Study 2:

The Psychological, Behavioural and Academic Profile of Children in Out-Of-Home Care in Malta

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Abstract

In this study, a picture of the psychological, behavioural, and academic functioning of children living in care was provided and those factors which impact upon their current psychosocial adjustment were highlighted. A survey was conducted among all children living in residential or foster care between the ages of 5 and 18 years, and with a response rate of 92.8%, data for 270 children was collected. Children's carers filled in the Child Behaviour Checklist (CBCL). Carers and teachers filled in the Strengths and Difficulties Questionnaire (SDQ), and young people between the ages of 11 and 18 years also completed the SDQ self-report version. Demographic data was also collected from the children's files within the *Looked-After Children* Service. Results show that a greater degree of difficulties and mental health problems are present among children in out-of-home care when compared to their peers. Several adverse pre-care experiences, a greater number of transitions during care, being male, having a low degree of participation in extra- curricular activities, a lack of interpersonal competence and difficulties with peer relations were among the key aspects that predicted a lower level of psychosocial adjustment. Children in foster care fared better than those in residential care in terms of their overall psychosocial functioning, even when comparing children with similar pre-care backgrounds. Whereas there is a significant association between formal diagnosis and the use of mental health services, not all children who scored in the clinical range on the CBCL make use of such services. Children who do not have a formal diagnosis also attend these services.

Dedication

We would like to dedicate this work to all those children in out-of-home care in Malta and Gozo.

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1.0 Introduction

This study includes *all* the children in care in Malta, between the ages of 5 and 18 years of age, and is the first of its kind to be carried out in this country. The study seeks to explore the social and emotional wellbeing of children in foster and residential care in Malta to provide a picture of how these children are faring in the various care settings.

2.0 Context for the Study

The United Nations Convention on the Rights of the Child promotes family settings for children who are in out-of-home care. However, it does recognise that residential care can play an important role for some children (Ruxton, 2005). In 2007, the United Nations General Assembly continued to encourage States to offer family-based care to these children. This type of care is considered indispensable in the case of children under 5 years, given that various studies have repeatedly replicated the finding that it is detrimental for children in this age bracket to be placed in institutional care (see Abela, Abela, Abdilla, Mercieca, & Mercieca, 2008 for a review). Other research carried out in Malta has also reported that children in care "feel more attached and safer in a family setting" (Abela, Dimech, Farrugia, & Role, 2001, p. 17).

In an attempt to provide a family setting for these children, foster care services were formally set up on the island in the mid-nineties. At the time, only thirty families were fostering children (see Abela et al., 2001, p. 2). By the end of 2010, the number of fostered children amounted to over 200 children (Role, personal communication, January 17, 2011); this shift has brought about a decrease in the number of children in residential care.

In 2007, the Commissioner for Children included looked-after children as one of her main areas of action in the three year work plan which was presented to the Social Affairs Committee in Parliament. She subsequently invited a focus group, including all of the stakeholders and experts in the field, to help her lay the foundations for a National Policy on looked-after children. Very early on, it became evident that the research available on out-of-home care in Malta was very sparse and did not provide enough of an empirical base to inform such a policy.

3.0 Aims of the Study

This study was therefore commissioned with the specific aim of building a picture of the psychological, behavioural, and academic profile of children living in out-of-home care. Variables which had an impact on the psychosocial functioning of these children were identified. Significant differences between children in residential care and children in foster care were also elicited.

All the children in care between 5 and 18 years of age were assessed for the purpose of the study. The social workers employed with the Looked-After Children service within *Aġenzija APPOĠĠ* were trained by members of the research team in the administration of two important assessment tools namely the SDQ and the CBCL. While the information coming out of the questionnaire and the check-list was analysed statistically for the purpose of the study, the assessments were put in the children's files so that all children in care had a profile of their psychosocial functioning and their current attainment at school.

4.0 Conceptual Framework informing the Study

Given the vulnerability of these children, it was considered important that the research would not further stigmatise children in out-of-home care. For this purpose, the study adopted a resilience perspective when looking at Maltese children in out-of-home care. Children's strengths were specifically taken into account when building their profiles which was possible since both the CBCL and the SDQ include sections which particularly assess children's strong points. Houston (2003) emphasises the importance of a strengths focus for children in out-of-home care.

Although these children's strengths were highlighted, the difficulties that they face were not ignored. An attachment perspective which provides us with a deep understanding of the importance of relationships between caregivers and children has helped us make sense of the problems these children have to contend with and informs our understanding of their needs (Bowlby, 1969, 1973, 1979, 1980,1988; Schore, 2001a).

5.0 Conclusion

The ultimate aim of this national study is to come forward with a number of findings that can inform policy in the area of out-of-home care. It is also hoped that professionals working with these children will gain new insights from this study.

Study 2 Chapter 2: Literature Review

2.0 Introduction

This chapter aims to give a general overview of the mental health needs of children in out-of-home care by outlining the psychological, behavioural and academic impact of this type of care. The term out-of-home care denotes children living in residential settings, as well as those living in family and unrelated foster care. The focus of this review will be on children aged between 5 to 18 years.[1]

Most of the research quoted in this report used diagnostic criteria based on the 10th edition of the International Classification of Diseases and Related Health Problems, ICD-10 (World Health Organisation, 1996) or the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders, DSM-IV (American Psychiatric Association, 2000). The authors thus use the term *mental health disorders* "to imply the existence of a clinically recognizable set of symptoms or behaviour associated in most cases with distress and with interference with personal functions" (World Health Organisation, 1992, p. 11). The term *mental health problems* is used to refer to the presence of traits that are causing significant difficulties in the child's intellectual and socio-emotional development, even though the DSM-IV or ICD-10 criteria for a particular disorder are not being met.

2.1 Vulnerability of Children Living in Out-Of-Home Placements to Mental Health Problems

The vulnerability of looked-after children to mental health problems is well recognised in the literature. Studies indicate a higher prevalence of mental health disorders and higher rates of disturbance in looked-after children and adolescents in comparison to children and young people in the community (Stanley, 2007; Baker, Kurland, Curtis, Alexander, & Papa-Lentini, 2007; Armsden, Pecora, Payne, & Szatkiewicz, 2000; Kelly, Allan, Roscoe, & Herrick, 2003; McCann, James, Vostanis, 2010; Wilson & Dunn, 1996).

[1] Some studies included slightly younger children in their sample. Thus, children's ages implicated in the particular studies will be outlined.

Using a sample of Scottish children, aged between 4 to 16 years, living in the care system, Millward, Kennedy, Towlson, and Minnis (2006) found that over half (53%) had high enough symptom scores to suggest that they were suffering from a mental health problem. In fact, they were, significantly, more likely to have symptoms of conduct disorder, hyperactivity, emotional problems (depression and anxiety), and difficulties in peer relations. Moreover, in their research with adolescents aged between 13 to 17 years, McCann et al. (1996) noted that 96% of those living in residential settings and 57% of those living in foster care had formally diagnosed psychiatric disorders. It was further observed that there had previously been poor detection of these disorders and limited access to appropriate treatment.

Furthermore, Meltzer, Gatward, Corbin, Goodman, and Ford (2003) in their study of British children, cared for by the local authorities, report that 45% of 5 to 17-year-olds had a mental health disorder as compared with 10% of children in the wider community.

The most common mental health disorders identified were conduct disorders, followed by emotional disorders, and hyperactivity. Interestingly, Meltzer et al. (2003) report that whereas about two-thirds of children living in residential care were assessed as having a mental disorder, this was the case in only about 4 in 10 of those placed with foster carers or with their natural parents.

In accordance with the above mentioned study, Armsden et al. (2000) using a sample of children aged between 4 to 16 years living in long-term family foster care, report that on average, children in care have more behaviour problems of an externalising, rather than of an internalising nature. In fact, they argue that such findings are consistent with the accumulating documentation of significant behaviour problems of children in the foster care system.

On the other hand, Stanley (2007) in his qualitative study with adolescents, aged between 12 and 19 years, in both residential and foster care settings, reports that professional and kin carers identify anxiety or fear and low self-esteem as the mental health problems most likely to occur in looked-after children and young people. However, Stanley (2007) also notes that poor relationships with adults and other young people, as well as severe tantrums were other

problems considered by carers to have a relatively high incidence.

Significant mental health problems in children in out-of-home care appear to be even higher when considering children who are within the child protection system. Katz et al. (2006) in fact report that 93% of children in the British child protection system had one or more symptoms of childhood mental health problems: half of the children presented with conduct disorder and 45% with unipolar depression. Oppositional defiant disorder, attention deficit hyperactivity disorder, and anxiety disorder were each identified in about a quarter of children. Additionally, in more than 4 out of 5 cases, the child had difficulties with his or her emotions, concentration, behaviour or ability to get on with other people.

