not observed by foster carers.

- **Relationships and social functioning**

Children in care with relationship problems also had problems socially and this association was observed by both Teachers and carers.

5.1.4 Concordance in service use and mental health need

- **Social work**

The study investigated children’s use of services in the previous six months and as expected, identified Social Work as the most frequently contacted service by 78% of children in care compared with 5.3% of peers.

- **General health professionals**

A GP was the second most frequently contacted service by 65.9% of children in care in comparison with 26.35% of peers.

- **Educational supports**

36.6 % of children in care received educational supports compared with 10.5% of peers. 2.4% of children in care had contact with educational psychology compared with no reported contact with educational psychology by peers.

- **Mental health services**

9.8% of children in care had contact with clinical psychology compared with 2.6% of peers. 2.4 % of children in care had contact with child psychiatry compared with no reported contact with child psychiatry by peers.

- **Supports from other agencies**

34.1% of children in care had contact with other professional supports including Speech and Language Therapy, Occupational Therapy or Family Support compared with 5.3% reported contact by peers.

- **Concordance in service use and mental health need**

The study investigated concordance in rates of mental health and relationship problems of children in care and their contact with services and identified that carer report of mental health and relationship problems significantly predicted children’s contact with services.

Discussion

5.2.0 Discussion of findings

5.2.1 Mental health of children in care

The present study assessed children's mental health on standardised screening and found that 1 in 10 children in care had clinically significant mental health problems compared with 1 in 20 school peers. Children in care had more internalising, externalising and total problems in carer and teacher reports than other children, were more anxious/depressed, withdrawn/depressed and had more rule breaking and aggressive behaviour. Children in care had almost ten times the risk of relationship problems than peers and had more social problems, thought and attention problems than peers. Similar rates of psychopathology were reported by teachers and carers.

These findings provide comprehensive information that was heretofore unavailable about the level of mental health problems experienced by school age children in care in Ireland. The study found that clinical levels of mental health and relationship problems are reported in school and foster care which supports research in other care jurisdictions in the UK and internationally indicating that children in care are more likely than not to have psychological problems of the scale and severity to require specialist mental health intervention.

Notwithstanding the level of psychopathology in the sample, as most children were in long term care, there is a possibility that their mental health may have been positively impacted by the experience of greater stability than children in other care placements such as residential care and may not be representative of the looked after population as a whole. Higher levels of mental health problems have been consistently found in children in residential care (Meltzer et al., 2003; Mc Nicholas et al. 2011) compared with family foster carer. Research (Fernandez, 2009) has also confirmed that the greater the length of time children spend in current foster placement, the better children's ratings on a number of mental health indicators including adjustment, satisfaction, integration, academic progress and behavioural outcomes. Studies (Fernandez, 2009) conclude that overall, longer placements are associated with better adjustment outcomes in children. Adversity precipitating placement in care is a critical developmental risk factor for children’s mental health and wellbeing. It is also known, that problems can and do resolve over time when stable care is provided and irrespective of pre-care experiences, children’s disrupted attachments entering care are responsive to changes in parenting style (Dozier et al., 2001). It was not explored in the study whether children had experienced continuity in care which may have mitigated findings. It was not investigated whether children resided in kinship or non kinship care which might also exert potential influence on outcomes. Studies have found that placement in kinship care is a protective factor against the experience of mental health problems in children. It is also acknowledged however that the degree to which differences in mental health problems can be attributed to different care experiences is unclear and many factors potentially exert influence on mental health findings. These unexplored factors limit interpretation of findings and suggest areas to consider in future studies.

It is maintained that more research is available on the scale and prevalence of mental health problems of looked after children than of the nature, pattern or complexity of psychopathology (Tarren-Sweeney, 2014). The profile of clinical scores on the CBCL and TRF screening measures provides evidence for the presence of psychopathology in the sample. Diagnostic assessment on cases screening positive for risk of psychopathology was not conducted in the sample which places limitations on the conclusions that can be reliably drawn regarding the exact nature of mental health problems in children in the study. Future diagnostic assessment and clinical interviewing will elaborate on the pattern and complexity of psychopathology that is study found is indicated in children.

The finding that teachers and carers reported more behavioural than emotional problems supports the assertion that children experiencing internalising distress may be at risk of their mental health problems not being detected and not being referred for specialist supports. This finding is consistent with a previous study carried out in Ireland which identified more disorders of conduct and attention in children in care than depressive disorders (Mc Nicholas et al., 2011). Higher prevalence of externalising problems is also documented in the UK (Meltzer et al., 2003) where children were found to present with more disorders of conduct than emotion while international research has identified more externalizing and total behaviour problems in looked after children compared to others (Fernandez, 2008; Lawrence et al., 2006; Shore et al., 2002; Tarren-Sweeney, 2008a).

The higher rate of externalising problems found in children in the sample may be explained by the fact that behaviours such as rule breaking and aggression are more easily identified than emotional problems. Previous studies (Minnis & Del Priore, 2001) found agreement on teacher and carer report that half of children surveyed had hyperactivity and more than half had conduct problems. Findings for anxiety and depression were less clear cut where half of carers compared with only one in ten teachers identified anxiety or depression in the sample indicating that carers may be overly sensitive to children's internalising problems, although this was discounted as children's self report of internalising difficulties were more similar to carers than teachers (Minnis & Del Priore, 2001).

Other researchers who found that carers rated more children above clinical thresholds than teachers, particularly on externalising problems than internalizing problems maintain that teachers could be more conservative than carers or have a better idea of the normal range of behaviour (Fernandez, 2008). An alternative explanation also proposed is that classroom structure offers guidelines and routines for children to behave within normal levels, and in the absence of such structures in foster placement carers report a more problematic spectrum of behaviours (Fernandez, 2008).

This study found concordance in teacher and carer ratings on levels of internalising mental health problems in children. Similar to other studies (Fernandez, 2009) more externalising behaviour problems were reported by foster carers than teachers which supports the view that the classroom environment may offer the necessary parameters that support children's behaviour. This study differs from other research (Minnis & Del Priore, 2001) however with it's finding that that teachers are as well, if not slightly better able than carers to identify children's emotional distress.

The finding that both responders detect behaviour problems more readily than emotional problems in children lends weight to the argument that emotional distress may be missed in both foster and classroom settings. Previous authors maintain that major depression can be missed in looked after children (Mc Cann et al., 1996). The present study certainly confirms this may be so and warrants further investigation so that emotional distress is not underreported by important adults in children's lives.

This study confirms the importance of actively involving teachers and carers in mental health assessment and the need to routinely survey children's self report regarding their wellbeing to inform research and practice and ensure that children's behaviour problems do not overshadow their experience of internal distress

The possibility must also be considered in this study for the potential for responder bias to have influenced foster carer and teacher report in either a positive or negative direction. Studies that have examined within-group inter-rater reliability (James et al., 1984) report the spurious influences of response bias such as positive leniency and social desirability and highlight the need for methods for controlling for the biasing effects on responses. The potential for response bias needs to be considered when interpreting findings and is addressed by the researcher in more detail under the study limitation section.

This study compared mental health in children in care with their school peers and found higher rates of psychopathology in the former. Other studies that carried out these comparisons confirm more externalizing and total behaviour problems in looked after children than others (Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2001; Lawrence et al., 2006; Shore et al., 2002; Tarren-Sweeney, 2008) while some (Keller et al., 2001) identify that both internalizing and externalizing problems occur in children in care in higher rates than in the general population.

The present study confirms research in the UK and internationally that children in the Irish care system also experience similar risk for externalising (Fernandez, 2008; Jiménez & Palacios, 2009; Keller et al., 2001; Lawrence et al., 2006; Shore et al., 2002; Tarren-Sweeney, 2008) and internalising (Keller et al., 2001) mental health problems that exceed those of their peers. The undisputed finding that children in care have higher risk for psychopathology informs the need for routine assessment of mental health in this population and the need for concerted effort of all stakeholders in address this risk.

This study found low report on somatic problems in children which along with ratings on anxious/ depressed and withdrawn/ depressed subscales comprise the total internalising problem subscale of the CBCL. Thus low report of somatic problems is consistent with the lower ratings on children's internalising problems suggesting that similar to other symptoms of internal distress, somatic problems could have been overlooked in the sample. It may be that somatic problems were not of clinical concern in children or that somatic symptoms were undetected by carers or not communicated by children themselves. Studies have revealed that somatic complaints can present in children at sub clinical levels and relate to negative affect mediated by deficits in emotion regulation (Jellesma, 2008) and are associated with emotional disorders as well as physical health complaints both of which occur at higher frequency in children in care than others (Tarren-Sweeney, 2009) but can potentially be missed.

The maltreatment literature confirms that children can underreport physical health complaints due to atypical pain responses and higher pain thresholds (Tarren-Sweeney, 2009). This may have influenced the low report of somatic problems in this study and suggests this is an important construct to investigate further and which would help to clarify the complex mental and physical health looked after children experience. Obtaining child self report will help ensure that this impairment indicator of children's emotional and physical health is not overlooked or under recognised by children themselves due to atypical pain responses.

The present study compared mental health problems in boys and girls in care on multi informant ratings and across settings. Most previous studies investigating whether mental health problems present differently in male and female children in care agree behaviour problems present in more boys than girls (Keller et al., 2001; Minnis & Del Priore, 2001; Rosenthal & Curiel, 2006; Tarren-Sweeney, 2008; Tarren-Sweeney & Hazell, 2006; Bernedo et al., 2012) while others identify no gender differences on behaviour problem measures (Heflinger et al., 2000; Jiménez & Palacios, 2009).

The present study, by comparison, found that girls were twice as likely to break rules as boys in foster placement and more than twice as likely to display aggressive behaviours. Girls were three times more likely than boys to be anxious and depressed in foster placement and almost twice as likely to be withdrawn and depressed. More thought problems were also identified in girls than in boys in foster placement. The increased mental health vulnerability of girls in foster placement warrants further exploration as emotional and behavioural problems play a major role in disrupting stability in care. Writers (Newton et al. 2000) attempting to disentangle the relationship between problem behaviours and placement breakdown found that externalizing behaviours proved to be the strongest predictor of placement changes for children who presented with problem behaviours on at least one broad-band CBCL scale. Newton et al. (2000) concluded that children who initially scored within the normal range on the CBCL were particularly vulnerable to the detrimental effects of placement breakdowns. Thus, the mental health risk in children in the sample and in girls in particular on mental health ratings by foster carers may represent a vulnerability factor in the sustainability of placements for girls in particular and in their stability in care. Other studies investigating variables related to placement breakdown found interaction effects with gender where older girls were more likely to have disrupted placements than younger girls or older or younger boys (Oosterman et al., 2007). The higher rate of externalising mental health problems in girls in care suggests increased risk regarding placement instability and possible breakdown for looked-after girls in particular.

Present findings provide strong support for the need to provide information and training to foster carers to support children’s placements and enable foster carers in the detection of internal distress which may impact placement stability and precipitate breakdown. Previous studies have identified support to foster carers as a mediating factor in their ability to cope with children’s behaviour problems and sustain foster placements (Terling Watt, 2001) while other research has indicted that support to foster placements from caseworkers yielded moderate to strong effects in preventing placement breakdown (Kalland & Sinkkonen, 2001) although ultimately it is maintained that it depends on the quality of care-giving whether particular risks result in actual placement breakdown (Oosterman et al., 2007).

Research by Fernandez (2009) confirmed that the greater the length of time children had spent with their current foster carers was associated with better satisfaction, integration, academic progress and better behavioural outcomes and adjustment in their placement. Fernandez (2009) findings that overall longer placements are associated with better outcomes for children who are at risk of their psychological and social development being compromised when stability of their living environment is not maintained, reinforces the need for a commitment of care systems to plan proactively for stability

It is increasingly identified that looked after children endure systemic threats to their felt security (Tarren-Sweeney & Vetere, 2014) further confirming the need for interventions that promote mental health recovery by increasing caregiver sensitivity, promoting felt security and strengthening caregiver child relationships (Chambers, 2014). The quality of care children receive in foster placements is one of a number of important factors that collectively exert greater influence on children's mental health and adjustment than providing therapeutic interventions (Tarren-Sweeney, 2014)**.** The above findings provide compelling support for this view and confirm the potential of carers to identify mental health risk in children in care, enhance children's felt security in relationships and foster settings and ultimately facilitate restorative therapeutic change.

5.2.2 Mental health of children in care in school

Most research investigating mental health in children in care has relied on caregiver reports. Fewer studies have examined teacher perspectives of mental health, therefore less is known of the psychopathology of children in care in school. An important finding of this multi-informant survey which included teacher ratings of mental health was the level of agreement between teachers and carers on psychopathology in the sample. In fact, slightly higher mental health ratings were observed by teachers in more than one in ten looked after children in school and less than one in ten in foster placement suggesting a slightly better detection rate of mental health symptoms by teachers than carers.

While it is asserted that mental health problems are more identifiable in carer-child relationships, this finding supports the view that mental health problems are identifiable in teacher-child relationships. An important implication of this is the potential of the school environment, and relationships within it, in highlighting mental health risk in looked-after children. According to teachers, children in care had more emotional and behavioural problems than peers, and boys in care had more emotional and behavioural problems than girls, demonstrating that eachers identified both internalising and externalising psychopathology in children in care compared to others, and in more boys in care than girls.

Previous studies investigating teacher reports of mental health in children in care on the TRF (Fernandez, 2008; Jiménez & Palacios, 2009, Bernedo et al. 2012) have yielded contrasting findings. Some identified more externalising than internalising mental health problems in children in care. Fernandez (2008) found more than one in five looked after children were in the clinical range on externalizing problems in school while one in ten were in the clinical range on internalizing problems. Interestingly, follow-up assessment by Fernandez (2008) found behaviour and school adjustment had improved and no significant differences existed between children in care and peers when supports were provided. Jiménez & Palacios (2009) also compared the mental health of children in care to peers on teacher ratings on the TRF and found more emotional and behavioural problems and hyperactivity in looked after children than others. Other research however, offers a more normalising view of the mental health of children in care in school where, similar to peers, the majority of children were in the normal range on teacher ratings the total behaviour problems scale (Bernedo et al. 2012).

The present study is consistent with Fernandez (2008) and Jimenez & Palacios (2009) with regard to the finding that both internalising and externalising mental health problems are greater in children in care than peers in the school setting. The fact that boys in the sample had more internalising and externalising problems than girls on teacher report may indicate greater mental health vulnerability in looked after boys in school while the educational environment may have a protective role for girls. Mental health problems expressed behaviourally most likely would present challenges for teachers to manage and could impact peer relationships. The sustained effort required in managing classroom behaviour could lead to negative focus on the behaviour of boys and negative appraisal from peers. Further exploration of this potential educational risk factor for boys and protective factor for girls respectively will help determine if school is a mediating factor and why. It may be that looked after girls experience similar risk for mental health problems in school but are better able to mask symptoms, or mental health problems may be more difficult for teachers to detect in girls in school.

There is the possibility that a confirmatory bias in teachers could have influenced their ratings and led to expectations of greater behavioural disturbance in boys and could have impacted outcomes. This is an important area to address in research and practice to ensure that bias or negative expectation about children’s behaviour or achievement would influence the educational outcomes of children in care, especially of boys.

Studies that have used child self-report found that fostered girls reported more behaviour problems than either teachers or carers leading to the assertion that girls have a propensity for more difficult to detect internalizing symptoms (Rosenthal & Curiel, 2006). Bernedo et al. (2012) also identified more externalising problems in fostered boys in school compared with girls, suggesting that withdrawn or anxious depressed behaviour may go undetected by teachers, particularly in girls. It could be that there is a cultural expectation for girls to have more internalising behavioural profiles leading to possible distress being overlooked or underreported in girls in their school peer group. The higher level of emotional problem in boys in care in school is an unexpected finding and underscores the importance of multi-informant methodologies including child self-report to adequately capture psychopathology. Self-report measures would help ensure internalising problems are not overlooked in the population especially in looked after girls in school.

The finding that one in four children in care received learning supports compared to one in ten peers confirms high educational need in the sample and supports research documenting educational morbidity in the population. The higher thought and attention problems in children in care compared with peers would negatively impact educational attainments. This finding supports Golding’s (2010) view that children in care do less well educationally than children at large. Writers confirm a concerning educational profile in the population where a third had poor concentration, a half had special educational needs (Stanley et al. 2005) and a third had learning disabilities (Minnis & Devine, 2001).

Although a dearth of research has thus far existed on educational outcomes of children in care in Ireland, a previous study by Mc Nicholas et al. (2011) found that in spite of the young age of children surveyed, one in ten had left school early, repeated a year, or were inconsistent attendees and a further third had learning difficulties. Mc Elvaney et al. (2013) explored outcomes for care leavers in Ireland and found mental health factors played a role in approximately half of those with attendance problems in secondary school, but because psychopathology can manifest as difficult behaviours problems may not be detected by teachers. An earlier study in Ireland (Daly & Gilligan, 2005) which investigated educational outcomes using mean scores in academic subjects as educational indicators, highlighted that where children had low mean scores and deemed to be making little progress academically they were making progress in other areas of schooling, such as developing friendships and social skills. The high level of educational risk in one in four in the sample confirms the need to systematically investigate educational needs in children in care in educational settings. Focusing on academic and non academic progress indicators is indicated when evaluating children's educational outcomes.

Not all studies of mental health of children in care use the same methodologies or standardised measures which makes direct comparison between findings difficult. Notwithstanding the limited information available on mental health of children in care or studies comparing psychopathology with peers as in the present research, present findings are congruent with the literature available thus far in Ireland (Mc Nicholas et al. 2011; Mc Elvaney et al., 2013) highlighting a spectrum of educational risk and poorer educational outcomes in the Irish population of looked after children.

The evidence for high educational morbidity in the sample in school suggests this is an area warranting further exploration and confirms the importance of including teachers in mental health research. The benefits of education for looked after children are described as far greater than academic attainment alone and attendance and participation in school offers children the chance to engage in a range of social experiences which can provide an essential developmental foundation for social, emotional and academic learning. Schools can provide a regular, consistent and safe environment for children, and teachers are potentially very influential in facilitating children's engagement in school systems (Department of Communities, Child Safety and Disability Services, 2013).

5.2.3 Relationship problems

Clinical levels of relationship problems were identified in one in four children in care in school and one in five in foster placement based on teacher and carer reports. Children in care in the study had a ten fold risk for relationship problems compared with peers. Social problems were the most frequently occurring mental health problem in children in care on TRF and CBCL ratings by teachers and carers respectively. Social problems were associated with relationship problems on the RPQ, confirming the positive association between children's mental health and relationship functioning. Stronger associations were identified by teachers indicating the importance of school relationships for mental health and the possible buffering role of mental health in children's relationship functioning with peers.

The high rate of social and relationship pathology in the sample accords with the assertion that interpersonal relationships are the hallmark impairment of a significant number of children in care (Tarren-Sweeney, 2014). Early maltreatment is a known risk factor for later relationship functioning, and the primary care-giving relationship is possibly the single most important predictor of later mental health outcomes in children (De Jong, 2010). Previous research investigating relationship functioning in children in care confirmed problems in both peer and teacher relationships (Minnis & Del Priore, 2001), and associations between social problems and school based problems suggesting the psycho social and educational morbidity in looked after populations (Stanley et al., 2005).

Writers explaining the poor relational capacities of children with histories of maltreatment propose that deficits in social cognition are associated with past abuse (De Jong, 2014) and affect dys-regulation arising from early trauma results in children being overwhelmed by the demands of social relationships (Howe, 2005). There is now considerable neurobiological evidence highlighting the pervasive impact of early adverse care on later social and cognitive functioning (Green, 2002; Green & Goldwyn, 2003; Minnis, 2007, Schore, 2007; De Jong, 2010).

Research in Ireland has not previously systematically measured social and relationship disturbance in looked after children or identified the positive association between relationships and mental health in the population. Previous studies in Ireland report poor social interaction in children in foster and residential care (Mc Nicholas et al. (2011) while others identify links between educational outcomes and social supports, where children with supportive friendships were more likely to have positive educational experiences confirming how these areas of children's lives are positively related (Daly & Gilligan, 2005).The academic and psychosocial risk in the present study supports the view that the impact of maltreatment on children in care manifests in interconnected ways in the school setting, academically and socially.

A significant outcome of this study was the ability of Teachers to identify problems in Teacher-child relationships, confirming the potential for mental health detection and intervention in educational contexts and the pivotal role of Teacher report in assessment. Further, school offers children the chance to develop supportive relationships with adults and peers, affording connectedness and promoting resilience (Hunt, 2000) while positive teacher-child relationships have the potential to benefit maltreated and traumatised children who may not have previously experienced quality relationships with other adults in their lives (Department of Communities, Child Safety and Disability Services, 2013). Teachers are identified as a source of academic and social support (Fernandez, 2008) and an important role model for children (Merdinger et al., 2005). Research has elaborated the importance children themselves attach to relationships both with adults (Martin & Jackson, 2002) and peers (Harker et al., 2003; McClung & Gayle, 2010; Hedin et al. 2011; Celeste, 2011).

The level of relationship disturbance in the sample would no doubt impact adaptive school functioning and the network of relationships with Teachers, carers and peers, suggesting a number of practice implications in school-based intervention. The present study supports the view that school relationships can potentially promote positive mental health. The study also highlights the importance of school-based intervention in ameliorating mental health risk and including school systems in children’s overall care planning.

Assessing relationship disturbance in the present study addressed the issue highlighted in the literature, that the mental health of looked after children is typically framed in terms of problems measured by rating scales such as the CBCL, the SDQ or the Rutter Scales; these identify emotional and behavioural problems while attachment, peer relationships, and trauma based difficulties are mainly overlooked (Tarren-Sweeney, 2007).

The one in four detection rate of children above the clinical cut off for problems suggests the potential of the RPQ in identifying a core group of children with a constellation of behaviours distinct from other mental health problems and discriminates relationship problems in children in care from peers and identifies children who may be most at risk for social exclusion in their peer group. The RPQ represents a useful tool in detecting children with impaired relationship functioning who may be most at risk for social exclusion in their peer group. The RPQ could form part of a comprehensive assessment on entry to care and could potentially identify children who may be subthreshold clinically yet due to their relationship problems may constitute a particularly vulnerable group within the looked after population as a whole. The RPQ is suggested as a useful tool in maltreatment alongside standardised measures of mental health to detect complex psychopathology in children whose clinical presentation may be hard to define but whose outcomes may be poor.

5.2.4 Contact with services

The present study examined concordance in identified mental health need in children in the sample and their service use and found mental health & relationship problems on foster carer ratings predicted children’s contact with services, with low to moderate associations found between mental health problems and help-seeking by carers for the child in care. Previous studies identified higher i.e. moderate correlations between mental health symptom scores and use of services (Bellamy, 2007; Burns et al., 2004; Tarren-Sweeney, 2010).

The low concordance in mental health need and service use in the present study may have a number of explanations. It may be that there is inadequate recognition of the needs of children in care including their mental needs and this impacts their access to services. Social workers who have a key role as gateway for children to access services may not be adequately trained to identify mental health problems. This represents a gap in mental health problem detection and service provision. This study found not all children in care in the sample had contact with their social worker in the previous six months. This may be another reason for low level access to services as problems may have gone undetected.

It may be that children in care are not receiving routine assessment on entry to or whilst in care. A review panel report into deaths of children in care or known to child protection agencies (Buckley, 2014) has called for the implementation of one standard framework for comprehensive assessment of children in care. Until this recommendation is incorporated into standard practice children may fail to be identified as needing supports and services which will continue to be beyond the reach of children.

The lack of protocols to promote inter agency cooperation has also been identified in previous review panel reports (Buckley, 2014). This may represented a barrier to children being referred for mental health assessment in this study. The gap in inter agency coordination of child in care services along with other agencies especially health and education sectors will continue to impact children’s access to assessment and appropriate intervention.

The need for specialist inter-disciplinary looked after children’s teams is an even greater priority since the Child and Family Agency i.e. the child protection and welfare service in Ireland became separated from the wider health sector in January 2013 which has led to gaps in cooperative working practices, protocols of assessment, agreed thresholds of concern, sharing of information all of which are key in identifying children’s needs and ensuring services are accessed.

As specialist looked after children’s teams such as those in the UK and internationally are unavailable in the Irish care context, children may experience low or inconsistent service provision until systematic assessment and comprehensive delivery of services are reliably established. It is suggested that some or all of the above service issues may have contributed towards the low level of access to services in this study. This is an area which will benefit from analysis in future research.

It is highlighted in the literature (Fernandez, 2008) that children experience fragile permanence when placements break down and placement moves are accompanied by a change of schools and consequent broken peer and adult attachments. The detrimental effects resulting from moves in care and placement breakdown are evidenced in children's high levels of psychological need and multiple and interrelated problems affecting emotions and mood, behaviour and relational capacities. The finding of this study … and the research evidence supporting permanency in care provide a further argument for the need for agencies to provide maximum support to foster carers to promote children's security in foster placement and prevent placement disruption breakdown.

Shortcomings in social work provision have been highlighted in child protection and welfare services in Ireland. Mc Nicholas et al. (2011) found the majority of children in care had no case worker while the Health Information and Quality Authority (HIQA; 2012) identified that half of looked after children had no social work allocation. Ensuring children have a consistent and long term case worker as a single point of contact to access services is recommended in the Irish care system (Mc Elvaney et al. 2013) and echoed in international research confirming that an assigned caseworker for children in out-of-home care was the only independent predictor of children seeking or receiving mental health supports (Tarren-Sweeney, 2010b).

As well as direct social work provision to children in care, link support to foster carers especially at times of transition of the young person in care is associated with best outcomes (Mc Elvaney et al., 2013) while children in care themselves identified having someone to turn to for support and advice was the most important factor whilst in care and when leaving care (Daly, 2012a; 2012b). The sizeable numbers in the study with no social work contact suggests the unavailability of this critical gateway to mental health intervention. This is evidenced in the few contacts with psychology by children in the sample and even fewer with child psychiatry compared with the high level of mental health need.

A number of other possible factors are suggested for the low/moderate contact with services in spite of high identified need. It may be that carers failed to identify the significance of psychopathology in children or recognise that problems could benefit from specialist supports. The high referral but low follow up treatment at CAMHS highlighted in the literature (Stanley et al. 2005) and problems gaining entry to CAMHS (De Jong, 2010) may be mitigating factors in relation to the few contacts with child psychiatry in the sample. There may also have been a disincentive for foster carers in the study to seek support from mental health professionals because of lengthy waiting times required to access specialist agencies, which is an acknowledged problem in the Irish health care system (Hughes et al., 2013).

No published studies in Ireland have systematically investigated access of children in care to tiered mental health services at primary or secondary care or tertiary CAMHS, thus explanations for present findings are speculative. Annual reports of CAMHS in Ireland provide limited information only regarding children in care who attend that service such as low attendance and a fall in numbers of children attending CAMHS who were in contact with or in the care of the Child and Family Agency (HSE, 2014). Besides this, little else is known about the population of children in care in Ireland who attend CAMHS or the prevalence or profile of psychopathology in this group. The low contact of children in the study with psychiatry is consistent with a previous study in Ireland (Mc Nicholas et al., 2011) which identified a high rate of psychiatric disorder in more than half of children in foster care and behavioural problems in the majority of children in residential care, but fewer than one third of the total number attended CAMHS.

Inconsistencies in CAMHS provision are documented elsewhere in the literature as well as strict referral policies operating in CAMHS. In practice in Ireland, stability in children’s care, something that can be difficult to achieve, and active engagement with social services are typically required before referrals are accepted at CAMHS; children’s mental health may be negatively impacted by the placement issues that could benefit from the multi systemic intervention in CAMHS. It is also highlighted that referral to CAMHS is not necessarily made on the basis of symptom severity and when problems are not clearly defined, referrals may not be accepted, which is a further barrier to children receiving appropriate help.

The present study, confirming few contacts with psychology and even fewer with child psychiatry, sheds important light on this area and suggests, while children in care have increased risk of psychopathology compared to children at large, CAMHS are not sufficiently targeting the population.

The specialist educational provision to children in the study is similarly inadequate. The contact with educational psychology by only one child in care compared with the high educational need in more than one in three requiring educational supports suggests significant educational morbidity in the sample but limited access to specialist educational supports. The school psychology provider – the National Educational Psychological Service (NEPS) is available in theory to all children at primary and post primary school level in Ireland, however in practice NEPS is difficult to access and only a percentage of those requiring NEPS support actually avail of that service. This finding supports the assertion that looked after children have greater need for educational supports than children at large (Mitic & Rimer, 2002, Mc Nicholas et al. 2011) and face additional educational challenges than other children with respect to educational needs and educational performance (Fernandez, 2013)

The finding that more than one in three children in care had contact with specialist services including Occupational Therapy, Speech and Language Therapy or Family Support confirms the high developmental need in the sample warranting specialist intervention. This finding is consistent with UK and international studies documenting complex developmental risks in looked after children who endure poorer physical health, more learning and language difficulties and poorer educational outcomes than others (Crawford, 2006).

Moreover, the high rate of GP contacts by two thirds of children in care compared with less than one third of peers, poses questions about the physical health of the sample as well as their mental health. It is not immediately clear why children visit their G.P practically as often as their Social Worker. It may be that the present sample has poor physical health which is consistent with research confirming children in care have more physical health complaints than others (Kerker & Dore, 2006; Sawyer et al., 2007; Minnis et al., 2006; Nathanson & Tzioumi, 2007; Royal Australasian College of Psychiatrists, 2006). Research in Scotland (Minnis & Del Priore, 2001) similarly revealed children in care had regular contact with their GP but few contacts with child psychiatry. The authors explained that high GP contact could possibly be explained by the requirement for routine medicals on entering care or because children attended their GP for emotional and behavioural problems instead of CAMHS due to the difficulty accessing that service.

As the majority of children in the present study were in long term care, inflated GP contact may be unrelated to initial health assessments and due instead to health concerns. Further, while it is mandatory in some care jurisdictions for children to have regular health checks by a medical practitioner (Hardy & Murphy, 2014) and considered best practice for comprehensive health assessment entering care (Chambers et al., 2010) to the knowledge of this author, mandatory initial assessment and review is not established practice in child welfare and protection services in Ireland. This suggests that high GP contact in the study may reflect children's physical or emotional health concerns. The latter possibility that children attended their GP for emotional or behavioural or mental health concerns may be related to carers' perception that GPs are more accessible than either CAMHS or primary care mental health services. This assertion is supported by research in Ireland which has documented that primary health providers are required to meet the mental health needs of the general population because of low referral to specialist mental health agencies (Mc Hugh et al., 2013). The present findings suggest a possible reliance on GPs in primary care to bridge service gaps in mental health provision for children in care also. Further research will determine if looked after children experience poorer physical health compared to others requiring visits to their health practitioner or whether GP's are required to see and treat mental health problems in this population without children having recourse to specialist mental health intervention due to inadequacies in service provision in the Irish health care system.

The availability of mental health services for children in care and the extent to which adults and agencies tasked with the responsibility for safeguarding children's wellbeing make these services available is referred to as a critical public health issue (Tarren-Sweeney, 2014). In spite of identified mental health need, sizeable numbers of looked after children do not receive adequate clinical assessment or access mental health services. Reasons for this are broadly summarised as: mental health difficulties remaining undetected, services not being sought by case workers or foster carers, inability to access services or unavailability of suitable services (Kerker & Dore, 2006; Minnis et al., 2006; Sawyer et al. 2007). It may be that one or a number of the above are mitigating factors in access to services in the present study and are areas to explore in future research.

5.3.0 Limitations of the research

5.3.1 Sample size

The small sample size is a limitation of the research. Some children initially recruited to the study were subsequently omitted because families were in distress over access arrangements or court proceedings or where placements were at risk of breakdown. While such exclusion criteria aimed to avoid causing undue distress on already burdened families and had strong ethical merit, it resulted in a smaller than expected sample size which is a limiting factor when interpreting findings.

5.3.2 Selection procedure

The above selection procedure would have served to introduce bias to the study. If more problematic families were included this might have led to a more representative sample of children whose families were experiencing distress and who may have displayed more emotional and behavioural disturbance thereby yielding different research outcomes.

Findings in the study may have been further influenced by the selection of most of the sample from the long term care register which included children experiencing more continuity in care and possibly fewer emotional and behavioural problems than children in short term, emergency or respite care if such samples had been included.

It was deemed likely by social work that these more stable families experiencing greater permanency would be less challenged by participating in the research, more motivated to cooperate with the study and return questionnaires. This rationale demonstrated an awareness of the potential stress caused by care system factors and was ethically commendable; thus findings may underestimate psychopathology for the reasons as outlined and results should be interpreted in light of selection procedures.

5.3.3 Response rate

The questionnaire survey methodology yielded a low return of 41 questionnaires out of a total of 100 distributed to foster carers, representing a 41 % response rate. As research highlights that those who fail to take part in research tend to be less healthy than those who do (Hennekens & Buring, 1987), the possible bias resulting from questionnaires being returned by carers of children who may have had better mental health is a limiting factor in the research and has implications when interpreting and generalizing findings. An even lower response rate was found among the school comparison group where 39 questionnaires were returned from a total of 90 distributed, representing a 43% response raising questions regarding the representativeness of the comparison sample also and profile of responders who may have had fewer problems that those who did not respond. The prevalence of psychopathology may therefore be underestimated in foster care and control groups and is a limitation of the research suggesting caution is warranted when interpreting findings. Low motivation in returning questionnaires is a factor in postal survey research. One possibility suggested for the present finding is that non responders failed to understand the requirement to return questionnaires for data analysis purposes.

Boyle et al. (1991) also identified that those who opt in to research tend to be of higher socio economic status. Although the school control group was deemed broadly representative of a mixed socio economic population, those parents who opted in to the study and responded to the survey may have had higher socio economic status and fewer current stressors in their lives, reflected in lower mental health scores in children who may be a less representative control group as a whole.

5.3.4 Child self report

The present study was multi-informant and sought parent and Teacher report of child mental health and relationship problems. The research design did not include child self-report as some surveys of mental health in children in care have previously done (Minnis & Devine, 2002). As the findings in the present study support the assertion that internalising mental health problems may be undetected in looked after populations, the inclusion of child self-report of mental health would have tested this hypothesis, lent robustness to research findings and informed intervention and treatment planning.

5.4.0 Strengths of the research

5.4.1 Ethical considerations

As a requirement of the college, prior to the study commencing, ethical approval was sought and obtained from the Senate Research and Ethics Committee of City University, and from the Regional Ethics Committee of the University Teaching Hospital in the Health Service Area where the study was carried out.

Maintaining ethical standards was an objective at all stages of the research and ensured by the investigator who, as a member of the Psychological Society of Ireland (PSI), adhered to the PSI's ethical guidance for conducting research with human participants. In terms of confidentiality, information collected in the study was held under the provisions of the Data Protection Act, 1988 (amendment, 2003) and the Freedom of Information (Amendment) Act, 2003.

To minimize distress that participating in the study might evoke, prior to commencement of the study social workers visited birth parents, explained the rationale for the research and gained cooperation for children's inclusion. Any concerns or questions that arose at this initial stage were addressed. During these social work visits, participating families were informed of the opt-in nature of the research and their right to withdraw at any stage.

The face to face meetings social workers subsequently held with foster carers to distribute questionnaire packs, outline the purpose of the study and respond to any queries or questions was a strength of the research and of ethical merit and meant that any literacy issues that might have existed were addressed in a sensitive manner. Referral pathways to GP and access to mental health and emergency services were discussed with foster carers in the event of risks to mental health arising over the course of the study and template letter to GP was available if required (Appendix X1).

5.4.2 Opt –in design

The opt in design is a significant strength of the study and of ethical value when working with vulnerable groups such as children in care. At the initial stage of the research discussions were held with the Principal Social Worker in the Health Service Area where the study was conducted and any aspects of the research potentially raising ethical concerns were addressed. Notwithstanding the low sample size and bias incurred by the initial selection procedure as outlined under Study Limitation Section above (5.3.1), ethical awareness and avoidance of causing unnecessary distress or harm to vulnerable families is viewed as a valued aspect of the study.

5.4.3 Child assent

As sensitive information regarding children’s mental health was sought from informants on the Child Behaviour Checklist (CBCL) and Teacher Report (TRF) forms (Achenbach & Rescorla, 2001) and relationship problem (RPQ) questionnaires, the research methodology included obtaining child assent by foster carers. Explaining the purpose of the study to children and the nature of the information shared by Teachers and carers on their behalf adds further ethical merit to the research.

5.4.4 Working alliances

A positive outcome arising from the collaborative process involved in carrying out the study was the strong working alliances established between psychology and social work from initial planning meetings with Principal Social workers to subsequent information sharing briefings with social work colleagues. Social workers also reported a strengthening of relationships with participating families on their caseload, enhanced by face to face meetings with foster carers at different stages of the research from disseminating information to data collection. Obtaining data in this way had ethical merit and positive consequences through the development of working alliances between disciplines and partnerships with foster carers.

5.4.5 Standardised measures

The study used multi methods of data collection including the ASEBA standardised assessments to measure mental health in the population. The CBCL & TRF completed by respondents in the study are used in routine clinical practice and have established research validity and reliability from numerous studies investigating mental health in child and adolescent populations which have used the ASEBA measures. The established validity of the ASEBA to determine clinical levels of mental health risk in the sample represents a valid measure of psychopathology with a robust evidence base which is a notable strength of the research design.