Different researchers have also noted that young people, in foster and residential care, had significant behavioural and emotional problems, multiple difficulties, or comorbidities[2]. For instance, Meltzer et al. (2003) reported that nearly three-quarters of adolescents, living in residential care, were diagnosed with one or more forms of a mental disorder. De Jong (2010) also points out that conventional diagnosis, such as that used in the DSM, does not capture sufficiently the difficulties of children in care, which might include syndromes such as quasi-autism, reactive attachment disorder and complex trauma. In Millward et al.'s study (2006), children in care had significantly higher symptom scores for Reactive Attachment Disorder (RAD) compared to both school and general practice controls. Moreover, scores for RAD were highly correlated with conduct problems, emotional problems, hyperactivity, and peer relationship difficulties.

2.2 Problems in Other Areas of the Child's Development

Apart from the above mentioned mental health problems, children and adolescents in care may also experience physical problems, sexual behaviour problems, and academic difficulties. Throughout their literature review, Hill and Thompson (2003) point out that, children with mental health difficulties may be more vulnerable to physical health problems than their peers. Additionally, children with sexual behaviour problems are exceptionally at risk for further externalising types of problems (Armsden et al., 2000).

[2] The term comorbidity refers to the presence of two or more simultaneous disorders or medical conditions.

Poor academic achievement has also been found to be characteristic of children in out-of-home care (Schiff, Nebe, & Gilman, 2006). Various research findings have also reported that children raised in institutional care experience delays in language development that include poorer vocabulary and less spontaneous language production. Tizard and Joseph (as cited in Johnson, Browne, & Hamilton-Giachritsis, 2006) note that this depends on the standard of care provided; they differentiate between institution-oriented care and child-oriented care. Institution-oriented care is characterised by low staff-to-child ratio, children's lack of personal possessions, deficiency in children's 'everyday experiences', and staff in need of experience, that are all elements associated with delayed language development. On the other hand, child-oriented care is associated with normal development as it includes staff members that do not adhere to strict routines but spend time interacting with children while scaffolding their learning and developmental progress; such care provision resembles more that provided to children raised in a supportive family setting.

The *By Degrees* study carried out in-depth interviews, at regular intervals, with three successive cohorts of university entrants who had been in care at the age of 16 years and the majority of whom had spent at least 5 years in out-of-home care. It transpired that the main factor that differentiated the care experience of these students from that of other looked-after children was that they were placed in foster homes that provided high-quality educationally-oriented care. Such care involved foster parents who provided good conditions for study, supervised homework, attended school events and worked closely with the children's teachers, offered advice and celebrated events (Jackson, Ajayi, & Quigley, 2005; Jackson & McParlin, 2006).

Also of note is that in their Israeli study, Schiff et al. (2006) also state that youths had the lowest level of life satisfaction in the 'school' domain, suggesting that youths in care may not be achieving at an optimal level.

Armsden et al. (2000) look at the relationship between behaviour and academic achievement and report that there is a two-way causal relationship between behavioural and academic problems, in that half or more of children with significant difficulties in certain behavioural areas were performing poorly in school.

Additionally, many of these children showed social immaturity, weak control of emotions, as well as behaviours that hindered learning and other school adaptation. At the same time, some of their responses to faring poorly in school included emotional and behavioural maladaptation, thus creating a vicious behavioural cycle. For instance, a strong relationship was observed between anxiety and depression and school performance problems.

2.3 Factors Impacting on the Mental Health of Children in Out-Of-Home Care

2.3.1 Adverse Life Experiences prior to Entering into the Care System

Pre-care experiences may have predisposed children to an increased risk of developing mental health problems. These experiences may include high levels of abuse and deprivation (Stanley, 2007; Kelly et al., 2003). In fact, Fox and Berrick (2007) report that a large proportion of children feel safe in their foster carer's home, safer than they did in their birth parent's home.

Attachment theory emphasises the critical role of early experiences in shaping the expectations and beliefs a child constructs concerning the responsiveness and trustworthiness of significant others. Such expectations, or internal working models, contribute to the way children subsequently organise their attachment behaviour, and can have an important impact on shaping and maintaining an individual's interpersonal dynamics (Fraley, 2002). In fact, Stovall and Dozier (1998) note that the child's "movement along a particular developmental pathway is determined by the transactions that occur between the child and his or her environment. In a transactional model the child and the environment co-determine a child's developmental progress" (p. 66).

In fact, Armsden et al. (2000) remark that the high rate of delinquent behaviour problems manifested by the fostered pre-adolescents in their study, may reflect the prevalence of maltreatment earlier in their lives. Many of the more frequent problem behaviours shown by the children in this study, such as lying, stealing, having trouble in getting along with parents and peers, and difficulties in self-control, reflect their histories of disrupted attachments.

2.3.2 Further Experiences within the Care System

The complications outlined above may, on some occasions, be exacerbated by the care system, thus increasing vulnerability rather than strengthening psychological resilience (Richardson & Joughin, as cited in Kelly et al., 2003). This is of relevance, particularly, when the child experiences: separation from family, moves from one residential home to another, disruptions and placement breakdowns, variable standards of care and exposure to the distress and disturbance of other children (Stanley, 2007) which are interrelated to social, educational and relationship difficulties. On the contrary, children with mental health problems are less likely to achieve placement stability, thus often entering a sequence that is difficult to break (Barber, Delfabbro, & Cooper, 2001). Kelly et al. (2003) also note that looked-after children are also vulnerable to further abuse and emotional damage within their placements and the wider environment.

In accordance with the above research, Callaghan, Young, Pace, and Vostanis (2004) report that "placement stability and the presence of secure and consistent adult care are important factors in improving young people's overall psychosocial well-being" (p. 142). This view, on the importance of placement stability, has led to changes in practice. For example, the Adoption and Safe Families Act in the US requires permanency decisions to be taken at an early age in the child's care history, specifically if a child has been in care for 15 out of the last 22 months (Minnis, Byrce, Phin, & Wilson, 2010). Notwithstanding, it is significant to note that this increased time pressure on permanency planning may also have negative consequences in some instances (Phillips & Bloom, as reported in Minnis et al., 2010).

Stability was also seen as important among children in foster care. In fact, Fox and Berrick (2007) report that foster children's experiences of safety, support for their well-being, continuity with their birth families, and family-like care in placement, are related to the stability of the foster placement.

Moreover, from their study comparing youth in residential treatment centres (RTCs) to youth in therapeutic foster care (TFCs), Baker et al. (2007) conclude that although both populations

showed an extremely high level of behavioural and mental health disorders, the prevalence of disorders in youth in RTCs was significantly higher than that of youth in TFCs. Additionally, Stanley (2007) outlines how the residential staff in his study identified regular, or frequent, problems at higher rates than foster carers on all measures of mental health needs, particularly in the reporting of severe tantrums. Residential workers were also more likely to report high-risk behaviours and symptoms, such as eating disorders, drug and alcohol misuse and self-harm.

This difference in rates of mental health problems in children and young people between residential and foster settings is consistent with the findings of other studies (McCann et al., 1996).

Nevertheless, one must not exclude the possible positive aspects of residential care. From their review of a number of studies, Armour and Schwab (2005) conclude that some treatment practices have made a significant impact on children and youth who are severely disturbed. Moreover, in contrast to the study by Baker et al. (2007), Kendrick (1995) reports that although residential placements were considered by social workers to be less successful than foster placements in achieving their goals, when the aims of placements were taken into account, there was little difference in the 'success' rate of foster and residential placements. Schiff et al. (2006) also reported moderate levels of life satisfaction among Israeli youth in residential care, suggesting that despite the stressors which are experienced in residential care, youth could adapt to these stressors on a positive level.

Armour and Schwab (2005) also report positive findings among children with severe behavioural difficulties when placed in highly specialised residential settings, although, as reported by Callaghan et al. (2004), success rate with regards to mental health well-being was seen as directly related to placement stabilisation. At the end of the two-year highly specialised programme, Armour and Schwab noted that although there were some negative outcomes, the gains made by children attending the programme were more remarkable, particularly since these were unexpected due to the severity of the children's difficulties. They note that several factors may have been implicated in the success rate of this project, including continual one-on-one monitoring, individualised attention and programming, consistency in limit setting, behavioural management, and a highly structured environment.

However, one must note that, as Stanley (2007) points out, the difference in rates of mental health problems among children in residential and foster care settings might be due to the fact that high risk behaviour may lead to a move to residential care, apart from the possibility that this behaviour may increase in group settings.

2.3.2.1 Psychological factors underlying behaviour manifestations

Winnicott (as cited in Briggs, 2004) conceptualised behaviour as meaningful, and understood difficult behaviour as an expression of the children's hope that someone in the environment will understand that they are looking for a good parental experience. Indeed, he coined the term 'deprivation' to refer to the child's total absence of good enough experiences with parental objects. This term was later developed by Henry (as cited in Fleming, 2003) who came up with the concept of 'double deprivation' to describe children who because of ineffective parental experiences, were reluctant or unable to accept the nurturing offered to them by adults in their environment, thus making them 'doubly deprived'.

When an infant does not experience an object who can tolerate and contain his anxieties and frustrations (Bion, 1984), the infant's trust in the capacity of the world to withstand his/her rage is diminished (Fleming, 2003). Howe and Fearnley (2003) note that in such circumstances children learn that help is unpredictable, and thus avoid being cared for, as "care for them implies danger, abandonment, rejection, confusion and hurt" (p. 374). By repeatedly engaging in maladaptive patterns of behaviour, including aggression, violence, and helplessness, these children may thus appear to be actively sabotaging the good care available to them (Fleming, 2003).