5.4.6 Multi-informant screening

The fact that carers are deemed as reliable as parent informants with regard to children in long-term foster care (Tarren-Sweeney et al., 2004) supports the inclusion of foster carer report of mental health symptoms in the study. It is also asserted that research fails to account for a range of mental health problems in children in care mainly because measurement is confined to parent-report (Tarren-Sweeney, 2007; 2008a). Therefore, obtaining multiple measures of psychopathology by including Teachers in the study yielded important information regarding psychopathology of children in care in the school context. The inclusion of this information has contributed significantly to knowledge in this area and the validity of the present study’s findings where previously there was a dearth of research in Ireland

5.5.0 Reflection on the Research Aims and Limitations

5.5.1 Sampling Issues

Robson (2002) has highlighted that the demands of carrying out real world research can mean that the requirements for representative sampling can be difficult, if not impossible, to achieve. A probability sampling method is one that uses random selection and in order to have random selection, the researcher needs to set up a procedure that ensures each constituent of the target group has equal probability of being chosen. I agree that this methodology in real world research is difficult to achieve particularly when carrying out studies with looked after groups.

Robson's (2002) example that 'a doctor may not be prepared to provide you with a list of patients' (Robson, 2002 p. 266) has relevance in the present study where during the recruitment phase, while full lists of children on the care register were shared with the researcher and a random sampling methodology was aimed for, certain cases were subsequently withdrawn families who were problematic and involved with the court system or in conflict with social work department and where it was felt that consent would be difficult to obtain, which introduced bias to the sampling frame. Robson (2002) highlights the problem in research of *ineligibles* where participants in the sampling frame are not part of one's target population, and *eligibles* who may not get into the frame and that slippage between what one has as a researcher and what one wants causes problems with representativenss and also lowers sample size.

Non response is a further issue to address when conducting survey research and interpreting results. Even when consideration is given to reducing it, as in this study, response rate merits attention. Robson (2002) suggests that the relevant issue to be aware of is that those who do not participate may differ from those who do, but it is extremely difficult to allow for this. If a researcher gets everything else right in the methodology - from perfect random sample to a perfect sampling frame, anything other than a very high response rate casts serious doubts about the representativeness of the sample and once studies fall below that rate, Robson (2002) suggests it is not so much a question of the rate of response you achieve as a researcher but the unknown degree of difference between responders and non responders that matters. It may be wholly feasible for a response rate of thirty percent to lead to a more representative sample than one of sixty percent.

There are actions researchers can take in postal survey research such as comparing late returners of questionnaires with earlier ones or those who respond after reminders compared with those who respond with no prompting (Robson, 2002). With a random subset of non responders researchers can aim to *turn them into respondents* and compare them with previous respondents. However, these are only ‘palliatives’ and the real answer is that if representativeness is crucial to the research , then studies need to be set up so that virtually everyone responds which in real world research is difficult to achieve (Robson, 2002).

Bryman (1989) agrees that in practice, few survey research studies are based on full random sampling while Schwab (1985) points to the fact that a great deal of empirical research published in psychology journals rely on convenience samples and suggests that to take generalization to a population using statistical inference seriously, one would recommend rejecting nearly all studies submitted. These issues encountered in this study which are pitfalls encountered by all researchers aiming to achieve random sampling and representativeness, require consideration when interpreting findings.

5.5.2 The Impact of Scoring of Participants by Teachers

The possibility of Teacher bias in scoring participants has to be considered as Teachers had knowledge of children’s care status when completing questionnaires which may have influenced ratings on mental health problem scales in either direction; positively or negatively. Teachers are no different to other individuals in terms of their vulnerability to response bias has been well documented in research and can include a range of cognitive processes that can lead to inaccurate or invalid results. Biases are most prevalent in studies using self report methodologies, structured interviews and survey research.

The way in which information was obtained from Teachers may have influenced responses. For example, disseminating Teacher forms via foster carers not only identified children's care status but may have singled out children as meriting attention and influenced ratings emotional, behavioural and relationship problem indicators.

Bias can be introduced in a number of ways, even in the phrasing of questions (Robson, 2002) and can occur due to the effect of participants wanting to be good experimental subjects and provide socially desirable responses. Bias in survey research can damage the validity of findings and the possibility needs to be considered that some results are due to systematic response bias rather than any hypothesised effects or outcomes (Robson, 2002).

In considering this issue further, arguments advanced both for and against response bias should be considered. Arguments against research bias contend it does not contribute significant effects or where it does have a role in influencing responses it is proposed that effects 'wash out' with large enough samples (Campbell et al. 1976). Proponents of the view that bias is not a systematic problem in mental health research (Clancy & Gove, 1974) call into question the concept of social desirability which is a subtype of response bias, highlighting that researchers have no way of quantifying the desirability of statements of participants (Gove & Geerken, 1977). It is contended that what is believed to be artifacts of response bias in research, such as differences in responses of males and females may just be actual differences between groups and conclude that response bias is not as great a problem as is suggested (Clancy & Gove 1974). Research that has investigated this issue compared participant responses with and without controls and found no difference (Clancy & Gove, 1974) while others identified that although bias may have been present, effects were small and had little effect on altering responses (Campbell et al. 1976). These studies supporting the argument against response bias suggest, while it may exist, more often its effects are minimal.

Argument that assert the presence of response bias maintain that researchers need to take steps to reduce it in order to conduct sound research (Furnham, 1986; Nederhof, 1985) and that its impact represents systematic error that needs to be addressed in order to produce accurate results. This view is supported in research in multiple settings with different clinical groups (Knauper & Wittechen, 1994) and cultural populations (Fischer, 2003) where responses have been based on desirability. There is support for the view that being part of an experiment or research study in itself can bias behaviour and responses of participants (Orne, 1962). One of the most influential arguments suggesting that response bias is a factor that needs to be addressed is that of Nederhof (1985) who confirmed that social desirability can account for as much as 10-70% of the variance of responses.

Because of the effect response bias can have on research outcomes, writers suggest that steps should be taken to mitigate its effects to maintain the accuracy of research. Pannucci & Wilkins (2010) suggest that a discussion of the topic of bias at the very least is essential for those carrying out research and those reading and interpreting findings.

There have been many studies of implicit bias arising from mental processes that cause us to hold negative feelings and attitudes about people based on characteristics like race, ethnicity, age or appearance. For example, studies have identified how teacher influence can advantage some children and disadvantage others. Teacher bias has been found in studies on gender (Sadker & Sadker, 1995) and ethnicity (Tenenbaum & Ruck, 2007) in particular. Because cognitive processes can function in our unconscious mind we are typically unaware of the biases we develop and that can last a lifetime (Erbentraut, 2015).

Bias can occur in the planning, data collection, analysis, and publication phases of research. Understanding research bias allows readers to critically and independently review the scientific literature and avoid treatments which are suboptimal or potentially harmful. Therefore as some degree of bias is nearly always present in published studies (Gerhard, 2008) researchers conducting research and readers of studies must also consider how bias might influence a study's conclusions. A thorough understanding of bias and how it affects study results is essential for evidence-based practice.

In summary, while there is support for both sides of the debate in the literature regarding response bias, there is compelling empirical evidence confirming its occurrence (Furnham, 1986; Nederhof, 1985: Orne, 1962; Fischer, 2003). The present results should be interpreted in light of this literature and the potential for Teacher’s response to have influenced coding of questionnaires and ultimately influence findings needs to be considered.

There can be profound effects of bias on questionnaire and survey based research. Considering the potential for bias to have occurred in this study and its effects at least allows this researcher and readers of this study to engage in critical and independent analysis when considering findings.

5.5.3 The Amendments Made to Measures Not Validated

Reliability in fixed design research is associated with the use of standardized research instruments such as formal tests and scales. The concern is whether tools or measures used produce consistent results. Therefore researchers need to concern themselves seriously with the reliability of the methods and practices in the design (Robson, 2002).

In choosing the measures in this study, I was aware of the merits of standardised instruments to measure mental health in the sample (i.e. ASEBA) and the limitations of non standardised instruments (i.e. Contact with Services Questionnaire) used in previous UK research (Minnis et al., 2006) which I modified for an Irish sample with the threats to internal validity this adjustment to the measure incurred. I concur with the view that when researchers attempt to measure their outcomes against other client groups or settings, they need to consider external validity and generalizibility of findings and balance this with the threats to internal validity by changes to instrumentation (Robson, 2002).

I was aware of the factors that jeopardize internal validity such as instrumentation changes which may influence outcomes, however, I believed this measure was useful and the changes were made were necessary to reflect the Irish care and health system. Researchers need to concern themselves seriously with the reliability of methods used and their research practices and be thorough, careful and honest in carrying out research and demonstrate this (Robson, 2002) which I have attempted to do.

In the selection, execution and analysis phases of the study which involved consultation of the literature, selection of relevant measures for hypotheses testing and adaptations to methodology and measures to meet the research agenda, I aimed to fulfil the research requirements outlined by Robson (2002).

Much real world research in the social sciences has the purpose of evaluating something and real world researchers have an ‘action’ agenda (Robson, 2002). When practitioners embark on research, they often want to change something linked to their practice. The modified instrument used in this study aimed to identify the services children availed of that are provided by the main stakeholders in the social, health and education sectors and highlight possible areas of unmet need. The further research agenda aimed to bring about discussion and debate regarding potential gaps in provision and areas for policy change in the care system which have been signposted in reports and reviews at national level (Buckley, 2014) and which merited investigation in this study.

An aim of most research is to encourage further research exploration. Direct demonstration of research findings involves the same researcher or someone else who wishes to apply or extend results and carry out further studies involving other participants or settings. Robson, (2002) explains that *making a case* as a researcher means putting forward a persuasive argument that it is reasonable for one’s results to generalize, by demonstrating that the group studied is representative (i.e. shares certain essential characteristics with other groups) and hence the same mechanism is likely to apply to others also.

There is a strong case especially with novel findings for trying to replicate an original study with different target groups or different settings to assess generalizability (Robson, 2002). This study is the first of its kind (in Ireland) to systematically attempt to measure the mental health, relationships and access to services in a cohort of looked after children in family foster care. Notwithstanding the limitations of carrying out modification to some measures use and their diminished statistical power, future research may attempt to further refine instrumentation and research methods in looked after populations where research analysis is warranted.

Studies that seek to expand or replicate main findings, Robson (2002) suggests is a practical test of reliability and a further contribution of knowledge in an area. The dearth of data that exists in this field in Ireland and the reliance on international literature and research with other cultural populations and ethnic groups (Tarren – Sweeney, 2007; Tarren-Sweeney & Vetere, 2014) is a compelling reason to recommend ongoing research in this area.

5.6.0 Implications of findings

5.6.1 Implications for practice

The scientific strides achieved in neurobiology have informed developmental models of attachment and explain how emotional transactions with the primary care giver influence maturing brain systems that are key to affect regulation and psychic development in the infant (Schore, 2010). Neurobiological evidence explains that the left hemisphere mediates most linguistic behaviours while the right is important for broader aspects of communication (van Lancker and Cummings 1999). Just as the left brain communicates its states to other left brains via conscious linguistic behaviours so the right brain nonverbally communicates its unconscious states to other right brains that are tuned to receive these communications

The intense expansion that attachment theory has undergone from its original scientific foundation has witnessed a corresponding expansion in its application to clinical work (Schore & Schore, 2007) and informed models of therapy such as counselling practice that focus on the interplay of relationships and subjective and inter-subjective processes as key agents for change (Connolly et al. 2014).

The concept of *regulation theory* which explains the process of developmental change embedded in interpersonal interactions is an amalgam of Bowlby's attachment theory, internal object relations theories, self psychology, and contemporary relational theory that are all informed by neuroscience and infant research (Schore & Schore, 2007). This is a profoundly developmental approach with the conceptualisation that a person's trajectory of emotional growth is facilitated or inhibited by the family context and culture. In this way, attachment outcomes are the product of the interaction of nature and nurture, strengths and weaknesses in an individual's biological predispositions and the early caregiver relationship that is embedded in the social environment (Schore & Schore, 2007). Regulation theory explains how developmental and therapeutic attachment experiences are transformed into internal regulatory capacities (Schore & Schore, 2007).

Regulation theory as it applies in therapeutic contexts, explains how implicit systems of the therapist interact with implicit systems of the client leading to the view (Schore, 2003b) that psychotherapy is not the *talking* but the *communicating* cure. Schore & Schore (2007) explain that right brain-to-right brain inter-subjective transactions lie at the core of the therapeutic relationship and mediate ‘‘moments of meeting’’ between client and therapist. Counselling informed approaches to therapy which incorporate neurobiological evidence into practice have particular relevance for looked after children with histories of maltreatment and relational trauma.

The importance of the therapeutic relationship is highlighted in the Presidential Task Force on Evidence-Based Practice (American Psychological Association) (APA) (2006) "central to clinical expertise is interpersonal skill, which is manifested in forming a therapeutic relationship, encoding and decoding verbal and nonverbal responses, creating realistic but positive expectations, and responding empathically to the patient's explicit and implicit experiences and concerns (p. 277). Bugental (1987) has referred to ‘‘the art of psychotherapy’’ and highlights the importance of the sensitive practitioner's ability to experience finer and finer distinctions or nuances. The primary mechanism of support for the client in the therapeutic relationship is the trained, practiced, and disciplined sensitivity of the therapist (Bugental, 1987). It is this collaboration of client and therapist according to Schore & Schore (2007) that allow for right brain communication and regulation of dys-regulated affective states.

The research evidence defines the importance of mental health interventions for children in care designed to enable optimal right brain development and attachment programs of prevention and early intervention. Counselling psychology has a particular contribution to make to the field with the importance it places on the therapist's use of self, and the interplay of subjective and inter-subjective factors within human interactions, particularly within the therapeutic relationship (Kirk, 1982).

One of the clearest messages when the views of young people who have been through the care system are obtained, is the need for stability which is often missing from their lives and continuity in care (Mc Elvaney at al., 2013) . As experts by their experience, young people should be involved in policies, planning and delivery of systems supporting them which does not mean a multitude of services according. Children who had been through the care system expressed the view that if they had a single trusting relationship, the impact on their mental health would be immeasurable (Mc Elvaney et al., 2013).

This present study provides evidence that confirms problems in relationships of looked after children and accords with Tarren-Sweeney & Vetere (2014) that inter personal relationships are the core deficits of children in care. The link between relationships and mental health in this study speaks directly to interventions for young people that address relationship functioning as central to mental health and wellbeing. Counselling models of therapy can contribute invaluable insights into the mechanisms of change towards recovery of young people in care that emphasise relationships with carers, teachers and peers- and the therapeutic relationship, at the heart of this process

5.6.2 Implications for policy and service

There are a number of implications for clinical practice arising from the findings of the study.

Given the prevalence of mental health problems identified in the sample, the importance of children receiving a routine mental health assessment on entry to care is indicated as well as regular health reviews whilst in care. Including children’s physical health status as part of comprehensive assessment and monitoring by a GP is indicated.

The level of psychopathology uncovered in the study supports the use of diagnostic assessment in looked after populations for those who screen positive for mental health problems. This would determine the actual prevalence of disorders to inform policy and service planning and is important clinically to identify children warranting specialist intervention and treatment.

Including child self-report measures in studies will add rigor to mental health assessment and improve identification of mental health risk and better capture the complex psychopathology in the population which can be difficult to detect via instruments completed by adult respondents alone. This may also help address the potential for bias influencing findings.

Children and young people in care manifest a range of attachment and trauma related mental health problems that are under-researched and inadequately measured by instruments used in routine clinical settings. The present study suggests that standardised mental health assessment on instruments such as the CBCL and TRF used in the study would be enhanced by the inclusion of measures such as the ACC caregiver–report psychiatric rating scales developed more recently and which have an already-established evidence base for identifying the atypical psychopathology found in the population.

The level of relationship problems identified in the study suggests that assessing this area of functioning is especially relevant for children in care. The RPQ used in the study is suggested as a useful research tool to explore complex relationship problems in the population and clinically, can contribute towards a comprehensive assessment of children’s complex psychopathology and inform treatment planning.

An implication of the finding that children experience problems in relationships speaks to counselling psychology’s role in highlighting the need to prioritise interventions in social and peer group contexts, including school to enhance relational opportunities that can positively impact mental health and wellbeing.

The risk identified in the sample of children educationally and socially in their school peer group and the known protective nature of school and educational attainment for mental health and wellbeing suggests that supporting children’s engagement in educational systems should be a major practice goal. Whilst specialist educational provision and dedicated teams are established practice in looked after children’s services in the UK, there are no corresponding services configured to meet the needs of children in care in Ireland or an agreed framework for delivery of services at interagency level. This is a critical gap in looked after children’s services

The developmental and physical health risks identified in the sample indicated by children’s frequent contact with Occupational Therapists, Speech and Language Therapists and General Practitioners, suggests the need to explore children’s developmental and health status as part of routine assessments. Obtaining health related information in research will clarify whether children attend a GP for physical health reasons or whether higher rates of help seeking from a GP as evidenced in the present findings is determined by psychological factors.

The finding that a sizeable number of children in care in the sample had no contact with their social worker is consistent with the shortcomings identified in child welfare and protection services in Ireland where gaps in social work provision are identified. Future studies could inform the need for social work support to children in care because of their role as a gateway for children to access mental health supports.

The importance of one close relationship as a protective factor mitigating against mental health problems in children in care is undisputed. This study confirms the association between children’s mental health and relationship functioning and highlights the role of foster carers in identifying mental health risk and accessing services. Including foster carers in mental health research is indicated as is their need for support and training

Foster carers can make an immeasurable difference to the emotional lives of children in care, can help develop the emotional capacities requires for adaptive interpersonal functioning with others in their foster care and school relationship networks. Supporting children’s foster placements can mediate foster carer’s ability to cope with child adjustment problems. Targeted intervention with foster carers may be important ways to enhance the capacity for children to develop emotionally rewarding relationships in care and promote placement permanency.

Recognition of mental health symptoms is a key factor in the variability of access to services. This study identified that in addition to foster carers, teachers have an important role in identifying emotional and behavioural distress and facilitating children's access to services. Providing training to teachers and other professionals in the educational system is warranted.

Caseworkers and other professionals have a pivotal role in identifying psychopathology in children in care and accessing services on their behalf. Multi informant research methodologies including caseworker reports of mental health ratings will ensure better problem recognition and procurement of services on children's behalf. This study provides a compelling argument for the need for training to social work practitioners in the recognition of mental health needs in children.

This study identified a low to moderate relationship between mental health need in the sample and service contact. Many factors potentially exert influence on access to services and several pathways and barriers to services are identified. Exploring correlates and predictors of mental health service use is important in future research with larger sample sizes will identify pathways and potential barriers to supports and inform appropriate and timely interventions.   Differences in individual care systems explain much of the variation in mental health service use of children in care and it has been suggested that local area factors in care systems should be taken into account and addressed in planning mental health policy and planning and better service delivery.

5.7.0 Conclusion

This study provides an insight into the mental health of a sample of children in family foster care compared with a matched control of school peers and yields important information regarding the complex psychopathology in children and the level of impairment in children's relationships in particular. In the study children in care were four times more likely to have mental health problems than others and three times more likely to have relationship problems of clinical concern. The multi informant methodology found that Teachers were equally able if not slightly better at identifying mental health in children as foster carers demonstrating the importance of including Teacher report in mental health assessment and the role of schools in mental health intervention.

A useful function of the study was to document that similar to other care jurisdictions, children in Irish state care experience clinical levels of mental health problems warranting specialist input but are services are poorly matched to level of need. The study revealed the multiple correlates and predictors in access to services which need to be explored further in research with this population. Also highlighted are the various methodological difficulties involved in studying this client group. The study nevertheless represents a starting point in highlighting the complex mental health and relationship problems in a sample of school going children in family foster care in Ireland and serves as a signpost for the unmet needs of this group. The study offers clinicians and researchers future areas to explore in the population.

The low rate of contact with mental health services in the study in particular suggests systematic inquiry is needed to explore the adequacy of health care provision to looked after children, the need to ensure tiered access at primary and secondary care and tertiary CAMHS, and to identify critical gaps in service provision and plan multi level child and family supports as is needed.

Continued research is paramount focusing on developing assessment protocols for use with looked after populations and to inform therapies capable of addressing the diverse needs of this vulnerable but resilient group of children.

5.8.0 The Research Process

5.8.1 Reflexivity and the Role of Researcher

Reflecting on this study and the process of conducting research in general, I considered the assertion that the objective researcher is a myth that many social scientists recognise (Greene & Hill, 2010) and the argument that is advanced nonetheless (Davies, 1998) for the researcher to strive to be objective, reflexive and questioning in their assumptions and flexible in adjusting their approaches accordingly. In considering both of these propositions which I addressed in supervision, I agreed with the suggestion of Greene & Hill (2010) that an additional layer of interpretation is needed by any researcher to uncover their own personal biases, feelings, attitudes, ideologies and experiences in relation to the research they are conducting.

Writers suggest that it is important for researchers to familiarise themselves with the cultural milieu of their study participants and position the research in this milieu (Willig, 2008). It is highlighted that personal and epistemological reflexivity and acknowledging researcher bias and it's potential effects on outcomes address issues of validity (Willig, 2008) and that clarifying researcher bias is a core characteristic of good qualitative research (Creswell & Wanqing, 2009). While any research involves a certain amount of subjective selection of narrative evidence and literature the view needs to be challenged that a researcher takes a passive role in the process, and acknowledge instead the researcher's role in shaping research findings and summarising conclusions (Braun & Clarke, 2006).

Reflecting on the background context to this study, I am aware that working in child maltreatment has led me to come into frequent contact with children in care who have endured significant developmental trauma in their early care giving relationships. It is probable that in my professional role these experiences will have influenced both the way the research was conceptualised including the selection of the literature that I consulted and deemed relevant to the study design and hypotheses I wished to test and the subsequent interpretation of findings. While I had experience working in the area and had familiarised myself with the literature when formulating my research questions, I acknowledge that by not having first hand experience of the care system as a service user, the level of understanding I could bring to the subject area was necessarily limited.

It is suggested that new researchers are free to choose any theory or research paradigm considered relevant to explore their research question and test their hypotheses (Cann, 2012). With this choice and freedom comes subjective experience and personal bias that is known all researchers bring to their work. It is important to acknowledge the inherent challenges in conducting research in one’s place of work. The child protection and welfare agency where the study was initially proposed to take place had lengthy waiting times for children in care to receive therapeutic intervention. Due to this issue in service provision, there was frustration on the part of some social worker’s with the limited therapeutic supports that were available to children. The case workers may have formed certain assumptions regarding my professional involvement in the research and expectations of service delivery to children on their caseloads if they participated. This required transparency on my part as to the professional motivation for the research and methods used and anticipated outcomes of the study from the outset.

Consideration and reflection on the possible pitfalls at various stages of the research from initial design to selection of measures and hypotheses testing to interpretation of findings alerted me to only conclude what I believed the research indicated and to reflect on the inherent limitations of the study and its findings. Awareness of what our subjective experience brings to research is an important reminder that no research is perfect or optimal. Reflexivity is fundamental to ethically informed and scientifically conducted research to raise our awareness of potential flaws in all research and the possible omissions that can be made. Acknowledging and attempting to avoid the influence of personal, prior beliefs and possible expectations and reflecting on research limitations is a guiding principal I uphold as a researcher and is a signpost in carrying out future studies in the area.

We are encouraged to engage in objective and reflexive thinking while conducting research to minimise the impact of our own bias. Reassuringly, we are also reminded not to feel too bad in acknowledging our biases as we all have them (Robson, 2002).

To acknowledge the potential for one’s own biases, prejudices and stereotypes, means to have engaged in introspection and reflection. On reflection, we should try to accept our inherent bias and subjective experience as something that may or may not be true or right, but that it exists nonetheless. The process of reflexivity I engaged in involved going beyond my own point of view and consideration of different perspectives which may propose different answers to the research question. Such reflective practice according to Robson (2002) helps ensure that bias does not lead one’s research and encourages instead openness to possibilities and new solutions during and post research - in essence, keeping an open mind concerning one’s assumptions and questioning them at every opportunity.

5.8.2 Personal Journey to the Research

My previous work, prior to training as a psychologist, was as a Teacher- Therapist in a Child Developmental Clinic for children with physical, sensory and intellectual disabilities. This role involved multi disciplinary team working in providing interventions to children with complex health and educational needs. The job was a blend of teaching and therapy due to the multiple difficulties children experienced that warranted multiple supports and therapies from disciplines including nursing, occupational therapy, speech and language therapy and psychology. The combined role of teaching and therapy offered the opportunity to co work with professionals in these other disciplines, including psychology and observe first hand the contribution psychology can make and the diversity of its role in facilitating an understanding of child developmental risk and vulnerability and supporting care givers and staff working with children with complex needs. This undoubtedly influenced my decision after some years teaching, to return to study and embark on psychology as a career. I took the opportunity enthusiastically because of the value I place on learning and the challenges that study offers as well as the rewards. Reflecting on my return to education which I did as a mature student, I am aware that I consider learning as a continuous process and a life long pursuit. Therefore the decision to pursue studies to doctoral level seemed a natural path to follow.

As well as my personal journey to psychology which led me to this present role of researcher, the pathway to choosing this particular subject area began when I worked as a newly qualified psychologist in a CAMHS team where numerous interdisciplinary discussions centred on child psychopathology through an attachment lens. My attention was drawn in particular to pathogenic attachments and their impact on later child mental health. Ziegler (2011) posited that the most serious finding of the past decade is that neglect of a child by its caregiver has the most long lasting effect on development and is the most persistent and pervasive form of trauma. Findings from neuroscience have expanded knowledge of how the brain reacts to neglect as a threat to survival, but also what the brain is not doing while preoccupied in survival mode. Ziegler explains how neglect shifts the focus of the infant away from exploration and essential learning the brain is prepared to do at the beginning of life. Thus the early care-giving relationship is crucial for the physical and emotional survival of the infant, mediated through the attachment relationship. It is argued that we develop maturely when our attachments stem from nurturing and loving relationships, but when relationships give rise to the possibility of traumatic experiences then there will be problems in future relationships (Bowlby, 1969).

In my work on the CAMHS team with children in care who had experienced neglect and maltreatment, some of the broad issues and questions I wished to explore centred on the vulnerability of children during their physical and emotional development and the far reaching impact of inter personal trauma such as the adverse effect on emotional development and ability to form relationships with others (Thomas & Philpot, 2009). I was keen to understand the long term consequences for children’s mental health and relationship functioning due to the known impact of early adversity. I was also aware of the resilience of children and their capacity to develop new and nurturing attachments to foster carers. I considered how children were impacted in school and the protective role of teachers and school friendships and the consistency schools can bring to children’s lives in care which can be chaotic and unpredictable. The area of mental health and relationships of looked after children had not been researched previously in an Irish context and I believed this area merited attention and the generation of knowledge to inform health, social care and educational providers in meeting the needs of this population and interventions and treatments that may be indicated based on the available evidence conducted elsewhere but not thus far in Ireland. I also wished to identify what services and supports children were receiving to determine the adequacy of fit between children’s identified need and the supports received.

In this research, therefore I wished to investigate the risk and vulnerability for mental health and relationship problems in a cohort of children in care, compared with a group of their school peers. I aimed to determine how the social, emotional and relational lives of looked after children can be impacted by early adverse care which would inform pathways towards recovery and treatment. The study aimed to examine the services and supports accessed by children to determine to what extent unmet needs exist for this group who the research suggests have complex needs that require coordinated and multi level interventions across health, care and educational sectors. It was hoped that the study would generate knowledge in an area that has received little research attention in Ireland and would signpost for stake holders international best practice in the area that might be incorporated into policy and planning for children in care to achieve optimal outcomes.

5.8.3 Personal Investment/ View as Teacher

My awareness that many systems need to work together to achieve best outcomes for children in care educationally and psycho socially was informed by my experience as a teacher and also as a school psychologist working in educational services in one of my first jobs as a psychologist post training. Now, many years on from my previous teaching career , I am still aware of the influence that being a teacher has had on the subject area of the research and the methodology employed which speaks to the stability that education can offer and the enrichment it can bring to the lives of children who have experienced upheaval and trauma and require provision of alternate care.

Schools offer a safe and supportive environment and opportunities to build life skills and resilience and a sense of connectedness. Importantly for children in care, schools foster development of healthy relationships with peers and teachers which are key to children’s positive experience of school and their cognitive and emotional development. I now work as a psychologist in a primary health care setting that provides intervention to children and adolescents who are looked after in foster care and who are adopted. Systemic thinking and working is essential in services for children who present with complex mental health needs. As I consider the course of my career as teacher and later as psychologist, I am aware that these experiences have influenced the shape and form this research has taken and the work outlined in the portfolio. Considering children's needs though an educational lens influenced the subject area and the inclusion of teacher report in the methodology. The literature identifies that Teachers can represent important attachment figures in the lives of children. This has special significance for children with disrupted attachments and adverse early care for whom teacher and peer relationships have the potential to heal trauma and loss and offer alternative relationships which are protective for emotional wellbeing and recovery.

Through my own experience of education, I am aware how insightful Teachers can identify times in children's school lives when they need encouragement and praise and the experience of success for confidence building and achievement. Teachers can motivate and nurture children in many ways, inspire and encourage emotional development, build self esteem, wellbeing and resilience. There is a growing attachment literature endorsing the potential role of teachers as attachment figures for looked after children where the school milieu help build friendships, enhance educational outcomes and foster recovery from adversity. Schools can offer stability and security to children whose lives in care can be characterised by chaos and confusion and for whom school can provide a predictable environment and a safe haven of support and protective and healing relationships for children with experiences of interpersonal trauma and loss and non-optimal early care.

5.8.4 Difficulties Along the Way

There were disappointments, unexpected events and losses experienced along the way during the research which led to doubts as to whether the work would reach conclusion. The course of studies which was long from start to end witnessed events in my life personally that required reorganisation and adjustment of my world view and what was important to me. The goals that inspired me to undertake the study at the outset changed along the way and differing motivating factors saw the project through to completion.

A problem at the early stage of the research involved a complete change in research methodology when a measure that was central to the original study design became unavailable due to funding issues within the research team that developed the measure. This resulted in having to undertake a further literature review and a reformulation of a research question and re submission to the college ethics committee and the university hospital ethics board where the study took place. While this setback involved a process of letting go of time lost and personal energy and investment, I acknowledge with the benefit of hindsight the conventional wisdom of a *blessing in disguise* where at first this setback seemed disappointing but turned out beneficial where the original study may have proven too expansive and difficult to undertake while the reformulated design was a more feasible option when all things were considered.

Another setback occurred when the social work department who initially approved the study, subsequently withdrew their involvement due to the extra work load they envisaged would be involved. This placed the project in jeopardy at the time and required the engagement of interest and support of a new team of social workers in another service area. I later reflected on the enthusiasm with which the new team affirmed the study and facilitated data collection which was personally and professionally validating and sustained me in starting the research over.

These setbacks were testing but not insurmountable and prepared me for adjustment to other personal losses along the way that with the passing of time I have adjusted to. I accord with the proposal that emotionally investing in one’s future hopes and dreams may mean experiencing disappointment when things don’t go well (Kernis et al., 2000; King & Burton, 2003) and that goal pursuit is imbued not only with potential rewards but also potential regret.

Authors (King & Raspin, 2004; King & Smith, 2004) maintain that goals represent a fertile ground for understanding the role of motivational processes through life transitions. Motivation is a source of coherence and meaning in life (Murray, 1938; McClelland, 1985) and events gain meaning because of their relevance to the ends we seek (Cantor et al., 1991). It is believed that the goals we seek provide a psychic hub in our lives and lend a sense of purpose to what we do (King & Hicks, 2006).

Although working towards valued goals is an important aspect of physical (Emmons & King, 1988) and psychological wellbeing (Brunstein, 1993; Elliot et al., 1997) investing in goals is identified as a risky proposition (Pomerantz et al., 2000) as the selection of a goal may preclude the pursuit of equally rewarding but competing opportunities (Kuhl, 1986). Part of maturing may be the ability to place one's choices in the context of *the roads not taken* (King & Raspin, 2004) and asserted that while investing in the present and not looking back relates to heightened happiness, how and when we look back on the selves we've lost or forsaken along the way relates to personality development (King & Raspin, 2004).

When I consider the goals when I set out on the research then and how life changes over time and with it our goals, I concur that goals are inherently contextualized and attach us to the events of the day and the circumstances that make up the psychological context of our lives (King & Hicks, 2006). With the retrospective lens of experience (King & Raspin, 2004) and time passed I consider the changed context of my life and people in it and what motivated me then and what sustains me now.

It is maintained that introspecting on one's previously valued life dreams and working towards inventing or reinventing alternative future selves can be viewed as part and parcel of the accommodative process (King & Raspin, 2004) and the potentially painful task of considering what might have been is an important aspect of maturity (King & Raspin, 2004)

It is suggested that a lifetime may be viewed as a process of discovering our true wants and needs and the content of our life dreams can be revised (King & Raspin, 2004). Reflecting on this proposal I look forward to what other pursuits and goals are next. I agree that self-development is not a linear process but an integrated accumulation of a multitude of factors and situations that simultaneously occur, overlapping and weaving, through and between our experiences (Goodyear, 2007) and not only is reflection a space to think critically about a thought, experience, or action that is essential for professional competence (Epstein & Hundert, 2002) but allows increased self awareness. I agree with the view that the mature individual can look on their multiple possible selves with fearlessness and acknowledge life’s second chances as part of the unfolding of a rich and valuable human life (King & Hicks, 2006).

Considering all the messiness and difficulties along the way in this study, I am grateful in equal measures for two things; the chance to fulfil a personal dream, not just for my self but for others in my life past and present who lived my dream with me, and that I got to know myself better in the process. It is with this in mind that I look forward and grasp new opportunities ahead.

5.8.5 Attention to Process in Research Supervision

As a psychologist working with children in care and dealing with cases of interfamilial abuse and neglect, I was aware of the potential bias this experience may bring as a researcher and practitioner. Carr (1989) maintains that even those who are well-seasoned are challenged by the assessment and treatment of families where physical or sexual abuse of children has occurred.

Carr (1989) contends that some of the difficulties arising in the work stem from strong personal emotional responses that working and researching in this area evokes. Carr (1989) points to the interference that can occur in collective and balanced child protection decision making and suggests that the counter transference reactions identified in early writings by Freud (1955) that are familiar to those working in the area of child abuse occur outside a clinician's awareness, where intense emotional reactions are elicited by certain characteristics of families being treated and which are fuelled by the clinician’s significant prior experiences.

As researchers and practitioners, we are subject to the influence of implicit biases. Through the supervisory process I identified such processes arising from my prior and current experience as a psychologist working in child maltreatment and abuse and how my work as practitioner led me to the research topic and shaped the methods used and influenced the interpretation of research findings. Supervision provided the necessary space for reflection on my emotional investment in the area and my strong desire to advocate on children’s behalf in carrying out the study. Whilst I made efforts to reduce biases and maintain objectivity in my work, I recognise that possible assumptions may have impacted the research process and conceptualisation and interpretation of the research experience

Willig (2008) stated that personal reflexivity involves deliberate reflection on our values, experiences and beliefs, and in particular how these aspects of our identities have shaped the research process and changed us as researchers. Throughout the research process this was facilitated through regular discussion in supervision where I had the opportunity to explore my feelings and attitudes towards the research itself and the problems in systems that I encountered.

Overall, however, the experience of conducting research has been a very positive one. This study raised the particular dilemma for me as researcher in how to faithfully represent the mental health and relationship experiences of looked after children and the supports they need. It required a decision on my part as researcher in choosing what information to include and what to leave out. It was not possible within this study design to directly represent the voices of looked after children. In the professional practice report in the section that follows there is an account of a young person in care whose personal narrative I have tried to capture. What I have learned in this process is the richness that is gained from listening to the voice of the young person in care, who as others agree (Mc Elvaney et al. 2013) points to the best way forward. In advocating for looked after young people, the powerful role and the privilege of the researcher is in conveying the losses and vulnerabilities of the young person in care but also the depth and quality of their personal life skills and capacities to recover from past trauma.

5.9.0 References

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Appendix IX

Letter to Teachers

Mr/ Mrs. xxxx
Class Teacher
xxxx National School
xxxxx
xxxxx

xx.xx.xx

Re: Pupil's Name ___________

Dear Class Teacher

A research study is being carried out in the Department of Child, Adolescent & Family Psychology, 'X Hospital …Health Service Executive X, in conjunction with Social Work Department, HSE, X investigating emotional, behavioural and relationship problems of children in family foster care compared with school peers.

The research also aims to examine the services provided to children in care and determine if contact with services is based on identified need.

The above named pupil has been selected to participate in this research. You are kindly requested to complete the attached forms which should take approximately 20 minutes of your time.

1. The Relationship Problem Questionnaire
2. The Teacher Report Form for Ages 6 -18

A stamped addressed envelope is provided for your convenience for return of questionnaires.

This information will make a valuable contribution towards knowledge in the area and identify the type of supports children may require depending on their identified needs.

If you have any queries regarding completion of questionnaires or on any aspects of the research please do not hesitate to contact the undersigned. Feedback on findings of the study can be provided by the investigator, on request, at a later date when the study has been completed.

Thank you for your assistance in this request.