Music and Hall (2008) remark that as a result of their comportment, children "can be 'excluded', deemed a problem, and are seen as 'bad', 'unmanageable', 'unstable', 'uncontrollable', or 'dangerous'. However, professionals need to challenge, where appropriate, the discourse with regards to *who* has a problem, *where* the problem is located, and *how* best to deal with it. Thus, a crucial role is of containing unmanageable affects such as fear, anger, disgust and hurt, so that it becomes possible to help others to see a child as sad rather than bad, hurt as well as angry, distressed rather than malevolent, and in need of support and help" (Music & Hall, 2008, p. 45).

However, offering such containment is not always possible. As Briggs (2004) notes, it is probable that, at times, "adults either miss the point of, or become overwhelmed by, the child's communications through difficult to manage behaviour" (p. 38). Consequently the environment itself becomes emotionally depriving, giving rise to 'triple deprivation', a concept elicited by Sutton (as cited in Briggs, 2004).

Indeed, as noted by Ebeling (1994), this is confounded by the fact that children may project different parts of themselves onto diverse staff members, evoking different feelings in different staff members. Moreover, through projective identification, the child may evoke even contradictory counter-transference reactions in various staff members (splitting) whereby the staff might find themselves entangled between their own experiences and the child's emotions to the extent that they find it difficult to think about the child and his/her needs. In addition, various staff members may react in an opposite fashion towards the child. In fact, "staff members who are the recipients of cruel, punishing parts from the patient will tend to react to the patient in a cruel, sadistic and punishing manner. Staff members who have received loving, idealised, projected parts of the patient will tend to respond to him with a projected parental love" (Adler, as cited in Halperin et al., 1981, p. 564).

In fact, Briggs (2004), on reviewing the work of Sutton (1991), Britton (1981), and Bion (1959), remarks that behaviour is actually an emotional phenomenon, as it is an outward expression of the internal difficulties the child contends with when facing the external reality of a caring environment. Hence, the environment becomes an emotional one, both because the child's behaviour is an emotional event, and because the staff's feelings are elicited through their interactions with the child.

2.3.3 Age and Gender

In their review of studies, Armsden et al. (2000) and Schiff et al. (2006), reported conflicting results regarding the influence of gender on the mental health of children in care. There appears to be no clear pattern to the incidence of one gender experiencing more mental health problems than the other; this seems to be the case also with regards to different age groups. In their paper, comparing 13 studies ranging from 1986 to 1997, where the Child Behaviour Checklist (CBCL) was used, Armsden et al. (2000) report conflicting findings as regards the effect of age on the

impact of out-of-home care. Some studies reported notable differences between pre-adolescents and adolescents in problem behaviours. However, other studies reviewed by these authors reported no age-group differences in the CBCL scores. Furthermore, in their own study of children in foster care, Armsden et al. (2000) report that adolescents were rated higher on Anxious/Depressed and on Somatic Complaints than pre-adolescents. However, twice as many pre-adolescents scored in the combined clinical range on Delinquent Behaviour.

2.3.4 Contact with Family of Origin

Contact with family of origin is another factor which seems to influence the well-being of children and adolescents in care. The role of birth mothers was emphasised as the primary source of support by adolescents in care (Stanley, 2007), and for the majority of children, the preservation of birth-parent ties constitutes a primary goal (Fox & Berrick, 2007). Most children in care desire contact with their family, even if they do not want to live with them (Sinclair & Gibbs, as cited in Clough, Bullock, & Ward, 2006). Schiff et al. (2006) in fact stress that attachment to a substitute care-giver does not completely replace the effects of parental attachment, and suggest that the combination of newly formed relationships with care workers together with on-going and positive relationships with biological parents would be of most benefit to the child.

Fox and Berrick (2007) report that over half of children in kin placements and over two- thirds of children in non-kin placements wanted more frequent contact with their biological parents. Similarly, a study of children in kinship, foster, and group care by Chapman, Wall, Barth, and The NSCAW Research Group (cited in Fox & Berrick, 2007) suggests that two-thirds of children wanted more contact with their biological mother, and the large majority reported feeling ‘happy’ following visits. These authors also highlight the importance children placed on contact with siblings.

Stanley (2007), however, reports that although adolescents expect maternal support, these expectations are sometimes not met. In these cases, adolescents showed ambivalent feelings towards their birth mother, characterised by anger conflicting with love. Furthermore, contact with birth parents is not often available to children in care. Stanley (as cited in Stanley, 2007) hypothesises that this may be because of the high prevalence of mental health problems among

mothers whose children were looked-after, as this might have a negative impact on the mothers' capacity to support their children. In fact, research which addressed these mothers' experiences of parenting revealed women "struggling to parent at a distance but feeling ineffective and powerless in the face of both the demands of their children and the bureaucracy of the looked-after system" (Stanley, 2007, p. 260).

Katz et al. (2006), also, demonstrate a high level of need among the family members of children in care within the child protection system. Parental ill-health, parental substance misuse, maternal and sibling mental health problems, parental learning difficulties, and family contact with the criminal justice system, occurred in around two-thirds of cases in this study. In 3 out of 4 families there was a problem affecting at least 1 family member. The majority of families had previously been known to social services for child protection reasons. For many families, the child protection system was only one of a range of encounters with state services.

The authors highlight how the system failed to address the holistic needs of the family, focusing on abusive incidents, notwithstanding that the child protection issues were only one element in the long-standing practical and emotional family problems.

Nevertheless, not all research suggests that continuous contact between the child in care and the birth parents is beneficial for children's well-being. Schiff et al. (2006) in fact state that empirical support of this hypothesis is inconsistent, and that findings are equivocal.

2.3.5 Quality of Child-Caregiver Relationship

The quality of the relationship between an adult caregiver and a child is a key factor in successful fostering and residential care placements (Clough et al., 2006; Schiff et al., 2006). Disturbed care-giving relationships are often one of the significant etiologic features of conduct disorders, social withdrawal and inhibition, anxiety disorders, childhood depression, and other early clinical problems, which together with other risk factors, contribute to the onset and maintenance of psychopathology (Zeanah, as cited in Thompson, 2002).

Indeed, various research findings stress that resilience, in young people, even those coming from a very deprived background, can be elicited through a warm and supportive relationship with at

least one caregiver who serves as a positive role model (Rutter, Giller & Hagell, as cited in Stein 1990; Callaghan, et al., 2004; Smith, 2006). Schiff et al. (2006) suggest that positive relationships between children and care-workers may be associated with a more positive mental health status and higher life satisfaction than what would be expected from children's pre-admission history. Other studies have found that a child who has a good relationship with even one caregiver manifests greater resiliency than one who lacks such a relationship (Werner & Smith, as cited in Smith, 2006).

Furthermore, Stanley (2007) reports that adolescents in care also stress the importance of the caregiver, highlighting the significance of availability and continuity of carers and of staff who set clear limits. On the other hand, a lack of consistency, such as that created by the shift system in children's homes, was the focus of critical comments in Stanley's (2007) study. These aspects highlighted by Stanley's study also emerged in research conducted by the Office of the Commissioner for Children with children and young people coming from different services on the Maltese island (Gonzi, 2006).

Berridge (as cited in Clough et al., 2006) sets out a list of factors that his research suggests as characterising good relationships between children and caregivers, namely staff who are informal in approach, respect young people, are frank and sometimes challenging, are available, punctual and reliable, maintain confidentiality, help out in practical ways and keep their promises.

However, it may be difficult to provide children in care with the ideal care giving milieu, especially where children have attachment difficulties, notably Reactive Attachment Disorder (RAD). Although foster carers may be motivated to provide a warm, sensitive, care-giving environment, a child with RAD may not be predisposed to receive this. Thus, carers can feel de-skilled, and those working to support them need to be aware of the particular challenges children with these symptoms may bring (Millward et al., 2006).

Stanley (2007) brings out another important aspect in caregiver-child relationships, as he reports that adolescents value confiding in caregivers who had experience of similar difficulties or who had been looked after themselves. Carers who had been through the care system themselves were perceived by the adolescents as being able to understand them and to know how to support

them better. This suggests the importance of providing positive 'models of survival' which young people find authentic and encouraging.

2.3.6 Child-To-Child Relationships

Several writers point out that child-to-child relationships are also an important component of the child's world (Clough et al., 2006). Fox and Berrick (2007) state that friends, significantly, influence children's well-being and socio-emotional development. Disruption of friendships can be particularly troublesome for many children (Johnson, Yoken, & Voss, as cited in Fox & Berrick, 2007).

2.3.7 Stigma

Stigma and pathologisation of children and adolescents in care were seen as having a negative impact on mental health (Stanley, 2007). Children, in substitute care, often report that they feel that the experience of being looked-after by the state demeans them in the eyes of others. This marginalisation may be increased by the low preference given to residential care when compared to foster care by professionals themselves (Clough et al., 2006). Schiff et al. (2006) suggest that labelling and stigma of children in care may be the cause of low life satisfaction in academic areas.

2.3.8 Culture

The culture of the residential setting; including goals, attitudes, beliefs, rules of behaviour, procedures, routines and customs, internal cohesiveness and nature of boundary with the external world, was also found to influence children's well-being. (Sinclair & Gibbs, as cited in Clough et al., 2006). It is however interesting to note that staff training was not found to be a determining factor in outcomes of care (Sinclair & Gibbs, as cited in Clough et al., 2006). Sinclair and Gibbs (1998) suggest that this may be due either to the inadequacy of training programmes to equip staff, or to other staff factors, such as confidence, morale, culture and leadership which may be more important. Another possible determining factor mentioned by these authors is that staff may have been unable to put their training into effect.

2.4 Conclusion

It is apparent that the nature or characteristics of looked-after children have gradually changed over the years. Social workers and other professionals involved with services for looked-after children, increasingly, express the view that children and young people who are currently being taken into care have more extreme and complex difficulties than in previous decades (Kelly et al., 2003).

Despite the above evidence, the extensive mental health demands of looked-after children remain largely unmet (Callaghan et al., 2004). In fact, McCann et al. (1996) report that a significant number of adolescents in their study, who were suffering from severe, potentially treatable, psychiatric disorders, had gone undetected. Other studies (Bellamy, Gopalan, & Traube, 2010) have pointed out the ineffectiveness of using outpatient mental health services as an intervention for children in long-term foster care. However, it is worth noting that within this study the authors refer to the treatment group as those who attended outpatient services for at least 3 visits. As De Jong (2010) points out, the needs presented by this population may be more complex and possibly necessitate longer term work.

Results from a study by McMillen et al. (2004) outline how foster care case-managers are actively engaged in arranging mental health services for older youth in the foster care system. In fact, few youth with psychiatric problems were not receiving services, and youth who entered the system with psychiatric problems tended to receive mental health services soon after entering the system. However, the youth received alarmingly high rates of the most invasive and stigmatising mental health services (inpatient and residential programmes) and 50% of these youth did not receive a community-based service before receiving a more invasive service. There is relatively little evidence on the specificity and clinical cost-effectiveness of different types of interventions provided to children in care, however those based on attachment theory seem promising (Vostanis, 2007, 2010).

Mount et al. (2004) remark that only a small percentage of looked-after young people are seen

within Child and Adolescent Mental Health Services (CAMHS). According to Vostanis (2005) there is a low prioritisation of vulnerable children in such systems that tend to favour stability in order to be accessed by user groups. Mount et al. also outline a number of other possible reasons for this; namely, poor provision of mental health services for young people in care, ineffective interagency communication and fragmentation of services, lack of care pathways, perceived stigma of mental health problems, including fear of pathologising children in care, and failure of carers to identify mental health problems and to refer cases. Tarren-Sweeney (2010) points out that caregivers very often did not consult with mental health professionals, in spite of the presence of mental health difficulties, and when they did, it was more likely to be in cases where the child had a history of having been abused.

The consequences of failing to identify mental health problems in young people may be serious: in the short-term, care placements may be disrupted, and in the long-term, adult life opportunities and mental health may be jeopardised (Quinton & Rutter, as cited in Mount et al., 2004). Mount et al. (2004) continue to explain how, in view of the traumatic experiences of many looked-after young people, their further experiences on entering the care system and their high levels of need, identifying mental health problems, through assessment, is necessary. Furthermore, early identification of mental health needs is believed to be a cost effective intervention in a young population at high risk of developing mental health problems, where strong links have been established between poor child mental health and societal issues such as juvenile crime, substance abuse, self-harm and eating disorders. It is thus imperative that services are tailored in such a way that these children's different needs are dealt with in an efficient and effective manner (Clough et al., 2006). Chambers, Saunders, New, Williams and Stachurska (2010) recommend the need for a specific co-ordinating service to overcome the inherent fragmentation of this group. Essentially, health, welfare and educational services must operate together with an awareness of the processes and resource constraints in each sector if they are to deliver sustainable and reliable health care to this vulnerable group (Golding, 2010).

Study 2 Chapter 3: Methodology

3.0 Introduction

This study seeks to provide a picture of the psychological, behavioural, and academic profile of children living in out-of-home care, including those living in residential and foster care.

In this chapter, the research questions put forward for this study will be presented, and the quantitative approach adopted will be explained. A detailed description of how the data analysis was carried out will also be provided.

3.1 Research Questions

This study sought to answer the following main questions:

- What is the psychological, behavioural, and academic profile of children in out-of- home care?
- Which are the variables having an impact on the psychosocial functioning of these children?
- Is there a significant difference between children in residential care and children in foster care in terms of their profile?

The following hypotheses have been generated:

- Children living in out-of-home care have a higher rate of mental health problems that fall in the clinical range when compared with the general population.
- Children living in out-of-home care have mental health problems which are not adequately diagnosed.
- Children living in out-of-home care have mental health problems which are not adequately addressed.
- Children living in residential homes have more mental health problems which fall in the clinical range than children living in foster care.

- The mental health of children in out-of-home care is affected by several external factors.

3.2 Research Design

This quantitative study included the whole population of children in out-of-home care between the age of 5 and 18 years. The decision to include all of these children was primarily taken in order that all of these children in out-of-home care would be provided with a psychological, behavioural, and academic profile in their files. Such a profile would present a better indication to carers of the interventions they might need to take regarding the children under their care.

Moreover, having the whole population of children in care in our sample, made it possible to carry out a whole range of statistical analyses, including a thorough comparison between children in residential care and children in foster care.

Children under 5 were not included, as the research team had already written a paper considering the ill effects of institutional placements for children under 5 (Abela, Abdilla, Abela, Camilleri, Mercieca & Mercieca 2008) and had advocated against placing children at such a tender age in a residential setting.

This research design necessitated the help and support of the *Looked-After Children* service within *Aġenzija APPOĠĠ*[1], as well as teachers in schools, other carers in residential homes, as well as foster carers of children themselves who helped us with the assessments. Training was offered to the social workers to help us in our work.

This preparation enabled the social workers to expand their repertoire of skills by developing their proficiency in using the CBCL and SDQ in their clinical work. In addition, this also granted the possibility to each new child, put into out-of-home care from the date of the research onwards, to have such an assessment in his or her file.

[1] *Aġenzija APPOĠĠ* is the central national agency for children and families in need.

3.3 Research Tools

Two research tools were used in this study, namely, the Child Behaviour Checklist (CBCL) and the Strength and Difficulties Questionnaire (SDQ). A Demographic Data Sheet including important information about children in out-of-home care also forms part of the questionnaire. The CBCL provides a broad description of the symptoms of emotional and behavioural disturbance, together with social competencies exhibited by the child over the past 6 months. The SDQ provides a measure of social, emotional, and behavioural functioning.

3.3.1 Rationale for Using the SDQ and the CBCL

It is increasingly being recognised that diagnosing a psychiatric disorder, solely in terms of the recognised constellations of psychiatric symptoms, can result in implausibly high "caseness" rates (Goodman, 1999). Goodman (1999) maintains that "an exclusive focus on symptoms ignores several factors that have an important bearing on whether a child or teenager has a psychiatric disorder" (p. 791). In fact, since "symptoms alone are not a good guide to the presence or absence of psychiatric disorder in childhood and adolescence, the current operational diagnostic criteria for most child psychiatric disorders stipulate that the diagnosis cannot be made unless the relevant symptoms result in the young person experiencing substantial distress or social impairment" (Goodman, 1999, p. 791).

Hence, the willingness to obtain a comprehensive picture, as much as possible, and the fact that both the CBCL and the SDQ look into the child's overall strengths and difficulties, influenced our choice of these two standardised questionnaires.

These two tools seek the views of different persons who are in contact with the child, which is an important asset to consider given that a child's functioning can vary from one context to another, and that comprehensive evaluations of functioning is best obtained from multiple sources.

It is important to note that the SDQ has the added advantage that it can be completed by both parents and teacher, in a relatively short period of time. Although the CBCL provides

a Teachers' Report Form, this was considered to be more time-consuming to fill in and score than the SDQ-Teacher Form, and therefore the latter was preferred. When possible, data collected from this form enabled the corroboration of information obtained from both the 'home' and school environment.

In addition, both the CBCL and the SDQ have the added advantage of having questionnaire forms specifically designed to be completed by the children themselves; the Youth Self Report (YSR) and the Informant-Rated Form respectively, enabling us to gain an understanding of the child's strengths and difficulties as perceived from his or her own point view. Once again, as the latter form is less time-consuming to fill in and score, it was chosen over the YSR.

Furthermore, another advantage of the SDQ is that it has been locally standardised, hence enabling the comparison of the population of children in out-of-home care with the general local population.

Information obtained from the CBCL could be used to complete the DSM[2]-oriented scales. As will be explained in further detail below, the DSM-oriented scales use diagnostic labels for specific psychiatric conditions which are closely related to those found in the DSM. Hence, it provided a tool to compare the diagnosis already given to the children (captured through the demographic data sheet) with the tentative diagnosis that emerged after the CBCL was completed; this data would not have been captured through the SDQ.