Yours sincerely

Gabrielle Mc Hugh
Clinical Psychologist

Appendix X

Letter to parents of controls

Title of the project: A study examining the mental health and relationship problems in a sample of children in family foster care compared with a matched control of school peers and concordance in mental health need and service use

Name of 2nd Principal Investigator:	**Name of 1st Principal Investigator:**
Gabrielle Mc Hugh	Dr. Pat Corbett Psych D
Clinical Psychologist HSE	Principal Psychologist
gabrielle.mchugh@hse.ie	HSE
Telephone: Mobile: 00353(0)87 9141056	Telephone: 021 4927142
Work: 00353(0)21 4923146	Email: Pat.Corbett@hse.ie

Dear Parents

Your consent to participate in the above research study is kindly requested. This study is being carried out by Gabrielle Mc Hugh, Clinical Psychologist, Department of Child, Adolescent & Family Psychology, X Hospital, X .. under the auspices of the Health Service Executive, X … and is being undertaken as part fulfilment of a Post Chartered Doctorate in Psychology at City University London.

Purpose of the Study
The research aims to examine the emotional, behavioural and relationship problems of children living in family foster care compared with a matched control group of school going peers living with their birth families attending local national school. The research also aims to examine the services being provided to children to determine if contact with services is based on identified need.

Your child's school: X …was selected to participate in the research as a comparison group and your School Principal and Parent's Committee agreed to school's participation in the study and contacting you as parent.

An invitation is extended to you to participate in the study and complete the enclosed forms with regard to your child:

- The Child Behaviour Checklist For Ages 6-18
- The Relationship Problems Questionnaire
- The Contact with Services Questionnaire

These forms should take approximately 20 minutes of your time. This information will contribute important knowledge in the area and identify the type of emotional, behavioural and relationship problems children experience and identify the supports required depending on identified need.

Confidentiality

The researcher guarantees any information collected will remain confidential and no identifiable personal data will be published. Records will be confidentially stored in the possession of XX Health Service Executive area. Anonymity will be maintained in any subsequent publication of findings arising from the research.

Opt Out

You may choose not to participate in part or all of the research. If you decide to participate you can withdraw at any stage of the project without being penalised or disadvantaged in any way.

Possible stress arising from the research

A possible stressor which may arise is the possibility that your child may obtain ratings indicating clinical significance on the measures used in the study warranting further investigation. It is important to highlight that questionnaires in the study will not diagnose disorder but may highlight areas warranting further assessment and referral to clinical services. Written information can be provided to your GP if you wish. Your School Principal can discuss concern with you and support you to obtain referral via GP if indicated.

Queries

As Principal Investigator carrying out the research I am available to answer any queries you might have and if you wish you are invited to make direct contact via above telephone/email.

Complaints Procedure

If there is any aspect of the study, which concerns you, you may make a formal complaint. City University has established a complaints procedure via the Secretary to the Research Ethics Committee. To complain about the study, you can telephone 0044 (0) 20 7040 8106. You can then ask to speak to the Secretary of the Ethics Committee and inform them of the name of the project.

Consent to participate

A Consent form is attached for you to kindly complete and return.

Child assent

Asset for your child’s participation in the research is also included. It is suggested that you explain that information is being shared regarding your child and the purpose of providing this information in language that your child can understand.

School information

Information will be sought from your child’s Class Teacher. You are kindly requested to forward the enclosed envelope containing forms for Teacher to complete and return directly to the investigator in the envelope provided.

Thank you for taking the time to read this information and for your participation in the study.

Yours Sincerely

____

Gabrielle Mc Hugh,
Clinical Psychologist
Department of Child, Adolescent & Family Psychology
X Hospital
Health Service Executive
XX

Appendix XI

Parent RPQ

Relationship Problems Questionnaire

Please tick the statement that best describes ______________(name of child).

	Exactly like ------- (child's name)	Like ------- (child's name)	A bit Like ------- (child's name)	Not at all like ------- (child's name)	For Office Use Only
Gets too physically close to strangers					1
Is too cuddly with people s/he doesn't know well					2
Often asks very personal questions even though s/he does not mean to be rude					3
Can be aggressive towards him/herself e.g. using bad language about him/herself, headbanging, cutting etc.					4
Has no conscience					5
Is too friendly with strangers					6
Sometimes looks frozen with fear, without an obvious reason					7
If you approach him/her, he/she often runs away or refuses to be approached					8
There is a false quality to the affection s/he gives					9
If you approach him/her, you never know whether s/he will be friendly or unfriendly					10
Scoring	3	2	1	0	

Appendix XII

Teacher RPQ

Relationship Problems Questionnaire

Please tick the statement that best describes ______________(name of child).

	Exactly like ------- (child's name)	Like ------- (child's name)	A bit Like ------- (child's name)	Not at all like ------- (child's name)	For Office Use Only
Gets too physically close to strangers					1
Is too cuddly with people s/he doesn't know well					2
Often asks very personal questions even though s/he does not mean to be rude					3
Can be aggressive towards him/herself e.g. using bad language about him/herself, headbanging, cutting etc.					4
Has no conscience					5
Is too friendly with strangers					6
Sometimes looks frozen with fear, without an obvious reason					7
If you approach him/her, he/she often runs away or refuses to be approached					8
There is a false quality to the affection s/he gives					9
If you approach him/her, you never know whether s/he will be friendly or unfriendly					10
Will not admit that they cannot do tasks					11
Will not ask for help with tasks					12
Tends to copy other children					13
Is too keen to get to know school staff, eg teachers, janitor, playground supervisors					14
Scoring	3	2	1	0	

Appendix XIII

Name of Child:___________________________________

Child IDno.	

Contact with Services Questionnaire

We would like to find out about the contact your child may have had with clinical and professional services; **In the past six months:**

In the past six months:

1. Have you seen a social worker or link worker regarding this child in the past six months?	Yes	No	*Please circle*
If yes, how often (write the number of times in the box)	No of times?		

How long was each meeting on average? (please tick box)	Less than one hour	1-2 hours	3-4 hours	More than three hours
Where did the meetings take place? (please write the number of meetings in each place in the relevant box)	At home	At Social Work Dept.	Somewhere Else	
2. Have you spoken to the social worker by phone regarding this child in the past six months?	Yes	No	*Please circle*	
If “yes”, how often?				
3. Have you taken this child to his/her GP in the past six months?	Yes	No	*Please circle*	
If “yes”, how often?				
4. Regarding this child, have you or the child seen an Educational psychologist in the past six months?	Yes	No	*Please circle*	
If “yes”, how often?				
5. Regarding this child, have you or the child seen a Clinical Psychologist in the past six months?	Yes	No	*Please circle*	

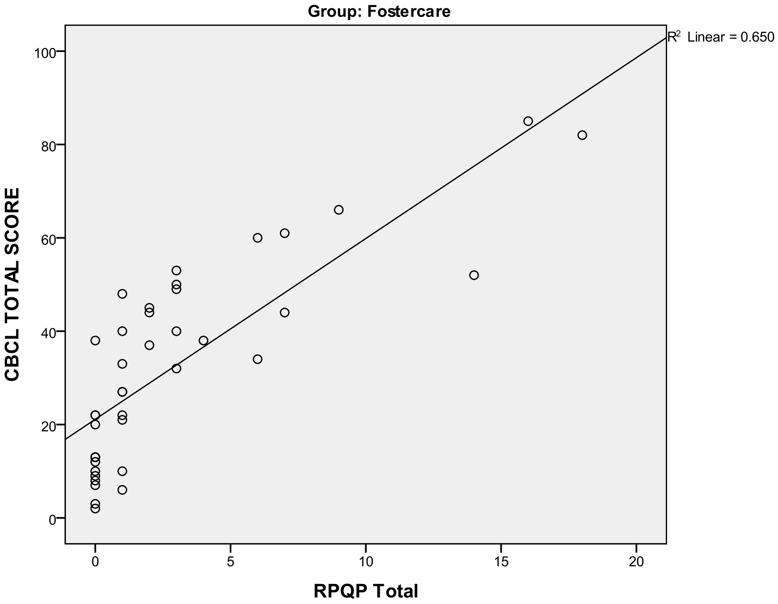
If “yes”, how often?				
6. Regarding this child, have you or the child seen any other type of Psychologist in the past six months?		No	*Please circle*	
If ‘yes’, how often?				
7. Regarding this child, have you or the child seen a Child psychiatrist in the past six months?	Yes	No	*Please circle*	
If “yes”, how often?				
8. Regarding this child, have you or the child seen a Paediatrician in the past six months?	Yes	No	*Please circle*	
If “yes”, how often?				
9.What kind of School does this child attend?	Mainstream School	Special Class in Mainstream School	Special School	
(please tick box)				
10. Does this child receive any kind of school supports ?	Yes	No	*Please circle*	
If “yes”, please circle: Special Needs Assistant yes no Learning Support yes no Assistive Technology yes no				
11.Has this child been in Residential Care in the past six months?	Yes	No	*Please circle*	
If ‘yes’ please say why:				
If “yes”, please say how long	Less than one week	1-4 weeks	1-3 months	More than three months
Please tick				
12. Has this child been a Hospital Inpatient in the past six months?	Yes	No	*Circle Please*	
If’ yes’ please say why:				
If “yes”, please say why	Less than one week	1-4 weeks	1-3 months	More than three months
13. Has this child had any Garda involvement in the past six months?	Yes	No	*Please circle*	

If “yes”, please say why:			
If “yes”, was further action taken?	Yes	No	*Please circle*
If “yes”, please say what action was taken:			
14. Have you phoned another foster carer about your child in the past six months?	Yes	No	*Please circle*
If yes, how often?			
15. Have you met another foster carer to talk about this child in the past six months?	Yes	No	*Please circle*
If yes, how often?			
16.Have you had any other help for this child in the past six months? (e.g. from other professionals, support at home)	Yes	No	*Please circle*
If Yes please specify Occupational Therapy yes no Speech and Language Therapy yes no Family Supports yes no Other yes no If other: please specify: ……………………………………..			

Thank you for all your help.

Appendix XV

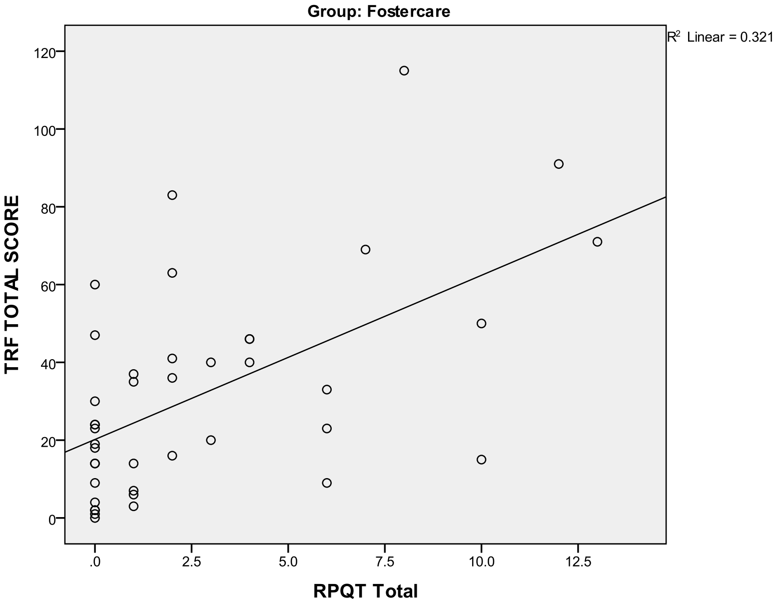
Scatterplot : RPQ P & CBCL correlation



Scatterplot demonstrating the relationship between RPQP questionnaire scores and mental health scores as reported by parents

Appendix XVI

Scatterplot : RPQ T & TRF correlation



Scatterplot demonstrating the relationship between RPQT questionnaire scores and mental health scores as reported by Teachers.

Appendix XVII Excel Data

			Score above 65 TRF Total	CBCL Total	Above 9 TRF Internalizing
General overview	Foster Care	Males	84.6	92.3	61.5
		Females	93.3	86.7	80
	Control	males	94.7	94.7	78.9
		Females	94.7	100	100

	Score above 65 TRF Total	CBCL Total	
Foster Care	87.8	90.2	**Foster Care**
Control	97.4	97.4	**Control**

			Above 8/9 TRF Anxious/depressed	CBCL Anx/Dep	6 TRF Withdrawn/depressed
Internalizing sub scales	Foster care	Males	76.9	96.2	96.2
		Females	86.7	86.7	93.3
	Control	males	89.5	89.5	100
		Females	94.7	100	100

			above 6/4 TRF Rule break	above 6/4 CBCL Rule break	above 14/9 TRF Aggressive beh.
Externalizing subscales	Foster Care	Males	80.8	80.8	73.1
		Females	93.3	60	93.3
	Control	males	100	94.7	94.7
		Females	94.7	100	94.7

		TRF Social prob.	CBCL Attentin prob.	above 4/3 TRF Thought prob.
Foster Care	Males	69.2	34.6	88.5
	Females	93.3	46.7	100
Control	males	94.7	73.7	94.7
	Females	94.7	94.7	94.7

Above 11/6 TRF externalizing	Above 9 CBCL Internalizing	Above 11/6 CBCL Externalizing			
57.7	80.8	46.2		Foster Care	Males
66.7	73.3	40			Females
84.2	84.2	73.7		Control	males
73.7	84.2	57.9			Females

Score above 65 in percentage

TRF Total	**CBCL Total**		**grand total**	**Foster**	0.11392
12.2	**9.8**			Control	0.02532
2.6	**2.6**				
6	3	3			

CBCL With/Dep	TRF Somatic Complaints	CBCL Som Comp.			
96.2	92.3	96.2		Foster care	Males
93.3	100	100			Females
100	100	94.7		Control	males
100	100	89.5			Females

above 14/9

CBCL Aggressive beh.		
80.8	Foster Care	Males
53.3		Females
94.7	Control	males
94.7		Females

CBCL Thought prob.	a 31/23 TRF Attention prob	CBCL Attention prob.			
69.2	88.5	100		Foster Care	Males
60	93.3	100			Females
73.7	100	100		Control	males
89.5	94.7	100			Females

TRF Total	CBCL Total	TRF Intern.	TRF extern.	CBCL Intern.	CBCL Extern.
15.4	7.7	38.5	42.3	19.2	53.8
6.7	13.3	20	33.3	26.7	60
5.3	5.3	21.1	15.8	15.8	26.3
5.3	0	0	26.3	15.8	42.1

TRF Anx./D.	CBCL Anx./D.	TRF With./D.	CBCL With./D.	TRF Som. C.	CBCL Som. C.
23.1	3.8	3.8	3.8	7.7	3.8
13.3	13.3	6.7	6.7	0	0
10.5	10.5	0	0	0	5.3
5.3	0	0	0	0	10.5

TRF Rule-break.	CBCL Rule-break.	TRF Agg. beh.	CBCL Agg. beh.
19.2	19.2	26.9	19.2
6.7	40	6.7	46.7
0	5.3	5.3	5.3
5.3	0	5.3	5.3

TRF Soc. pr.	CBCL Soc. pr.	TRF Thought pr.	CBCL Thought pr.	TRF Att. prob.	CBCL Att. prob.
30.8	65.4	11.5	30.8	11.5	0
6.7	53.3	0	40	6.7	0
5.3	26.3	5.3	26.3	0	0
5.3	5.3	5.3	10.5	5.3	0

Professional Doctorate in Psychology

(D Psych)

City University London

Section D

Critical Review of Literature

Completed in partial fulfilment of requirement for D Psych
City University London

Title: Non-suicidal self-injury (NSSI) in children and adolescents - A review update for the practitioner on issues of diagnosis and treatment

Gabrielle Mc Hugh

Student Registration No. 070050836

October 2014

1.0 Contents Page

2.0 Appendices Page

Critical Review of the Literature

Non-suicidal self-injury (NSSI) - A review update for the practitioner on issues of diagnosis and treatment

3.0 Introduction

Non suicidal self injury, defined as the 'direct and deliberate destruction of one's own body tissue in the absence of intent to die" (Nock, 2009) is described as a dangerous and pervasive behaviour problem among adolescents but increasingly is reported in children as young as 6 years old (Nock, 2009). Although research examining reasons for engaging in non suicidal self injury has increased dramatically within the last decade, many aspects of this behaviour continue to remain poorly understood. A great deal has been learned about NSSI and have now have a much more complex understanding of this behaviour as research in the area has continued to develop. What is apparent however, is how little of this growing body of knowledge is being disseminated among practitioners in the field and those involved in directly supporting young people who engage in NSSI. There is recognition in the literature that adolescents who cut themselves differ from those who take overdoses (Hawton et al., 2010) however, a significant problem in research and practice in NSSI is the number of descriptors and definitions used to refer to and describe behaviours. Although commonalities and shared psychological characteristics are identified in self injurers, individuals who engage in this behaviour form a 'diagnostically heterogeneous' group (Klonsky & Muehlenkamp, 2007). While empirical research has focused on who self injures, why people self injure, and what treatments have demonstrated effectiveness a further obstacle to understanding this behaviour and identifying effective treatments lies in the dearth of empirical research and inadequate dissemination of research findings (Klonsky & Muehlenkamp 2007).

The following review has six objectives: first (1) to examine what is currently known about self injury in children and adolescents including age of onset and prevalence, (2) investigate etiological and risk factors and (3) explore problems distinguishing self injury from the separate but related area of suicide and self harm. The review will also (4) investigate the co-occurrence of self injury with other forms of mental health problems. A critique will then be offered regarding (5) the current evidence base for what treatments are suggested as most effective for this behaviour and (6) suggestions for ways forward in addressing what has been referred to as a complex and perplexing problem of adolescence but which is increasingly reported in children of a much younger age (Nock et al., 2007).

4.0 Definitions & parameters of suicide and self harm

Much of the difficulty in understanding self injury lies with the inability of researchers and clinicians to agree on a single term and definition of the behaviour. Over 33 terms have been used to represent self injury (Favazza, 1996; Ross & McKay 1979), some of which include suicidal behaviours and indirect forms of self harm such as various forms of risk taking including drug abuse in their definition.

Self injury refers to the intentional, purposeful and socially unacceptable infliction of bodily harm without suicidal intent (Klonsky, 2007). NSSI has been referred to by a variety of descriptors, including ; self mutilation, deliberate self harm, non suicidal self harm, parasuicide, self wounding, wrist cutter syndrome, self carving, self cutting, repetitive non suicidal self injurious behaviour, self inflicted violence and self abuse (Favazza, 1996). Some of these terms such as ‘self mutilation’ and ‘wrist cutter syndrome’ have lost favour in recent years in order to identify less suggestive terminology and also to differentiate between behaviours with and without suicidal intent (Nixon & Heath, 2009). The lack of standardised definitions has led to difficulties in terms of comparisons of prevalence rates for ‘self injury’, understanding specific correlates and predictors as well as planning and evaluating effective interventions and additional terms such as self injurious behaviour, parasuicide, deliberate self harm and self cutting have all been used to describe all or some aspects of self injury (Nixon & Heath, 2009).

Certain standard terminology has been used among researchers in the study of self injury. Deliberate self harm includes a broad range of self harm behaviours (e.g. self injury, self poisoning, and the deliberate abuse of substances and alcohol to harm oneself) and does not distinguish whether suicidal intent is present or not (Hawton et al., 2003). An act of deliberate self harm by definition, can include a serious suicide attempt such as hanging or jumping from a height or may involve superficial wrist cutting with no intent to die (Nixon & Heath, 2009). Whereas broader definitions ensure all behaviours are considered, there are limitations from an assessment perspective in that it cannot be inferred that all deliberate self harm behaviours are similar in motivation or that specific approaches to assessment or treatment are effective for all types (Nixon & Heath, 2009).

5.0 Non suicidal self injury – NSSI

NSSI exists within the range of deliberate self harming behaviours and has been defined as ‘purposely inflicting injury that results in immediate tissue damage, done without suicidal intent and not socially sanctioned within ones own culture, nor for display’ (Nixon & Heath, 2009). NSSI includes but is not limited to cutting, scratching, carving, burning and self hitting but most commonly involves cutting (Nixon & Heath, 2009). Klonsky & Muehlenkamp (2007) agree that the most common form of NSSI appears to be skin cutting, but acknowledge that it may take other forms as well.

The relationship between self injury and self harm is not straightforward. Many who self-injure never attempt suicide or have suicidal thoughts, however, Muehlenkamp & Gutierrez (2007) and Nock et al. (2006) report 50% of community and 70% inpatient samples of self-injurers who did report having attempted suicide at least once. Clearly, self-harm is a broader construct than self- injury and critical readers of the literature should be aware that self -injury while subsumed under the self-harm definition, cannot be equated with other self-harming behaviours. Defining exact parameters of NSSI has not been straightforward and interpreting research in the field is challenging due to differences in the operationalizing of definitions (Muehlenkamp & Guiterrez 2007).

In response to such concerns Heath et al. (2008) report that the International Network for the Study of Self Injury (ISSS) was established by researchers in the field of self-injury to achieve consensus regarding key issues. In 2007, the following definition of NSSI was agreed on by ISSS …’the deliberate, self-inflicted destruction of body tissue resulting in immediate damage, without suicidal intent and for purposes not socially sanctioned' (International Network for the Study of Self Injury) (ISSS, 2007, pp.251-252).

As such, this behaviour is distinguished from suicidal behaviours involving an intent to die, drug overdoses and other forms of self-injurious behaviours including culturally-sanctioned behaviours performed for display or aesthetic purposes; repetitive, stereotypical forms found among individuals with developmental disorders and cognitive disabilities and more severe forms of self mutilation found among individuals with psychosis (ISSS, 2007)

Thus, while NSSI may be related to other suicidal behaviours, it is a distinct and separate behaviour from either suicide attempts or the broader deliberate self-harm definition. When reviewing the literature, or in attempting to identify NSSI in a clinical setting, it is essential to distinguish between the range of self-harm behaviours that may have suicidal intent and NSSI which does not.

Babiker & Arnold (1998) have tried to resolve the issue of terminology in defining various forms of self injury and self harm. They suggest that self injury is one part of a large repertoire of behaviours that involve the body in the expression of distress within the individual. Self-mutilation, as one of these behaviours, also offers a means for the individual to attempt to deal with the distress. In differentiating self injury from self mutilation, they suggest the former can encompass forms of hurting oneself which do not mutilate the body, while in self mutilation, the 'spoiling' or actual 'mutilation' of the body is a crucial part of the behaviour, and this is not reflected in the term self injury.

The difference fundamentally between forms of self injury and suicidal attempts and self harm, according to Babiker & Arnold (1998) is that while self mutilation is primarily an expression of traumatic experience and attempts to alter the body serve to alleviate distress, suicide seeks primarily to alter consciousness. In addition to the temporary alleviation of intense negative emotions such as self directed anger, self injury may also serve to influence or seek help from others, end periods of dissociation or depersonalization and help resist suicidal thoughts (Klonsky & Muehlenkamp, 2007). Thus, while self-injury is seen as part of the 'self-harm' or ‘deliberate self-harm’ category which also includes parasuicide and suicide, the view is generally accepted (Walsh & Rosen; 1988; Briere, 1996; Favazza & Rosenthal, 1993) that the essential difference between self injury and attempted suicide, is that in the latter the person intends to end their life while in the former; self-injury the person does not. Muehlenkamp & Guiterrez (2007) agrees that the key feature of self injury is a preoccupation with physically hurting oneself that is devoid of conscious suicidal intent.

6.0 Prevalence

Unsurprisingly high rates of self injury have been identified in individuals receiving mental health intervention. Figures suggest self-injury occurs in approximately 20% of adult psychiatric patients (Briere & Gil, 1998) and in 40-80% of adolescent psychiatric populations (Di Clemente et al., 1991; Nock & Prinstein, 2004).

Assertions are made about the increase of ‘self-injury’ in young adults **(**Adler & Adler, 2007) however, the empirical evidence documenting an increase in self-injury is limited to studies of the broader construct of deliberate self-harm (Hawton et al., 2002; Hawton et al., 2003). While approximately 4% of adults in the general population report having self injured and 1% reporting a severe history (Briere & Gil, 1998; Klonsky et al., 2003), higher rates are found in adolescents. In the US and Canada, 14-15% of adolescents report at least one instance of self injury (Ross & Heath, 2002).

Studies of self-injury in college populations report approximately 6% are actively and chronically self-injuring, while many more have some history of self-injury. A study by Heath et al. (2008) which examined characteristics (i.e., prevalence, method, age of onset, frequency) of nonsuicidal self-injury in a college student sample revealed 11.68% admitted to engaging in NSSI at least once. Similar numbers are identified by other researchers in college students (Gratz, 2001).

In community samples of adolescents, very high rates of NSSI are reported. A large scale study of 633 US adolescents (mean age 15.5 years) found 46% engaged in at least one self-injurious behaviour in the previous year (with self injury defined as;

frequently biting self, cutting/carving skin, hitting self on purpose, and burning skin), sixty per cent of whom (or 28% of the overall sample) endorsed moderate/severe forms of NSSI. (Lloyd- Richardson et al., 2007). Lower figures are reported in school based surveys which found approximately 13% to 25% of adolescents and young adults with some history of self-injury (Rodham & Hawton, 2009). Many of these young people engage in self-injury once or twice, then stop while others become chronic self-injurers. Middle school populations have somewhat higher prevalence since that is the age at which most individuals initiate self-injury (Whitlock et al., 2006).

The evidence suggests that adolescents and young adults are at greatest risk for self-injury and that estimates of NSSI vary depending upon the population studied and assessment tools used (Whitlock et al., 2009)**.** Prevalence estimates need to be interpreted with caution because of the limited number of studies and the likelihood that figures are underestimated as many who self injure care for themselves and therefore few who self injure are actually detected by formal methods (Muehlenkamp, 2005)

7.0 Age of Onset

Self injury typically begins during adolescence, around the age of 13 or 14 years (Favazza & Conterio, 1989; Ross & Heath, 2002). However, Nock et al. (2007) report an even younger average age of onset of self-injury at 12 years, while others assert it is reported in children as young as 6 (Nock & Prinstein, 2004).

In Ireland, figures published by the National Registry for Deliberate Self Harm (National Suicide Research Foundation- Annual Report 2008) confirm earlier onset of ‘deliberate self-harm’ in children as young as 10. Anecdotal evidence in the media found children as young as five and six were being treated in Children’s Hospitals nationally and although caution is recommended in interpreting findings (Response from the NSRF, August 2009) due to ‘low absolute numbers’ of children under 10 self harming to draw any significant conclusions, there were 52 reported cases recorded in the period 2002-2008 in Ireland of 7 to 10 year olds self harming. Self injury tends to persist for an average of 10 to 15 years, although it may continue for decades (Favazza, 2006) and many individuals who self injure stop of their own accord as they mature however, some need clinical intervention to assist them (Walsh & Rosen, 1988).

There is research to suggest that as the problem persists, self injury becomes more frequent and intense and may lead to accidental death (Favazza & Rosenthal, 1993). It is therefore important to identify the behaviour at an early stage with the ultimate goal to stop the behaviour and prevent reoccurrence (Muehlenkamp, 2005). Favazza (2006) **i**dentified that individuals who self-injure typically start in early adolescence, continue for 10 to 20 years, and may go on to develop other disorders such as eating disorders, alcohol and substance use.

8.0 Gender

It is widely believed females are more likely to self injure than males however, research indicates mixed findings regarding gender prevalence rates (Muehlenkamp, 2005). In psychiatric samples, higher percentages of women engaging in self injury are reported (Zlotnick et al 1996) although many samples include women with Borderline Personality Disorder which may distort true prevalence rates because BPD are diagnosed more often in women. Other large-scale studies identified similar overall rates in males and females (Briere & Gil, 1998; Klonsky et al., 2003; Whitlock et al, 2006). Heath et al., (2008) similarly **o**bserved no significant gender difference in the occurrence of NSSI in their college sample.

It is agreed however that self-injury is more visible among females than among males (Whitlock, et al., 2011) and suggested that main gender differences may concern methods of self injury. Women appear more likely to cut themselves, whereas men appear more likely to burn or hit themselves (Claes et al., 2007). Thus it appears that self injury may be equally prevalent among men and women but further research is needed before strong conclusions can be made (Muehlenkamp, 2005).

9.0 Psychological Characteristics of those who self injure

Individuals who self injure are likely to display certain psychological characteristics. Klonsky & Muehlenkamp (2007) suggest the most prominent feature is negative emotionality where self injurers report frequent and intense negative emotions. Studies indicate that self-injurers score more highly on measures of negative temperament, emotion dysregulation, depression, and anxiety (Andover et al., 2005**;** Gratz & Roemer, 2004). The heightened experience of negative emotions is suggested as one of the primary reasons for self-injury which appears to temporarily alleviate emotional distress (Klonsky, 2007) while deficits in emotional awareness explain why those who self injure experience periods of dissociation where emotional experience is impaired (Gratz et al., 2002). Self-injurers tend to be alexithymic i.e. have difficulty identifying or understanding emotions and are less mindful or aware of their emotions compared to non-self injurers (Lundh et al., 2007) and more likely than non self injurers to have trouble expressing emotions (Gratz, 2006).

Self injurers tend to be overly self critical or experience intense self directed anger or dislike (Klonsky, 2007) and low self esteem (Lundh et al, 2007). Individuals who self injure report feeling helpless or hopeless (Darche, 1990) empty inside and not being understood (Favazza & Conterio, 1989). Self injurers frequently describe an inability to express their feelings (Favazza & Conterio, 1989) and studies have found that measures of alexithymia significantly correlate with self injury (Zlotnick et al 1996) although research outlining that individuals high in negative emotionality and self derogation are especially at risk for self injury have not explicitly addressed the combination of these characteristics in relation to self injury.

10.0 Risk Factors

Studies suggest that precipitants for self injury are multi-determined (Favazza & Rosenthal, 1993). Risk factors are understood to fall into one of two general categories; environmental (e.g. childhood abuse and maltreatment) or individual (e.g. difficulties with emotion expression and intensity (Gratz, 2006). Historically, much of the literature on self-injury has focused on the environmental risk factors of childhood abuse and maltreatment. Research has consistently found a link between childhood sexual abuse and various forms of self harm. Physical abuse in childhood is also suggested as a possible risk factor for later self-harming behaviour (Carroll et al., 1980) although a dearth of research has examined normative community samples and studies that have may have biased selection samples (Gratz 2006).

Conterio et al (1998**)** note life events such as the death of a parent, childhood illness, physical abuse, marital violence and familial self-injury that relate to self-injury. Research also identifies adolescent experiences that may trigger self-injury, including: experience of loss, peer conflict, intimacy problems, body alienation or dissociation related to abuse and poor impulse control (Welch, 2001). In fact, all of these correlates can be useful in identifying at-risk adolescents both for early intervention and prevention (Walsh & Rosen, 1988).

Research suggests that early attachment difficulties can contribute to later self-harm (Walsh, 2006) although Gratz et al. (2002) is one of the only studies examining the parent-child relationship as a risk factor where results revealed that emotional neglect and the quality of the parent-child bond were associated with risk for self-injury in adulthood. In a further study by Gratz (2006) associations between self-injury, childhood trauma and abuse, and insecure attachment were examined. Authors reported that insecure attachment, physical and sexual abuse, and emotional neglect were significantly correlated with self-injury. Findings also indicated that parental emotional neglect and insecure attachment, significantly predicted self-injury in women; whereas childhood separation from caregiver predicted self-injury in men.

Other research supports the occurrence of childhood maltreatment or trauma as a risk factor in individuals developing later problems of emotion regulation (Shields & Cicchetti, 1998**).** Noll et al (2003) suggest for those who experienced child abuse and particularly child sexual abuse, self injury can be a re-enactment of the abuse perpetrated on them while others describe self-injury as a manifestation of sexual abuse (Cavanagh, 2002). A large scale review of 43 studies however, found a more modest relationship between childhood sexual abuse and self injury (Klonsky & Moyer, 2007). Kramer et al. (2001) suggest that child sexual abuse can be understood as a ‘proxy risk factor’ for self –injury, where child sexual abuse and self-injury are correlated with the same psychological risk factors. Although child abuse may have an important role for some individuals who self-injure, many who have been abused do not go on to self injure, and many who self – injure have not been abused. Studies examining NSSI in college samples (Heath et al., 2008) however found those who self-injure differed substantially from non-self-injurers with regard to emotion regulation, but did not differ significantly on either early attachment or childhood trauma and abuse.

What is evident, from an analysis of the literature, is the need to investigate childhood trauma including physical and sexual abuse and the quality of the parent-child attachment relationship when examining risk factors.

11.0 Childhood trauma & attachment as risk factor

Research in self injury in maltreatment has found that for children in the care system, self harm represents a major health concern. Lang & Sharma-Patel (2011).
Lang & Sharma-Patel (2011) refer to 'self injury' in maltreated populations which they propose is not a behaviour that typifies a specific diagnosis but is as an associated feature of multiple psychiatric disorders where individuals have self destructive tendencies and where etiologies often involves trauma. Strong associations have been established and replicated between child maltreatment and self injury, with the most robust findings indicated for childhood sexual abuse. Fewer studies explore the predictive power of childhood physical abuse although most support a relationship, while research on childhood neglect is mixed (Lang & Sharma-Patel., 2011).

Authors explain that childhood trauma disrupts adaptive skill development across multiple levels of functioning where self injury is conceptualised as a compensatory strategy correcting for deviations in representational, regulatory, and reactive developmental pathways (Lang, & Sharma-Patel., 2011).

Lang & Sharma Patel (2011) explain that the regulatory pathway is particularly important, as this describes the mechanisms by which maltreatment disturbs affect processing capacities.

12.0 Functions of Self Injury

Although there is no consensus regarding the etiology of self injury that can account for the heterogeneity of the behaviour (Zila & Kiselica, 2001) there are some consistent findings regarding the functions and motivations behind self injury. Affect regulation based explanations have garnered the most empirical support on functional explanations of self injury, most frequently performed in order to modulate overwhelming emotional states and disrupt a sense of numbness and a to a lesser extent, is related to interpersonal motivations according to Lang & Sharma Patel (2011).

For most individuals, preceding self injury is a psychological experience of increasing tension, anger, anxiety, dysphoria, general distress, or depersonalization, which from which the individual feels they cannot escape or control (Simeon & Favazza, 2001). It appears that self injury serves multiple and often simultaneous functions simultaneously (Suyemoto et al., 1998) which may account for its persistent and powerful effect.

Self injury is often a response to increasing tension or distress and subsequently followed by immediate sense of relief, gratification, and release from depersonalization (Simeon & Favazza, 2001). It is also common for individuals to report not experiencing any pain associated with self injury (Walsh & Rosen, 1988). Favazza & Conterio (1989) found in a study of 240 self injurers, the majority did so to control racing thoughts, release tension and relax, feel less depressed or lonely, stop dissociation and to punish themselves. Suyemoto & Mac Donald (1995) propose the most accurate and useful explanations from a therapeutic perspective is that self injury is an attempt to control overwhelming affect, stop depersonalization and create a boundary and a sense of identity.

In a review of 18 published studies on the functions of NSSI, Klonsky (2007) determined this literature was almost unanimous in finding acute negative affect precedes NSSI and afterwards a sense of relief, decrease in negative affect (automatic negative reinforcement function) and moderate support for a self punishment effect (automatic positive reinforcement function).

Janis & Nock (2009) propose that the mental processes involved in thinking about, planning and enacting NSSI may be outside of conscious awareness and suggest that while individuals are capable of accurately reporting they have engaged in the behaviour, it is unlikely they may be able to accurately explain the cognitive processes underlying the reasons why. Franklin et al. (2010) highlight that much of the literature comprises of studies that utilize correlation designs and self report methods and while studies yield crucial information in to NSSI, they have limited ability to determine causality and are vulnerable to self report biases.

Franklin et al. (2010) have added considerably to the body of knowledge with their findings which support the hypotheses that as well as serving an affect regulation function, NSSI serves a cognitive regulation function. Franklin et al. (2010) found that NSSI was associated with decreased activity in the areas of the brain that underpin executive functioning and increased activity in the areas of the brain associated with affective reactivity. Such a constellation of neurological activity is consistent with the neurological concomitants of affect dysregulation and according to the authors, should constitute a system that is biased toward engaging in impulsive affect focused behaviours such as NSSI. These findings provide the first support for the hypothesis that in addition to serving an affect regulation function, NSSI also serves a cognitive regulation function. Franklin et al. (2010) propose that individuals with higher affect dysregulation are more vulnerable to the reinforcing properties of the offset of pain. Franklin et al. (2010) suggest that for some, NSSI is an effective way to regulate cognitive processing. This parallel concurs with previous findings by Wallenstein & Nock (2007) demonstrating that exercise may be an adaptive substitute for NSSI. However Franklin et al. (2010) found post NSSI some continue to experience poor cognitive processing. While Franklin et al. (2010) found that NSSI serves the same function in clinical and non clinical populations, differences in affect dysregulation did not explain the association between NSSI and abnormal pain processing. An unexpected finding of affective valence regulation in Franklin et al’s (2010) control group is consistent with the hypothesis that opponent processes play a role in self-injury (Joiner 2005). NSSI appears therefore to initially serves an automatic positive reinforcement function and later serves an automatic negative reinforcement function (Koob, 2009) although this hypothesis remains largely untested. Future studies should build on existing research and continue to examine why individuals engage in the behaviour.

Muehlenkamp (2005) suggests that while a consensus is emerging regarding the basic functions and motivations underlying self injury, it remains unknown as to whether these different functions and motivations can classify different types of individuals who self injure.