An added benefit of the CBCL over-standardised closed-ended forms is that, it also enables the user to obtain more individualised descriptions through its open-ended questions. More specifically, the CBCL targets the respondent's concerns about the child, and how he/she looks at his/her strengths. This data was not analysed by us. However, this part of the tool was also administered as the research team deemed that the children benefitted from having such information in their files.

[2] The *Diagnostic and Statistical Manual of Mental Disorders* (DSM) published by the American Psychiatric Association provides a common language and standard criteria for the classification of mental disorders.

3.4.2 The Demographic Data Sheet

Through this sheet the research team aimed at obtaining demographic data and additional information regarding the child's circumstances, which would not have been captured through the other standardised research tools.

The data sheet, which can be reviewed in Appendix A, consisted of 8 distinct sections which will be presented in further detail hereunder.

Section A provides demographic information regarding the child's nationality and ethnicity.

Section B provides information pertaining to any known medical condition, mental health problem, and/or learning or physical disability or developmental disorder. Problems in each area were listed and the respondent had to select all those that where applicable. At the end of each list, the informant was asked to provide any other pertinent information which was not included in the list provided.

Section C provides a brief overview of the child's care history. The variables elicited include the age of the child's first admission into care, the total numbers of transitions while in care, and a brief description of the type of moves experienced. The total length of time the child spent in care to date was also requested.

Section D requested information regarding the child's legal status at the time of research. The main reasons for entry into care with regards to parental issues, child issues, and external factors, were also elicited through a list which was presented in a close-ended format where informants had to tick where applicable. Once again, at the end of each list, the informant was asked to provide any other pertinent information that was not included in the list.

Section E sought information about the child's placement as well as the child-to-adult ratio present within that particular setting.

Section F inquired about the number of siblings the child had, how many of them were in care, and whether the child was placed with any of his or her siblings. Moreover, the

type and frequency of contact the child had with siblings, mother, and father, including whether this was supervised or not, was also recorded. For each question a number of nominal or ordinal categorical options were provided, from which informants had to select the most appropriate. Once again, at the end of each list the informant was asked to provide any other pertinent information which was not included in the list.

The focus of Section G was to obtain an overview of the services the child received from different professionals, both in the past and at the time of the study. Respondents were not directly asked whether social work services were received by the child, since all children in the study were being followed up by a social worker from the *Looked-After Children* service of *Aġenzija APPOĠĠ.* This section also included a question about whether the child received input from a high support worker and the number of hours received per week.

In the last section, Section H, information about the child's schooling was obtained. This included whether a child was statemented, and the type of class support he/she was receiving, the number of days the child spent away from school due to absenteeism, and whether the child repeated class. The child's grades obtained during the annual examinations of the previous scholastic year for English, Maltese, and Maths were also recorded. In the case of children who were in year 4 or younger, and who would not sit for annual examinations, the grades recorded were those obtained in the previous year in these three core subjects when available. As for children who had finished Form 5, grades obtained in Form 5 were included. Lastly, the child's current level of schooling was requested.

3.4.3 The Child Behaviour Checklist/6-18 (Achenbach, 2001)

The Child Behaviour Checklist (CBCL/6-18), which can be utilised with youngsters aged between 6 and 18 years, was filled in by a parent surrogate (namely the child's foster carers, residential social worker, and housemothers) and provided a broad description of the child's emotional and behavioural symptoms indicating any disturbance which the child might have exhibited at the time of completion or in the six months prior to the completion of the checklist. The child's social skills were also covered in the check list.

Appendix B provides this checklist, which extends over four pages. The first part of the check list requests demographic information about the child, including gender, date of birth, age, ethnic group, and grades in school. Subsequently, in pages 1 and 2 the respondent was asked a series of questions, 20 in all, regarding the child's competence in extra-curricular activities, social relations, and school performance. More specifically, item I asks the respondent about the child's favourite sports, whereas item II asks about the child's favourite hobbies, activities, and games. For each selection the respondent was asked to compare the child to other children of the same age on the length of time the child spends in each activity, and on the level of performance. Each item was scored on a 3-point scale ranging from 'less than average', 'average', 'more than average' for the first part of the question, and 'below average', 'average', 'above average' for the second part of the question. An option 'don't know' was also provided of each item.

In item III, the respondent is asked to list any organisations, clubs, teams, or groups the child belonged to. Once again, for each of these activities the respondent had to rate the child with others of the same age on his/her level of activity, on a 3-point scale, ranging from 'less active', 'average', 'more active'. The option 'don't know' was again provided for this item.

Item IV asks for the list of jobs or chores the child might have. The child's performance on each activity when compared to others of the same age was also rated on a 3-point scale ranging from 'below average', 'average', 'above average', with the additional option 'don't know'.

In Item V, the respondent is asked about the number of close friends the child has, with the options being 'none', '1', '2 or 3', '4 or more'. The respondent was also asked about the child's frequency of involvement per week in out of school activities with any of his or her friends. The categories for this variable ranged from 'less than 1' to '3 or more'. In addition, in item VI, the respondent is asked about how well the child gets along with his or her brothers and sisters, other children, and his or her parents. The ability to play and work alone, when compared to children of the same age was also assessed. A 3-point Likert scale was used for these ordinal categorical variables ranging from 'worse', 'average' to 'better'.

Subsequently, item VII looks into the child's academic achievement such as the child's performance in academic subjects, and whether he/she received special education, remedial services, or attended a special class or school. It also asks whether the child has repeated any grades and whether the child had any academic problems. Moreover, the respondent was asked about any illness or disability and to write about any concerns she or he has about the child, and to provide a description of the child's strengths.

Pages 3 and 4 of the CBCL/6-18 request rating scores on 112 items describing a number of specific behavioural, emotional, and social problems encountered. The respondent had to rate the extent of how much the statement describing a child's behaviour was true, at the time the CBCL was being completed or in the previous 6 months. Items were rated on a 3-point scale ranging from '0'–not true, '1'–somewhat or sometimes true, and '2'–very true or often true. Items 2, 9, 29, 40, 46, 56, 58, 66, 70, 73, 77, 79, 83, 84, 85, 92, 100, 105, 113 are open-ended to enable the respondents to clarify their replies or report additional difficulties.

3.4.3.1 CBCL/6-18: validity and reliability

Good internal consistency has been reported with regards to the different measures of the CBCL; competence scores (Cronbach's alpha α ranging between 0.63 and 0.79), empirically based problem scales (α ranging between 0.78 and 0.97), while for DSM-oriented scales α ranged from 0.72 to 0.91 (Achenbach & Rescorla, 2001). Additionally, content validity of the competence and problem items showed that all items discriminated significantly ($p<0.01$) between demographically matched referred children and non-referred children (Achenbach & Rescorla, 2001).

Given that the social workers, who aided respondents in filling in the questionnaire, were proficient in the English language it was deemed unnecessary to translate the questionnaire to Maltese. Moreover, content validity was not required, since all the items in the questionnaire were retained and no changes were carried out to their descriptions.

The test-retest reliability of this tool was explored given that the CBCL has never been used with the local population. The carers of 15 respondents were asked to score the CBCL

again after a period of 1 year. Cronbach's alpha was calculated for the 4 major scales, namely the Total Internalising Scale, Total Externalising scale, and Total Syndrome scale, and the Total Competence scale. Results showed satisfactory reliability scores for all scales. Cronbach's alpha was in fact .809 for the Total Internalising Scale, 0.789 for the Total Externalising Scale, 0.893 for the Total Syndrome Scale and 0.737 for the Total Competence Scale.

3.4.3.2 Scoring the CBCL/6-18: the competence scales and the syndrome scales

For scoring purposes, the scores obtained on each of competence items on pages 1 and 2 of the CBCL were transferred onto the respective forms entitled CBCL Profile for Boys - Competence Scales or CBCL Profile for Girls - Competence Scales. Related items formed three distinct subscales: Activities, Social, and School. A child's score on each subscale was displayed, in relation to percentiles based on an American national sample of non-referred children of the child's gender and age. A Total Competence score was also obtained, by summing the scores obtained on the three subscales.

The scores obtained on each of the 118 problem items on pages 3 and 4 were transferred onto the forms entitled CBCL/6-18 Profile for Boys - Syndrome Scales or CBCL/6-18 Profile for Girls - Syndrome Scales form, whereby they are grouped into scales for eight empirically based syndromes: Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behaviour, and Aggressive Behaviour. Another scale, entitled Other problems, groups items that do not fall under any of the other eight scales. A Total Syndrome score was obtained by adding the scores on all the 9 scales.

Hand scoring guidelines provided in the Manual for the ASEBA School-Age Forms and Profiles (Achenbach & Rescorla, 2001) were followed. It is important to note that even though the contents of the scales and the scoring methods are the same for both genders and age groups, CBCL/6-18 has separate Profile forms for boys and girls that portray gender-specific norms for ages 6-11 and 12-18.