13.0 Associated features and disorders of self injury

Although psychiatric diagnoses are not infrequent in individuals who self injure, the presence of self injury does not imply the presence of any particular diagnosis. Ample research confirms that individuals who self injure are diagnostically heterogeneous and may experience a range of psychological disorders (Klonsky et al., 2003; Nock et al, 2006)

Self injury is primarily associated with a diagnosis of Borderline Personality Disorder (Favazza, 1996; Linehan, 1993a; Suyemoto & Mc Donald, **1995**; Walsh & Rosen, 1988) but is also a common feature of eating disorders, although it is not listed as an associated symptom. Studies have found that approximately 50% -60% of individuals who self injure report having an eating disorder or a history of the disorder (Darche, 1990; Favazza & Conterio, 1989). Studies assert that disordered eating behaviour such as binging or purging may be prompted by negative emotions comparable to those that tend to precede self injury (Jeppson et al., 2003) while a large scale study of college students identified a correlation between eating disorder symptoms and self injury (Whitlock et al., 2006). However, not all studies have found confirmed this link, and Zlotnick et al. (1996) believe the majority of self-injurers probably do not have eating disorders.

Acts of self injury are associated with other disorders such as post traumatic stress disorder (Favazza, 1996; Pitman, 1990) depressive disorders (Ross & Heath, 2002) and obsessive compulsive disorder (Yaryura – Tobias et al., 1995).

Finally, individuals with substance disorders are more likely to self injure (Favazza & Conterio, 1989). Self injury and substance use both involve causing harm to the body physiologically, and therefore similar psychological processes are thought to underlie the behaviour while Joiner (2005) theorizes that substance use leads individuals to habituate to self inflicted violence. There is no direct evidence however for these conceptual explanations, however there is evidence that individuals with substance use disorders self injure more than non users (Langbehn & Pfohl, 1993).

14.0 NSSI as a separate syndrome

The inability to agree on terminology has complicated research on self injury and is one reason why the adoption of self injury as a separate clinical syndrome has been much debated and proposed by some leaders in the field of research (Muehlenkamp, personal communication, 2009).

Muehlenkamp (2005) has clarified in the debate regarding self injurious behaviour vs. suicide that; self injury is used to feel better, is repetitive in nature, consists of low lethality behaviour and tends to include the use of multiple methods.

By comparison, suicide is used to cease living, occurs infrequently, the lethality is high, and in most cases, only one method is used. Muehlenkamp (2005) highlights further differences between the two behaviours in terms of the reactions they evoke from others, the cognitions reported during the act, the aftermath, the demographics, and the prevalence rates and has differentiated suicide vs self harm in table format (Appendix 1). Individuals are also treated differently by medical and mental health professionals depending on how the behaviour is described (e.g. whether suicidal or self injurious; Walsh & Rosen, 1988). Muehlenkamp (2005) concludes self injury to be psychologically and phenomenologically different from suicide and that a great risk is taken if self injury and suicide are thought of as similar behaviours, as this forces critical differences to be overlooked, which has important clinical implications for treatment and prevention or cessation of each set of behaviours.

Muehlenkamp (2005) suggests it is most effective to view suicide as a potential risk behaviour that is associated with a variety of disorders, one of which is a self injury syndrome. In addressing the debate, Muehlenkamp (2005) has advanced the argument of high co-morbidity, where self injurious behaviours occur consistently across a handful of mental disorders i.e. according to research, self injury appears to be highly comorbid with BPD and eating disorders (Favazza, 1989). Self injury is already included as a diagnostic criterion for BPD, and it is well known that managing the self injury if often the primary goal, at least initially, in treatment (Linehan, 1993b). Thus it is already well established that self injury is a symptom of BPD, although a large portion of borderline individuals do not self injure.

Others have argued (Alderman, 2000; Favazza et al, 1989) that self injury should be listed as an associated symptom of eating disorders. Cross (1993) outlines multiple similarities between self injury and eating disorders, concluding that self injury and eating disorders should be viewed as interchangeable coping strategies. Furthermore Cross (1993) pointed out that both behaviours have similar proposed origins (e.g. trauma or body dissatisfaction) and both serve similar functions such as providing a sense of control. The high percentage of individuals who report having eating disorders who have also self injured suggests these two behaviours are closely associated.

Lastly, from biological evidence that exists, it appears self injury is associated with biological dysfunctions similar to those associated with eating disorders and BPD. Therefore it is suggested that there is little to separate self injury from these disorders to warrant a separate syndrome.

Some studies have implicated serotonergic and endogenous opioid systems as primary contributors to self injury, with evidence in particular suggesting associations between low levels of serotonin and self injury (Favazza, 1996, Grossman & Siever, 2001) however, other studies have failed to find a relationship between self injury and serotonin (Coccaro et al., 1990). The strongest evidence supporting the serotonin dysfunction hypothesis is the association found between low levels of serotonin and impulsivity, aggression, and suicidality. Additionally, some success has been achieved in reducing self injury with the use of selective serotonin reuptake inhibitor (SSRI) medication with the endogenous opioid system implicated because of the analgesic effect individuals experience during self injury and the subsequent high many experience afterwards (Grossman & Siever, 2001). However studies using naloxone, a drug that reverses the effects of endogenous opioids, to treat self injury have experienced mixed success (Grossman, & Siever, 2001; Roth et al., 1996)**.** Thus the role biology plays in self injury continues to remain unclear. Most of the information gathered regarding the biology of self injury is extrapolated from biological studies of impulsivity and aggression, thus, the growing body of research on biological correlates of the behaviour needs cautious interpretation (Grossman & Siever, 2001).

A further compelling argument in the debate regarding NSSI as a separate syndrome relates to the assertion that high comorbidity with a handful of disorders is not sufficient evidence to deny the existence of a separate syndrome, because many disorders are highly comorbid anyway. Research suggests that although self injury is highly comorbid with certain disorders, it has unique distinguishing features from those disorders. Stanley et al., (2001) found in a study of BPD inpatients that the self injury group had significantly higher depression and hopelessness scores than the non self injury group. Similar results were found with adolescent inpatients with various diagnoses (Darche, 1990), suggesting an empirical distinction exists between the associated symptoms of self injury and the symptoms of other disorders. Herpertz, et a., 1997) found that when self injury was controlled statistically, of those individuals who self injured, only 28% actually met the diagnostic criteria for BPD, leaving a large percentage without a primary diagnosis. Additionally, Favazza & Rosenthal (1993) found that once self injury stops, many individuals no longer meet diagnostic criteria for BPD and argued that the bias within the field to diagnose personality disorders according to the presence or absence of self injury has led to the misperception of self injury as an associated symptom rather than a separate syndrome.

Lastly, studies with community based adolescent populations who self injure have found that many who engage in self injury stop doing so within one year (Ross &

Heath, 2002) yet other problems such as depression, may continue, suggesting that self injury may be a temporary behavioural dysfunction. There is some evidence to suggest that maturation alone leads to the cessation of this behaviour (Walsh & Rosen, 1988) which is not the case for several other disorders with which self injury is associated.

Muehlenkamp (2005) concludes that self injury can stand alone as a unique problem. But clearly, further research is needed in this debate. Muehlenkamp (2005) also suggests that probably the greatest argument for failing to adopt a self injury syndrome is the lack of good, empirical research.

15.0 Diagnostic classification: Suicidal Behaviour Disorder vs NSSI in DSM 5

The lack of nosological recognition and clear psychopathological importance of NSSI was identified in the most recent 5th edition of the Diagnostic and Statistical Manual of Mental Disorder – DSM 5, with NSSI included as a category in its own right. Up to current DSM 5 no psychopathological significance was given to this behaviour in younger people despite research findings that the condition was prevalent, impairing and under recognised in adolescent groups (Wilkinson, 2013). Writers have highlighted that when present there is nowhere in the current classification of Axis 1 emotional disorders in young people to record this behaviour as a symptom (Wilkinson, 2013). Furthermore, while NSSI is a symptom of borderline personality disorder, this is generally seen as an inappropriate diagnosis for children and younger adolescents, whose personalities are still developing. Some researchers advocating that NSSI is enough of a problem to warrant a diagnostic label of its own , have praised this inclusion in DSM 5 as a positive move while others are critical of the fact that ‘suicidal ‘and ‘non suicidal’ self injury have been separated, despite significant overlap between the two (Wilkinson, 2013).

It is suggested that the new proposed category of NSSSI will be helpful for several reasons; to improve communications, to reduce problems from the lack of diagnostic specificity for NSSI; to improve provision of treatment for adolescent who engage in NSSI and improve research on aetiology, treatment and outcome (Wilkinson, 2013).

16.0 Assessment of non suicidal self injury

Once definitional issues have been addressed, writers suggest the next aspect to evaluate is how self injury is measured (Nixon & Heath (2009). Sansone & Sansone (2010) refer to the number of measures that are available to assess self-harm behaviour but that they vary considerably in terms of content, response options, targeted clinical audience, time to complete, and availability (Appendix 11). An important factor highlighted by Nixon & Heath (2009) is that in self injury 'checklists' an array of possible self injurious behaviours are suggested to respondents that they may have engaged in, whereas more open ended type questions such as 'have you ever hurt yourself on purpose' rely on the individuals interpretation of what should or shouldn't be included. Furthermore, assessing self injury via anonymous surveys rather than interview, yields different results. Ross & Heath (2002) in large scale study of 440 high school students used survey questions embedded in a 'coping questionnaire' that asked if they had ever hurt themselves on purpose. In response to this open question, 21 % responded they had hurt themselves, on purpose, at least once, however, in follow up interview only 13% of responses corresponded to the definition of self injury. The remainder stated they had either; meant they had hurt themselves emotionally; had engaged in food restriction; or denied they had intended the response. Nixon & Heath (2009) assert that interview format may result in lower prevalence partly due to greater accuracy and partly due to refusal to self disclose.

Writers have aimed to bridge the gap for practitioners in devising instruments such as the Self-Harm Inventory (Sansone & Sansone, 2010) which was developed to assess self-harm behaviour, and is one-page in length and has a brief completion time of five minutes approximately. Studies indicate the Self-Harm Inventory screens for lifetime prevalence of 22 self-harm behaviours, detects borderline personality symptomology and predicts past use of mental health services. Its authors suggest more efficient assessment of self-harm behaviour will lead to more rapid intervention and resolution (Sansone & Sansone, 2010).

Researchers in the field recommend the use of specific assessment instruments for NSSI such as the Deliberate Self- Harm Inventory (Gratz, 2001) or the Self Injurious Thoughts and Behaviours Inventory (SITBI) (Nock et al., 2007) (Muehlenkamp, personal communication, 2012). The SITBI is an interview which can be easily adapted into self report questions and has similar performance to the DSHI. Muehlenkamp (2012) suggests that many other existing scales are either quite long because they include a wide variety of items assessing correlated features of NSSI or they tend to obtain inflated rates of NSSI (e.g. the FASM- Functional Assessment of Self Mutilation) although the FASM is very brief and used quite often with adolescents. International comparison studies are increasingly using standardised assessments to measure NSSI which will permit better comparisons between studies and more accurate measurement of the behaviour which is suggested to be a positive development (Muehlenkamp, 2012).

17.0 Treatment effectiveness - current evidence

Increasingly the literature advocates the need to adopt a youth centred approach to treatment for NSSI for several reasons. Practitioners often fail in conceptualisations and interventions with young people when a top down adult approach is adopted, often because limited evidence exists regarding effective interventions with young people and most studies include adult populations (Nixon & Heath, 2009).

Wilkinson (2013) suggests that assigning NSSI as a separate disorder will be likely to increase the chance that specific treatments will be offered and a greater chance than heretofore, that effective treatments will be developed. However most research that has investigated strategies to reduce self injury thus far – whether separated into suicidal and non suicidal self injury, or whether the two categories were combined, have failed to demonstrate significant efficacy or effectiveness more than control treatments.

In adult populations, in a recent NICE review (NICE, 2011), the only treatment indicated to reduce self harm in non selected groups at any age was a small trial of flupentixol which is a drug with significant side effects. As well as pharmacological treatments, therapeutic interventions have been trialled with adults with self injury and self harm. Dialectical Behaviour Therapy (DBT) and Mentalization Based Therapy (MBT) were found to be more effective than treatment as usual at reducing suicidal and non suicidal self injury -in adults with the specific diagnosis of BPD (Bateman & Fonagy, 2008). Writers (Wilkinson, 2013) highlight however that such intense treatments may not be effective or acceptable to individuals or funding agencies for those who self harm but do not have a diagnosis of personality disorder.

18.0 Gaps in current evidence in treatment

Treatment evidence for NSSI in adolescents is even more limited than in adult populations and Katz et al. (2004) highlighted the lack of randomized controlled trials of DBT with adolescents while non randomized studies have not demonstrated differences between DBT and treatment as usual. A more recent RCT of MBT in adolescents with depression and self harm demonstrated however a reduction in self harm and depression, although whether results would generalise to self harming adolescents without depression is unclear (Rossouw & Fonagy, 2012). In spite of encouraging findings from other studies , a specific group intervention (using CBT and DBT techniques) led to higher rates of self harm rates than treatment as usual in a study of self injuring adolescents (Hazel et al., 2009). Studies have investigated effectiveness of pharmacological and psychological therapies combined. Two randomized controlled trials demonstrated that adding cognitive behavioural therapy (CBT) to selective serotonin reuptake inhibitor (SSRI) antidepressants led to a significant additional reduction in depression although neither led to significant additional reduction in self injury, whether suicidal or non suicidal self injury were classified together (March et al. 2004) or separately (Brent et al. 2009). The NICE (National Institute of Clinical Excellence) guidelines for repeated self harm in adolescents**,** recommends developmental group psychotherapy, based upon just one randomised controlled trial (Wood et al., 2001) which crucially has not been replicated (Hazell et al., 2009).

The lack of evidence for effective treatments for NSSI in young people demonstrates the need to develop treatments that are more specific than assuming indirect response via treating primary psychiatric conditions and subsequently testing these in large, adequately powered studies (Wilkinson, 2013).There is cause for optimism however in the emerging evidence that DBT with adolescents can have a significant impact on self harm (Katz et al., 2004; James et al., 2008).

19.0 Self harm in youth in Ireland

The National Office for Suicide Prevention (NOSP), the agency responsible for suicide and self harm intervention and prevention in Ireland, states in its policy paper that the global target of the World Health Organisation(WHO) is for a 10% reduction rate of suicide by the year 2020 (Pillinger, 2014). Irish Government policy on suicide prevention was outlined in the *Reach Out* strategy which states its aims to prevent suicide, strengthen resilience and promote awareness of positive mental health in the Irish populations as a whole (Reach Out, 2005). An Irish government led *Practice Improvement Advisory Group* was set up to provide a strategy for suicide prevention and a timeframe for implementation (2015-2020) (NOSP, 2014). The Practice Improvement Advisory Group prioritised the examination of how existing models of health service provision in Ireland can be integrated and scaled up, such as access to Primary Care Psychology, Psychological Services Ireland (APSI), bereavement support, Counselling in Primary Care (CIPC) and the Suicide Crisis Assessment Nurse (SCAN) service.

The Practice Improvement Advisory Group has identified the need for national standards for practice for statutory and non-statutory sectors and the implementation of clinical guidance and protocols in health settings for people at risk including developing early warning systems at point of contact and the need for suicide prevention training for health professionals (NOSP, 2014).

It is undisputed that national standards for practice and policy regarding continuum of care are a pressing need in the Irish health sector at a time when Ireland has the fourth highest rate of youth suicide in Europe and suicide is among the top five causes of mortality in Ireland's 15 to 19 year age group (CSO, 2012).

While The NOSP has outlined national and international policy approaches to suicide prevention (Appendix III), however non suicidal self injury (NSSI) is not addressed in the NOSP policy, this is despite the inclusion of NSSI in the fifth edition of the Diagnostic and Statistical Manual For Mental Disorders – Fifth Edition (DSM 5) (American Psychiatric Association, 2013).

There are significant gaps in information in Ireland regarding prevalence of NSSI in young people and difficulties in systems of recording. The establishment of the National Register of Self Harm (NRSH) in Ireland has been a positive development and made it possible to quantify prevalence of suicide and self harm of cases presenting to hospital and emergency departments. However, young people with NSSI do not generally present to hospital and emergency departments, therefore prevalence of the behaviour is likely to be underreported in the National Register of Self Harm data.

Many who engage in NSSI present instead to their General Practitioners and are typically referred for therapeutic support to Primary Care psychology or CAMHS if there are active thoughts of self harm. Data recording and clinical audit at local and national level became a requirement in Primary health care in Ireland in January 2015. Considerable refinement is needed in data systems however, as metrics on the mental health presentations to primary care such as NSSI, are not as yet recorded.

There is a similar lack of data regarding young people with NSSI who are treated in CAMHS. CAMHS publish audits of clinical activity in yearly reports (CAMHS, 2014). As deliberate self harm/ suicidal ideation may be present in a number of different primary presentations, CAMHS record the number of cases seen where the reason for referral includes a history of suicidal ideation or deliberate self harm. CAMHS define self as 'lacerations, drug/medication, and/ or alcohol overdose' and sub categories include 'deliberate self harm with suicidal ideation' and 'suicidal ideation without deliberate self harm' (CAMHS, 2014). CAMHS do not however record NSSI in their audit reports which represent a significant gap in knowledge regarding NSSI and its prevalence and treatment.

The collection of data is integral to service delivery. The gaps in information and quality metrics regarding NSSI in both primary care and CAMHS suggests NSSI may be a significantly under reported and under researched area of clinical concern in child and adolescent populations in Ireland.

Policy and review groups need to identify NSSI as warranting specific attention for research and practice and in developing standards of assessment and treatment in line with best practice. The lack of information regarding NSSI is a major gap in public health care policy in child and adolescent mental health service in Ireland and requires priority attention. There is a clear need for improvement in quality metrics regarding NSSI to bring consistency to service responses, outline targets for treatment and measure treatment efficacy and outcomes.

Differentiating NSSI from broader spectrum of self harm and gathering important data on NSSI presentations to services is a necessary step towards achieving better knowledge of the behaviour and evidence of treatment efficacy.

20.0 Self Harm in Youth in Care

There is similarly a dearth of information regarding suicide, self harm and NSSI in the looked after population of children in Ireland. A recently published report by a review panel (Buckley, 2014) into deaths of children and young people in care or known to child protection services in Ireland found that a total of 26 such deaths were notified during 2014. Eight of these were due to suicide and three occurred while young people were in care. The report identified that more males than females died by suicide by a factor of three to one and the number of deaths in this population average 20 per year. The number of recorded deaths in 2014 was the highest to date. In some cases there were warning signs or previous incidents of self harm (Buckley, 2014).

These suicide rates in children in the care system in Ireland point to the need for recommendations from previous successive reports to be implemented, particularly the need for prevention programmes to be made available to all professionals and easier access to therapeutic services for young people with emotional distress who may not be considered to reach the criteria for mental health services (Buckley, 2014).