Reference data for CBCL scores are available from two types of samples. A large American community sample of 1,753 children, who had not recently received professional

help for behavioural and/or emotional difficulties in the preceding 12 months, made up the non-referred reference sample and provided normative data. A second sample of children, who were seen at various mental health settings and were demographically matched with the non-referred normative sample, made up the clinically referred sample, and provided comparison data.

The Competence Profile and the Syndrome Profile will be explained in further detail in the subsequent two sections.

3.4.3.3 The CBCL competence profile

The competence and adaptive functioning items offer specific information about the child's functional strengths at home and at school, with peers, and in leisure activities.

The Activities Scale consists of scores for the number of sports, other recreational activities, jobs and chores that the child is involved in. It also takes into account ratings of the amount and quality of the child's participation in the various undertakings. The Social Scale includes scores for participation in organisations, number of close friends, number of weekly contact with friends, how well the child gets along with others, and how well the child plays and works alone. The School Scale consists of ratings of performance in academic subjects, the need for special remedial services, grade repetition, and other school problems. The Total Competence score is obtained by summing up the metric raw scores obtained on the Activities Scale, Social Scale, and School Scale. If any of the competence scale scores is missing, the Total Competence score is not computed.

The percentiles, displayed on the left hand side of the Competence Profile, enable the user to compare the child's score on each competence scale with percentiles obtained from normative samples in 40 different districts in the US, and District Columbia of non-referred children of the child's gender and age.

Clinical, Borderline, and Normal ranges are provided for all the Scales. A score falling in the Clinical Range implies that the child obtained a score lower than those obtained by 98% of the non-referred sample, for that particular age group and gender. When a score falls in the Borderline Range, it implies that the child's score was low enough to be of concern, although it was not in the clinical range. Scores falling between the 2nd and 7th

percentiles fall within this range. Normal Range signifies that the child obtained a score above the 7th percentile.

With regards to the Total Competence score, a child's score falls within the Clinical Range if it is below the 10th percentile, within the Borderline Range if it falls between the 10th and 16th percentile, and in the Normal Range if it is above the 16th percentile.

Tables 1 (below) and 2 (overleaf) provide a breakdown of how the metric raw scores on the three different scales, and on the Total Competence Scale, can be categorised into Clinical, Borderline, and Normal categories according to age and gender.

Table 1: *Ranges for metric raw scores on the CBCL Profile for Girls – Competence Scales categorised according to age and according to Clinical, Borderline, and Normal Ranges*

	Age groups	**Clinical**	**Borderline**	**Normal**
Activities	*6 – 11*	0 – 5	5.5 - 7	7.5 – 15
	12 – 18	0 – 4.5	5 – 6.5	7 – 15
Social	*6 – 11*	0 – 3.5	4 - 5	5.5 – 14
	12 – 18	0 – 4	4.5 - 5	5.5 – 14
School	*6 – 11*	0 -2.5	3 – 3.5	4 – 6
	12 – 18	0 – 2	2.5	3 – 6
Total Competence Score	*6 – 11*	0 – 19.5	20 - 21	21.5 – 35
	12 – 18	0 – 18.5	19 - 20	20.5 – 35

Table 2: *Ranges for metric raw scores on the CBCL Profile for Boys – Competence Scales categorised according to age and according to Clinical, Borderline, and Normal Ranges*

	Age groups	Normal	Borderline	Clinical
Activities	*6 – 11*	0 – 6.5	7 - 8	8.5 -15
	12 – 18	0 – 5.5	6 - 7	7.5 – 15
Social	*6 – 11*	0 – 3.5	4 – 4.5	5 – 14
	12 – 18	0 – 3.5	4 - 5	5.5 – 14
School	*6 – 11*	0 – 2.5	3	3.5 - 6
	12 – 18	0 – 2	2.5	3 - 6
Total Competence Score	*6 – 11*	0 – 19	19.5 – 20.5	21 - 35
	12 – 18	0 – 19	19.5 - 21	21.5 - 35

3.4.3.4 The CBCL syndrome profile

A syndrome is a set of problems that tend to co-occur. The CBCL compiles 8 syndrome scales, each summarising the kinds of problems that form the syndrome: Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behaviour, and Aggressive Behaviour.

Similar to the competence and adaptive functioning profiles, percentiles for the normative sample are displayed on the left hand side of the profile. Clinical, Borderline, and Normal ranges are provided for all the Syndrome scales. Scores in the Clinical Range signify that the child obtained a score that was lower than the scores obtained by 97% of the non-referred children for that particular age group and gender. Scores in the Borderline Range (between 93rd and 97th percentile) imply that the child's problems are high enough to be concerning, but are not as clearly deviant as those which obtained a score which falls in the Clinical Range. Scores in the Normal Range signify that the person who filled in the CBCL did not perceive any problems which are of clinical concern.

The syndrome scales, can be further scored into two broad groupings of syndromes: Internalising syndromes, consist of problems that are mainly within the self and include the syndromes: Anxious/Depressed, Withdrawn/Depressed and Somatic Complaints. On the

other hand, Externalising syndromes consist of problems that mainly involve conflicts with other people and with their expectations of the child. This group includes the syndromes Rule-Breaking Behaviour, and Aggressive Behaviour.

Clinical, Borderline, and Normal ranges are also provided for the Internalising and Externalising scores. Hence, scores in the Clinical Range are above the 90th percentile, in the Borderline Range fall between the 84th and 90th percentile, whereas scores in the Normal Range fall below the 84th percentile.

Thus, by looking at the child's scores for Internalising and Externalising syndromes, the researcher can have a good indication of where the child's problems tend to prevail and how they are likely to be manifested.

The Total Syndrome score is obtained by adding the scores for Internalising syndromes, Externalising syndromes, Social Problems, Thought Problems, Attention Problems, and Other Problems. Once again Clinical, Borderline, and Normal ranges are provided for the Total Syndrome score. Similar to the Internalising and Externalising scales, scores in the Clinical range are above the 90th percentile, in the Borderline Range fall between the 84th and 90th percentile, whereas scores in the Normal Range fall below the 84th percentile.

Tables 3 and 4 (overleaf) provide a breakdown of how the metric raw scores on the Internalising, Externalising, and Total Syndrome Scales are categorised into Normal, Clinical, and Borderline ranges according to age and gender.

Table 3: *Ranges for metric raw scores on the Internalising, Externalising, and Total Syndrome Scales of the CBCL/6-18 Profile for Girls – Syndrome Scales categorised according to age and according to Clinical, Borderline, and Normal Ranges*

	Age groups	Normal	Borderline	Clinical
Internalising	*6 – 11*	0 – 10	11 - 13	14 - 64
	12 – 18	0 – 11	12 - 14	15 - 64
Externalising	*6 – 11*	0 – 11	12 - 14	15 - 70
	12 – 18	0 – 11	12 - 15	16 - 70
Total Syndrome Scores	*6 – 11*	0 – 37	38 – 48	49 - 240
	12 – 18	0 – 35	36 - 44	45 - 240

Table 4: *Ranges for metric raw scores on the Internalising, Externalising, and Total Syndrome Scales of the CBCL/6-18 Profile for Boys – Syndrome Scales categorised according to age and according to Clinical, Borderline, and Normal Ranges*

	Age groups	Normal	Borderline	Clinical
Internalising	*6 – 11*	0 – 8	9 - 11	12 - 64
	12 – 18	0 – 10	11 - 13	14 - 64
Externalising	*6 – 11*	0 – 11	12 - 15	16 - 70
	12 – 18	0 – 13	14 - 18	19 – 70
Total Syndrome Scores	*6 – 11*	0 – 38	39 - 48	49 - 240
	12 – 18	0 – 39	40 - 51	52 - 240

3.4.3.5 DSM-oriented scales

The information obtained from the CBCL/6-18 can also be used to review the child's problems from the perspective of a formal diagnostic system, the DSM-IV.

Specific items of CBCL/6-18 were recoded to have a metric scale from which six distinct subscales; namely, Affective Problems, Anxiety Problems, Attention Deficit/Hyperactivity Problems, Conduct Problems, Oppositional Defiant Problems, and Somatic Problems were generated. As with the other CBCL scoring forms, there are separate scoring forms for the

CBCL DSM-oriented scales for boys and girls that portray gender-specific norms for ages 6 to 11 and 12 to 18.

The CBCL DSM-oriented scales were normed on the same national US sample as the empirically based scales. Also similar to the Competence and Syndrome Profiles mentioned above, percentiles are also displayed on the left-hand side of the CBCL DSM-Oriented Scales profile forms. Hence, scores between the 93rd and 97th percentile fall within the borderline range. Scores above the 97th percentile fall in the clinical range, whereas those below the 93rd percentile fall within the normal range.

Table 5: *Ranges for metric raw scores obtained for each scale of the CBCL DSM-Oriented Scales for Girls categorised according to age and according to Normal, Borderline, and Clinical Ranges*

DSM- Oriented Scales	Age groups	Normal	Borderline	Clinical
Affective Problems	*6 – 11*	0 – 4	5 - 6	7 – 26
	12 – 18	0 – 5	6 - 8	9 – 26
Anxiety Problems	*6 – 11*	0 – 4	5	6 – 12
	12 – 18	0 – 4	5	6 – 12
Somatic Problems	*6 – 11*	0 – 3	4	5 – 14
	12 – 18	0 - 3	4	5 – 14
Attention Deficit/Hyper-Activity Problems	*6 – 11*	0 – 7	8 - 9	10 -14
	12 – 18	0 – 6	7 - 8	9 – 14
Oppositional Defiant Problems	*6 – 11*	0 – 5	6	7 – 10
	12 – 18	0 – 5	6 - 7	8 – 10
Conduct Problems	*6 – 11*	0 – 4	5 - 6	7 – 34
	12 – 18	0 -5	6 -10	11 – 34

Table 6: *Ranges for metric raw scores obtained for each scale of the CBCL DSM-Oriented Scales for Boys categorised according to age and according to Normal, Borderline, and Clinical Ranges*

DSM- Oriented Scales	Age groups	Normal	Borderline	Clinical
Affective Problems	*6 – 11*	0 – 4	5 - 6	7 - 26
	12 – 18	0 – 5	6 - 7	8 - 26
Anxiety Problems	*6 – 11*	0 – 3	4 - 5	6 - 12
	12 – 18	0 -3	4	5 -12
Somatic Problems	*6 – 11*	0 – 2	3 - 4	5 - 14
	12 – 18	0 – 3	4	5 - 14
Attention Deficit/Hyper-activity Problems	*6 – 11*	0 – 8	9 - 10	11 - 14
	12 – 18	0 – 7	8 -10	11 - 14
Oppositional Defiant Problems	*6 – 11*	0 – 5	6	7 - 10
	12 – 18	0 – 5	6 -7	8 -10
Conduct Problems	*6 – 11*	0 -5	6 – 8	9 - 34
	12 – 18	0 – 7	8 - 12	13 -34

Tables 5 and 6 above provide a breakdown of how the metric raw scores on the six CBCL DSM-oriented scales are categorised into Normal, Clinical, and Borderline according to age and gender.

It is important to note that great caution is to be taken when interpreting CBCL DSM-oriented scales, as scores on the CBCL DSM-oriented scales are not directly related to a DSM diagnosis. This is due to a variety of reasons, including the fact that CBCL DSM-oriented scales do not match exactly the criteria for DSM diagnoses. In addition, the scores on this scale are a reflection of the respondent's perception of the child's behaviour in the past six months, and do not include age of onset and duration of problems, which are important in determining cases for some DSM diagnoses. Moreover, whereas a diagnosis on DSM criteria is carried out by judging which criteria are present and whether the necessary criteria are met to merit a diagnosis, the scores on the CBCL DSM-oriented scales are obtained by summing up the item scores ranging from 0 to 2 to obtain a total score for each scale. In addition, whereas the DSM criteria are the same for children of both genders,

different ages, and all sources of data, the profile obtained from CBCL DSM-oriented scales is compared to a national US sample of similarly aged children of the same gender, and as rated by the same kind of respondents.

Hence, while caution has to be taken, if a child scores high on one of the CBCL DSM-oriented scales, a diagnosis corresponding to that scale should be considered. Consequently, the necessary DSM criteria for symptoms, impairment, age of onset, and exclusion of other diagnosis based on additional information, would have to be analysed and evaluated. Of note is that when multiple scores are in the borderline or clinical range multiple diagnoses or 'comorbidity' can be considered. Moreover, even if the child does not meet the DSM criteria for a particular diagnosis, high scores on CBCL DSM-oriented scales and on the empirically based syndromes suggests that the child needs help in those particular areas.

In addition, the CBCL DSM-oriented scales enable the user to see a relationship among the different difficulties the child is experiencing. Furthermore, given that the CBCL DSM-oriented scales are quantitatively scored, they can be used to assess the severity of problems.

3.4.4 The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)

3.4.4.1 Informant and self-report versions of the SDQ

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) is a short screening questionnaire which provides a measure of social, emotional, and behavioural functioning. Each of the 25 items can be answered on a 3-point Likert scale: 'not true', 'somewhat true', and 'certainly true', scored as 0, 1, and 2 respectively.

This tool is designed for children aged between 4 and 16 years. However, since our sample was composed of children, aged between 6 and 18 years, the SDQ was administered to the whole sample. It has two informant-rated versions i.e. 'Parent' (Code: -$S^{4\text{-}16}$/-$B^{4\text{-}16}$; Parents-Boys, and Parents-Girls respectively; see Appendix C) and 'Teacher' (Code: Għ-$S^{4\text{-}16}$/Għ-$B^{4\text{-}16;}$ Teacher-Boys, and Teacher-Girls respectively; see Appendix D) versions. In order to facilitate the readability of the results obtained from these scales, the 'Parent' version of the SDQ will be referred to as the 'Carer' version. A self-report version

(Code: St; Student; see Appendix E) for children aged between 11 and 16, is also available. The parent, teacher, and self-report versions differ only slightly from each other, mainly with regards to the wording used, such as using 'your child' instead of 'this child'. The items on the SDQ were numbered so as to aid clarity when explaining the tool and procedure followed.

It is good to note that though originally published in English, the SDQ has been translated into Maltese and tested for reliability by Cefai, Cooper, and Camilleri (2008). Although there were few instances when the English version was more appropriate, given the mother tongue of the carers answering the questionnaire, the Maltese version was mainly used in our study. The Maltese version of the SDQ has the male and female forms which were used according to the child's gender.

3.4.4.2 The SDQ impact supplement sheet

The 25-item multi-informant SDQ focuses entirely on symptoms and positive attributes, and does not enquire about any of the other factors relevant for determining caseness. However, the social impairment section explores whether the respondent thinks the child has a problem in different areas of everyday functioning, including peer relationships, classroom learning, home life, and leisure activities. According to the World Health Organisation (1996) these four domains are the main areas that need to be considered when rating psychosocial disability. Since these areas are captured through the extended version of the SDQ, known as the 'impact supplement', it was used with all respondents.

Question 26, which is the first question on each version of the impact supplement, asks respondents whether the child has difficulties in one or more of the following areas: emotions, concentration, behaviour, and ability to get on with other people. The response to these perceived difficulties is presented in the form of a Likert scale, with options ranging from no difficulties to severe difficulties. When respondents perceive no problems, all the remaining items are skipped. In the case of minor, definite or severe difficulties, respondents were asked to complete the remaining items regarding resultant chronicity, distress, social impairment, and burden (Goodman, 1999). The impact score generated from the questions was used to assign students to one of three categories, namely normal, borderline and abnormal, with students in the abnormal band being considered as severe

SEBD cases.

3.4.4.3 SDQ: validity and reliability

Goodman, Ford, and Simmons (2000) note that the SDQ is able to detect children with psychiatric disorders in the community with reasonable efficiency; identifying around two-thirds of children and adolescents with psychiatric disorders in the community when rated by multiple informants. Findings suggest that caseness cut-offs on the SDQ total difficulties score can be used to distinguish between cases and non-cases (Goodman, Meltzer, & Bailey, 1998). Moreover, a study by Goodman, Ford, Corbin, and Meltzer (2004) suggests that using the carer and teacher versions can potentially improve the detection of behavioural, emotional, and concentration problems among looked-after children.

The SDQ also has acceptable reliability and validity, performing at least as well as the CBCL (Goodman, et al., 1998; Goodman, 1999). In addition, Goodman and Scott (1999) also indicate that the informant-rated SDQ also seems, at least, as good as the Child Behaviour Checklist at detecting conduct and emotional problems, and better than the CBCL at detecting inattention and hyperactivity. Goodman, et al. (2000) remark that SDQs are good at detecting conduct, hyperactivity, depressive and some anxiety disorders, but are poor at detecting specific phobias, separation anxiety and eating disorders.

The Maltese translation of the SDQ, which was used in the current study, has shown satisfactory content validity in the Maltese national study carried out by Cefai, Cooper, and Camilleri (2008) with children in primary and secondary schools (aged between 5 and 16 years). The sample in this study amounted to 10% of the total school population of 2005-2006. Cronbach's Alpha coefficients, regarding content validity, ranged from 0.713 to 0.893 on the 5 subscales for the teacher, parent and self-report versions.

Reliability of the SDQ was also found to be high in the above research. Split-half reliability was calculated to be 0.799, while Cronbach's alpha for each item ranged from 0.657 to 0.920. A test-retest measure was also employed with a sample of over 700 teachers, and correlational analysis was carried out. Results showed positive correlations in all subscales, which were greater than 0.7 and statistically significant at the 0.05 level of

significance. Additionally, Pearson's correlation was also positive and significant for each of the subscales in the Teacher, Parent, and Self versions, indicating agreement between the responses provided by different participants.

Since reliability and validity were found to be high when the Maltese version of the SDQ was used with the Maltese population, it was deemed unnecessary to reassess these factors in the current study, considering the same version of the questionnaire and the same cut-off points were used to determine the degree of the children's difficulties and prosocial behaviour.

3.4.4.4 Scoring the SDQ

For scoring purposes, two scoring forms were used, where each form comprised 25 items measured on a 3-point scale. The first form entitled Scoring the Informant-Rated Strengths and Difficulties Questionnaire was used to score the carers' and teachers' replies; whereas, the second form entitled Scoring the Self-Report Strengths and Difficulties Questionnaire was used to score the children's replies.