A stated aim of the review panel was to raise the awareness of managers and those in supervisory positions of potential pitfalls in practice (Buckley, 2014) while a further objective was to determine the quality of services provided to young people prior to their death or serious incident with a primary focus on the quality and effectiveness of frontline and management activity and compliance with guidance and procedures. While there is now published annual data on child deaths of children in care or known to care agencies (Buckley, 2014) however, there is no systematic recording of NSSI by child protection agencies or knowledge of the prevalence or course of this behaviour in young people in care.

This represents a lack of knowledge about young people who may be among the most distressed in the looked after population and who may also be at risk of suicide or self harm. This is an area meriting attention and should be an essential component of future reviews such as those of Buckley and colleagues.

21.0 Self Harm and Suicide Prevention in Schools

School is an area where mental health in all children and in children in care can and should be targeted. The Department of Education and Skills (DES) (2013) acknowledge the role of schools in mental wellbeing and offer guidelines for mental health supports at primary and post primary level for all children. The *Wellbeing in Post-Primary Schools* document (DES, 2013) sets out guidelines for mental health promotion and suicide prevention in schools and outlines a number of actions that schools can undertake to promote emotional health and well-being including the involvement of the school psychological services; the National Educational Psychological Service (NEPS) in developing health promotion and suicide prevention frameworks.

It is recognised that, suicide prevention within the school setting should focus on strengthening resilience and helping young people cope with the challenges they meet (Reach Out, 2005). There is evidence that mental health promotion programmes in schools , when successfully implemented can have long term benefits for children's social and emotional functioning and can positively impact academic performance. Supportive school environments where high expectations and aspirations are the norm for children can of themselves contribute to long term health and well-being (Reach Out, 2005).

Guidance documents published by the Department of Education and Skills for use in schools (DES) (2013) highlight that mental health promotion and suicide prevention in schools has the objective of empowering young people so they can make decisions, solve problems, address behavioural issues, develop coping strategies, enhance self-esteem, identify and process feelings, and resolve difficulties they may be experiencing (Department of Education and Skills) (DES) (2013).

The DES also provides guidance to teachers on a list of factors which indicate that a child may be troubled or distressed. While the list is not exhaustive, and there may be other signs which those familiar with a young person may notice, there may be an increased likelihood of suicide or suicidal behaviour if a number of these signs are present (Appendix 1V). The DES (2013) guidelines recommend when concerns arise for a young person's mental health in school, parents and guardians need to be actively involved and on an ongoing basis.

22.0 Implications for Practice in Self Harm in Care

It is agreed that the challenge of understanding and responding to self-harm and attempted suicide in young people in care is exacerbated by the number of different terms describing the phenomena and the lack of precision with which they are used (Furnivall, 2013). This lack of precision makes it difficult to clearly identify the risk and protective factors for different forms of self-harm and appropriate ways to support self harming young people.

Self-harm is described as being intrinsically more difficult to define than suicide (Furnivall, 2013). An important implication for practice is the need to achieve a better understanding of NSSI and self-harm by establishing the underlying intent as most terms do not distinguish among acts where the individual has a fixed intent to die, where there is ambivalence about survival or where self-harm is a way of regulating negative emotions.

It is maintained that key to effective and ethical responses to self-harm is the importance of focusing on the distress underlying the behaviour rather than concentrating on stopping the behaviour per se (Furnivall, 2013). This has implications for practice that includes therapeutic responses that are non-judgemental and caring and focus on supporting professionals and foster carers in attending to the underlying emotional distress of young people engaging in NSSI as well as the physical manifestations of the behaviour.

For some young people NSSI and self-harm is a coping mechanism which they believe enables them to manage their lives rather than end them (Furnivall, 2013). It is suggested that if young people know that disclosures of self-harm will involve vigorous attempts to control it, they may harm themselves covertly which blocks potential sources of emotional support and treatment. Some young people may wish to reduce or stop the behaviour. Removing the means for young people to hurt themselves may be a relief, but this should be done in discussion with the young person and with their full agreement.

Furnivall (2013) maintains that for some young people, self-harm may be a response to coercive control from adults, for example through having experienced sexual abuse, and therefore removing tools for self-harm may worsen the distress. For those whose self-harm is a coping mechanism, discussing harm minimisation is indicated. Where a young person is trying to overcome the impulse to self-harm, developing more adaptive ways of coping with distress may be an effective intervention. Furnivall (2013) suggests that many find it useful to use diaries and visual ways to recognise patterns in their behaviour and thus begin to exert some control over it.

The literature on risks and protective factors points to longer term interventions to prevent or reduce self-harm. It is important for professionals to understand the core tasks of foster carers and residential workers involve helping young people learn basic self-regulatory skills that small children acquire naturally through their key attachment relationships and that caring responses with young people help address their underlying difficulties and distress (Furnivall, 2013).

Looked after young people can form genuine and secure attachments to adults who care for them and who can provide opportunities to resolve some of the underlying chaos and distress that characterised their earlier lives (Furnivall, 2013). Relationships with other young people with whom they share their living space can be very powerful, and while this can be viewed negatively, adults can encourage the healing potential and reciprocal responsibility of relationships among young people in care. This is particularly important as young people contemplating self harm are most likely to confide their intentions to a peer (Furnivall, 2013).

Research suggests that all self-harm and threats of suicide should be taken seriously and not dismissed as attention seeking or manipulative (Furnivall, 2013). Even if the underlying intention of the behaviour is to potentially influence others, the response should be to explore the triggers and underlying distress rather than punish or ignore. Creating a positive culture where distress is talked about and understood by everyone can prevent some of the dangers of contagion that can occur within residential settings.

A further practice implication is the need for professionals to be supported and resourced to address their difficulties and fears working with young people who self harm, particularly being able to ask about suicidal intent directly and having an awareness of risk factors and warning signs. While it is important to communicate with others about a potentially suicidal young person, all those involved should ensure that any response does not remove the young person from close contact with trusted adults and friends and assessment should focus on the needs of the young person as well as the risks, leading to clear joint planning that includes the young person and if appropriate, their family.

While it is not possible to remove the abuse, trauma and neglect that many young people experience, it is argued (Furnivall, 2013) that supporting them to manage and improve their relationships is a key role for professionals.

The recent review into deaths of young people in care in Ireland or known to care agencies, found that while there was no instance identified where it was clear that intervention could have prevented a young person from taking their own life, a number of practice implications arise such as the need for all child protection and welfare practitioners to be comfortable addressing suicidal tendencies, vigilance in ensuring as far as possible that children or young people are facilitated to avail of therapeutic services, the provision of therapeutic intervention for young people who may have experienced loss of friends or family to suicide and bereavement counselling for those who have experienced loss of a young person to suicide (Buckley, 2014).

Other key recommendations of the review panel included suicide prevention training for child protection and welfare staff and easier access to therapeutic services for young people with emotional problems who do not meet criteria for mental health services (Buckley, 2014). Implementation of these key recommendations is indicated as a priority to ensure best practice and evidence based standards are met.

A key recommendation of Buckley (2014) was the implementation of one standard framework for assessment of children in care and protocols to promote inter agency cooperation and increased availability of specialist therapeutic services and placement options. Until such baseline requirements are achieved, critical gaps will remain and children may continue to be in distress and at risk.

23.0 Efficacy of Treatment in Self Harm in Care

There is some evidence emerging of treatment outcomes for self harm in looked after populations.

James et al. (2011) describe the results of a DBT treatment intervention undertaken and specifically modified for adolescents in care who self harm. Components of this DBT programme for self harming adolescents in the looked after system (James et al., 2011) are outlined in Appendix V**.** Two major findings arise from this study. The first was the finding that DBT provided an effective and substantial treatment in reducing rates of self harm, depression, hopelessness and considerably improving life style.

The results of this study were consistent with a previous study by the same authors (James et al., 2008) which indicated the efficacy of DBT as a treatment to reduce self harm. James et al. (2008) suggested that as neither study was a randomized controlled trial (RCT) results needed to be interpreted with caution. Importantly James et al., (2011) found that all participants in their study had failed treatments previously, in the majority of cases more than once. Against such a background, James et al. (2011) maintain that their findings are impressive. The second finding was the low rate (28%) of non completion of the programme in the looked after group compared with a 12% non completion rate in the non in care group. James et al. (2011) highlight that those who did not engage appeared more depressed which suggested the importance of treating their depression as core psychological problem.

James et al. (2011) raised questions as to whether the entire DBT package is necessary as treatment is expensive in personnel and time commitment. James et al., (2011) assert that psycho-education and support for families can be offered as part of a DBT package, however because of lack of contact with families of young people in care this is not feasible and instead skills training and support packages for those working with the young person are offered (i.e. to staff, carers and schools). Given the complex psychopathology of young people in care regular professionals meetings to support treatment planning is a further option. Thus, through various adaptations and encouragement to young people to participate in DBT treatments & encouraging the involvement of adults in their lives, they are assisted to generalise skills leaned to many potential situations.

Studies suggest the importance in exploring how much of the benefit of DBT for young people in the looked after system who self harm relates to the extensive support packages alone in this approach. It is asserted that those who benefit from DBT treatment report using the skills based materials to reduce self harm, which indicates that the treatment effect is not just a reflection of the supports received, but involves a process of learning. Future research investigation is needed to determine whether depressive cognitions and automatic thoughts of self harm reduced which indicate an active learning process (James et al., 2011) It is maintained however, that DBT alone cannot meet the needs of a proportion of young people in the looked after system who self harm (James et al., 2011).

To maximise engagement in treatment, providing intensive support for young people in care was found to be effective when starting pre treatment motivational work and treating any depressive illness (James et al., 2011) which accords with the view of Kerker & Dore (2006) who maintain that innovations to meet the needs of looked after children should develop alongside empirically supported programmes.

Work with young people who self harm is particularly challenging. Research calls for further work in developing strategies to help young people in care who self harm engage in treatment. Research suggests the need for future studies involving controlled trials with active comparator treatments (James et al. 2011). Research in the field has involved small numbers which suggests the further need for multi-centred studies with sufficient power.

Lang & Sharma Patel (2011) completed a review of treatments for self injury in maltreated populations including Dialectical Behaviour Therapy (DBT) Trauma Focused – Cognitive Behaviour Therapy and Acceptance and Commitment Therapy, and found that despite different conceptualizations and specific techniques used, the core components of these approaches (DBT, TF-CBT and ACT) are similar in their aim to promote exposure to and tolerance for affective states that self injurers ineffectively attempt to avoid or control. All of these approaches encourage the development of more effective affect regulation skills which are especially important, given the affect regulation function of self –injury.

Lang & Sharma Patel (2011) importantly highlight that limiting self injurious behaviour without developing capacity to tolerate negative affect may place the young person at risk of engaging in other self-destructive behaviour such as substance abuse. Trauma is associated with difficult and distressing memories that can be triggered by a multitude of cues in the daily life of a young person in care.

Lang & Sharma Patel (2011) explain that both the explicit narrative based approach in TF-CBT and the experiential and mindfulness based approaches of DBT and ACT involve exposure to distress and prevention of self injury responses- the principal intervention to facilitate symptom change. Given the complex nature of the association between trauma and self injury, comprehensive treatment packages that incorporate the principle components of these approaches specifically for trauma-related symptoms and self injury are thought to have most promise.

Researchers suggest that self injury in traumatized adolescents in care seem to be best addressed through the development of distress tolerance and affect regulation and subsequent exposure within a framework that is supportive and oriented to change.

Lang & Sharma Patell (2011) suggest that research is required to validate what are clinically understood to be the most potent interventions and therapeutic processes in treatments for self injury to aid development of integrated treatment packages incorporating the best of all approaches both for self injury and trauma.

Based upon what is known about the core components of treatments for self injury and trauma, Lang & Sharma Patell (2011) maintain that the promotion of tolerance for affective states that those who self injure try to avoid or control is of particular clinical significance. Lang & Sharma Patell (2011) also recommend that practitioners working with maltreated and self injuring young people receive education and training in updated and empirically validated techniques to develop affect regulation and distress tolerance skills and guide trauma based experiential exposure.

The evidence in the maltreatment literature suggesting higher rates of mental health problems and self harm in young people in the looked after system coupled with the greater difficulty for young people who self harm in accessing services (James et al., 2011) suggests this is an area that requires focused research and practice attention.

24.0 Conclusion

Despite the increase in attention self injury is gaining in clinical research, there continues to be a paucity of epidemiological studies in the area and ongoing problems in definition, assessment and treatment of NSSI in clinical practice. The present critical review has highlighted areas where consensus has been achieved and some issues of outstanding debate.

While prevalence estimates vary among studies, there is consensus in the literature that self-injury is a growing problem of adolescence and the increasingly younger age of onset suggests it is becoming an increasing problem associated with childhood.

Although a sizeable body of research points to deficits in emotional regulation to explain the occurrence of self injury, it is accepted that children and adolescents who self injure represent a diagnostically heterogeneous group, with different etiological risk factors known to contribute towards the behaviour suggesting the need to consider developmental pathways and functions of self injury when planning interventions and evaluating the evidence for effective treatments.

There is a dearth of literature pertaining to the relationship between child maltreatment and self injury, however there is agreement that young people looked after in the care system are especially vulnerable to experiencing distress leading to self injury and research into NSSI in looked after populations is an area requiring particular attention.

Attention has only recently focused on understanding and treating NSSI separately from suicide and conditions co morbid with self injury such as personality disorders or eating disorders. In research studies however, NSSI continues to be frequently included within a broader set of ‘self harm’ and suicidal behaviours.

The present review has revealed a broad consensus in the literature suggesting that while suicidal and non suicidal self harm are often viewed together, they are not the same behaviour and it is both valid and useful to separate them. Specifically non-suicidal self –injury is both deliberate and contains no desire to die and therefore the aetiology is at least different in part to suicide. It has also been identified that NSSI is associated with subsequent suicide attempt leading some researchers to suggest that these behaviours may lie on the same risk trajectory.

A number of measures for assessment of self injury and self harm exist representing an endeavour to capture and evaluate the complex phenomenon of these behaviours, however there is continuing need for research focused on identifying the features that set non suicidal self injury apart from suicidal behaviour and other psychological disorders.

Psychosocial treatments show promise based on accumulating evidence and growing knowledge of the relevance of the core components of various treatments in addressing trauma related developmental deviations that can be experienced by those who self harm.

The present critical review identified that the behavioural literature has much to offer in understanding non suicidal self injury where behavioural approaches to treatment include cognitive based interventions such as DBT which are demonstrating effectiveness. Equally, complex trauma and psychodynamic literature has contributed an understanding in the field which goes beyond therapy goals of decreasing self injury alone focusing instead on the adverse experiences and cumulative risk that may precipitate young people to opt for such extreme measures to reduce emotional pain.

The present review identified the considerable need for a synthesis of information and approaches from the current evidence base and apply this knowledge to guide practice in assessment and intervention with young people who self harm.

Further research into the nature, course and outcome of NSSI should be extended to looked after populations not only to improve communication among practitioners in maltreatment but importantly to inform treatment interventions that yield better outcomes for children with adverse care histories and complex mental health needs

It is hoped the inclusion of NSSI in the latest edition of DSM under proposed criteria for sets of conditions where future research is needed will encourage common usage among professionals regarding terms and definitions, systematic research regarding non NSSI and improved knowledge of causes of the behaviour leading to better interventions and treatments.

Young people in the looked after system who self harm are a particularly vulnerable group. There is a need to achieve a better understanding of NSSI and self-harm in looked after populations. For some young people NSSI and self-harm is a coping mechanism which they believe enables them to manage their lives rather than end them (Furnivall, 2013).

There is a need for research regarding self harm and NSSI in looked after populations to bring consistency to service responses, outline targets for treatment and measure efficacy of treatment and outcomes.

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26.0 Appendices

Appendix I

Table 1 Differentiation in Suicide and Self Injurious Behaviour (from Muehlenkamp, 2005)

Feature	Suicide	Self-injurious behaviour
Intent	To cease existence, eliminate life	To avoid or remove distress, to feel better
Lethality	High, requires medical attention	Low, rarely requires medical attention
Chronicity	Infrequent	Repetitive in nature, chronic (10-15 years)
Methods	Often one chosen method	Tendency to use multiple methods
Cognitions	Death, dying, suicidal ideation	Thoughts of life, no thoughts of death
Reactions	Elicits care, compassion, concern	Elicits fear, disgust, hostility, revulsion
Aftermath	No relief of distress	Sense of relief, calm, satisfaction
Demographics	Usually older men complete	Adolescents, equally boys and girls
Prevalence	10/100,000 deaths/year; 100/ 100,000 attempts/year	400-1,400/ 100,000 per year

Note: The information included in the table is based on the literature reviewed as well as information presented by Kahan & Pattison (1984) and Walsh & Rosen (1998).

Appendix IV

Signs that a child may be experiencing difficulty

(from Department of Education and Skills (DES) (2013). Wellbeing in Post-Primary Schools. Guidelines for Mental Health Promotion and Suicide Prevention)

Below is a list of factors which indicate that a child is troubled or distressed. The list is not exhaustive, and there may be other signs which those familiar with a young person may notice. There may be an increased likelihood of suicide or suicidal behaviour if a number of these signs are present:

- An unexpected reduction in academic performance.
- A change in mood and marked emotional instability, either more withdrawn, low energy or more boisterous, talkative, outgoing.
- Withdrawal from relationships, separation from friends, or break-up of a relationship.
- Getting into trouble at school, discipline problems, suspension or expulsion, trouble with the law.
- Loss of interest in usual pursuits, study, relationships.
- Ideas and themes of depression, death or suicide.
- Hopelessness and helplessness.
- Giving away prized possessions.
- Stressful life events, including significant grief.
- Bullying or victimisation.
- History of mental illness.
- Alcohol/drug misuse.
- A history of suicidal behaviour or deliberate self-harm

Appendix V

Table 2. Components of DBT programme for self harming adolescents in the looked after system (from James et al., 2011).

Mode of treatment	Function of treatment
Individual 1:1 sessions 1 hr per week	Improving motivation applying skills to individual difficulties. Integrating techniques from CBT, psychodynamic, client-centred, Gestalt, paradoxical, and strategic approaches.
Group skills training sessions2 hrs per week	Enhancing young persons capabilities in 4 core skills: Mindfulness: understanding your mind and acceptance Distress tolerance: managing extreme distress in the moment Interpersonal regulation: managing and sustaining healthy relationships Emotional regulation: long term mood recognition and management
Telephone consultation 9am to 9 pm 7 days per week	Generalisation of skills to environment and life style
Outreach- including away weekends	Generalisation of skills to environment and life style, enhancing motivation and engagement
Consultation/ training to referrers &carers	Structuring environment around young person to enhance their capabilities. Psycho education and clear communication with the system
Individual skills training	Enhancing young persons capabilities when group skills not possible due to living environment (i.e. when person in secure unit)
Consult for staff	Enhancing therapist capabilities, ensure adherence to the DBT model and support