On the scoring form, items are grouped into four subscales which measure specific types of clinical problems, and another subscale which measures positive behaviour. Scores on each subscale can range from 0 to 10. The table below shows how the item numbers of each of the five different scales.

Table 7: *SDQ scales grouped by item number*

Emotional Symptoms Scale	3, 8, 13, 16, 24
Conduct Problems Scale	5, 7, 12, 18, 22
Hyperactivity Scale	2, 10, 15, 21, 25
Peer Problems Scale	6, 11, 14, 19, 23
Prosocial Scale	1, 4, 9, 17, 20

A total difficulties score, which can range from 0 to 40, can also be obtained by summing up the scores on the first four above mentioned subscales.

Tables 8, 9, and 10 (below) show how the Total Difficulties score as well as raw scores on the five different scales can be categorised into normal, borderline, and abnormal categories.

Table 8: *Carer's SDQ scale scores for normal, borderline, and abnormal ranges*

SDQ Scales	Normal	Borderline	Abnormal
Total Difficulties Score	*0-15*	*16-18*	*19-40*
Emotional Symptoms Score	*0-4*	*5-6*	*7-10*
Conduct Problems Score	*0-3*	*4*	*5-10*
Hyperactivity Score	*0-6*	*7*	*8-10*
Peer Problems Score	*0-3*	*4*	*5-10*
Prosocial Behaviour Score	*8-10*	*7*	*0-6*

Note: Adapted from Cefai, Cooper, and Camilleri. (2008)

Table 9: *Teacher's SDQ scale scores for normal, borderline, and abnormal ranges*

SDQ Scales	Normal	Borderline	Abnormal
Total Difficulties Score	*0-14*	*15-17*	*18- 40*
Emotional Symptoms	*0-3*	*4-5*	*6-10*
Conduct	*0-2*	*3-4*	*5-10*
Hyperactivity Score	*0-6*	*7-8*	*9-10*
Peer Problems Score	*0-3*	*4*	*5-10*
Prosocial Behaviour Score	*5-10*	*4*	*0-3*

Note: Adapted from Cefai, Cooper, and Camilleri. (2008)

Table 10: *Self-Rated SDQ scale scores for normal, borderline, and abnormal ranges*

SDQ Scales	Normal	Borderline	Abnormal
Total Difficulties Score	*0-15*	*16-17*	*18-40*
Emotional Symptoms Score	*0-4*	*5*	*6-10*
Conduct Problems Score	*0-3*	*4*	*5-10*
Hyperactivity Score	*0-5*	*6*	*7-10*
Peer Problems Score	*0-3*	*4*	*5-10*
Prosocial Behaviour Score	*7-10*	*6*	*0-5*

Note: Adapted from Cefai, Cooper, and Camilleri (2008).

3.5 Procedures Adopted for the Study

In this section, the procedure used to obtain access to the sample will be explained together with the ethical considerations made in order to provide maximum respect to the participants. Moreover, details on the procedure used to administer the instruments will be outlined.

3.5.1 Seeking the Collaboration of APPOĠĠ and the Education Division

The *Looked-After Children* (LAC*)* service within *Aġenzija APPOĠĠ* follows up children who are living away from their family, and who are currently residing in residential care or are in foster care. Hence, in order to recruit our sample we needed to collaborate with *Aġenzija APPOĠĠ*, and more specifically with the LAC team as they work directly with the client population with whom the study was to be carried out.

For this purpose a formal meeting was held with the senior Management at *Aġenzija APPOĠĠ*. The aim of the meeting was to present the study in some detail, and to seek the approval of management in order that such a study could be carried out. The study was to reach all of the children in care and required the participation of social workers in the LAC service. During this meeting the research aims, research design, and research tools were presented and discussed. Once the study was endorsed by management, other meetings were then held with the Service Area Leader of LAC, during which, several important issues, including the active involvement of the social workers and ways how the confidentiality of the children was going to be safeguarded, were discussed. As such the research team was to receive the protocols marked with an index number. Only the social workers who were directly involved with the children would gather the information from the relevant sources and fill in the instruments. Approval from the Education Department was also sought to enable the social workers to deliver the SDQ – Teacher form to the children's teacher.

3.5.2 Sample Composition

The criteria for inclusion in the sample were two. First and foremost, all children had to be in out-of-home care. By out-of-home care, the research team referred to all those children living in residential, kin, or unrelated foster care. Secondly, children had to be 5 years of

age by the end of April 2009 or 18 years old by end of April 2009, to be included in the sample.

The sample included a total of 291 children, which is the whole population of children in out-of-home care. However, not all protocols were returned and ultimately the total number of participants was 270. Of these, 153 (52.6%) participants were living in a residential home, 56 (19.2%) in unrelated foster care, 52 (17.9%) in related foster care, and 8 (2.7%) in a mental health setting.

Residential care settings incorporated all the church residential homes which include: *Conservatiorio Vincenzo Bugeja, St. Rita Home, St. Joseph Home (Haz-Zabbar), Dar Sagra Familja, St. Patrick's Home, Osanna Pia, Angela House, St. Joseph Home (St. Venera), Fra Diegu Home, Dar Don Bosco,* and *St. Theresa Home*.

Children following the residential therapeutic programme *Kids in Development* (KIDs) offered by the *Richmond Foundation*[3] were also included. This programme offers a treatment package of three years for children aged between 5 and 10 years presenting with severe emotional and challenging behaviour. In addition, children who had spent time living in out- of-home care but were admitted at either the Young People's Unit (YPU), an acute psychiatric unit which caters for children during an acute phase of disturbance, or at the main psychiatric hospital, were also included. A number of children in out-of-home care who were making use of the residential service offered by the YMCA[4] satisfied the inclusion criteria.

The sample excluded children who were under a care order but were living with their parents. Children living in a home for physical or mental disability, such as *Dar il-Kaptan* and *Dar tal-Providenza*, were also excluded.

[3] The Foundation is a non-governmental and non-profit making organisation in terms of the laws of Malta. It is a leading local Non-Governmental Organisation in the provision of community services for persons with mental health difficulties and in the promotion of mental health and the prevention of mental illness amongst the public.

[4] YMCA Valletta, forms part of the YMCA International Network and is a non-profit, voluntary and ecumenical movement that supports the positive development of youths as a preventive measure, as well as intervenes by offering a spectrum of social work services to individuals who are underprivileged or socially disadvantaged. The specialisation in this regard is support, assistance and rehabilitation of the homeless.

3.5.3 Obtaining Consent and Delivering Training Seminars

Following the approval of *Aġenzija APPOĠĠ to* help out in this study and consent from the Education Department for teachers to fill in the SDQ, permission to carry out the study was also sought from the University Research Ethics Committee (UREC) at the University of Malta.

Training seminars were planned for February and March 2009 and all professionals who were to be directly involved in the data collection process were invited. These included the LAC and Fostering Social Workers, and the social workers or professionals in charge of the different residential care settings.

During these training sessions, the research aims, design, and tools were presented. The procedure of how the tools were to be administered was also explained in detail. Those present were also given the opportunity to complete the SDQ (G-S$^{4\text{-}16}$) and the CBCL/6-18 so as to be able to familiarise themselves more with the items. Questions that emerged after this exercise were clarified by the researchers. Instructions on how the tools were to be scored were also delivered.

3.5.4 Administration of Questionnaires

The demographic data sheet required that the person had good background information about the child's circumstances since the first time she or he entered into care. Due to the fact that the LAC social workers had access to the children's files, where such information is held, each social worker filled in the demographic data sheet for the children he/she was following at the time of the study.

With regards to the CBCL/6-18 and the SDQ (Parent version), parent substitutes for children living in residential homes were determined and contacted by the child's social worker from the LAC Team, or by the residential social worker. The child's social worker was very well placed to do such work, given that he/she had more direct contact with significant people in the child's life, and hence was in a better position, than the research team, to carefully select the respondents in order to provide the best possible profile of the children. Specifically, the criteria for selecting respondents included the

length of time this adult spent with the child, the nature of the adult's relationship with the child, and the different contexts where the adult was in contact with the child. Ultimately, the person who had most contact with the child, or who was perceived as knowing the child best in different circumstances, was given the questionnaire.

This procedure was less of an issue when the child was in foster care, as the foster parents acted as substitutes for the child's parents. However, here too, emphasis was made on the selection criteria, especially in those cases when the child had just been placed into a foster placement. In all instances, the CBCL/6-18 and the SDQ (Parent version) were filled in by the same person.

The SDQ self-report version was handed out to children aged between 11 and 16 years by their social worker. This report was to be filled-in by them, with assistance provided by the LAC social worker, housemother, or foster parents if this was required.

When the tools were handed out to a respondent, the social worker always specified the aim of such questionnaires. The importance of maintaining anonymity of both the child and the residential setting was always stressed. Indeed, names of children or respondents were not to be included on any part of the questionnaire forms. In fact, prior to the commencement of the data collection process, the Service Area Leader of the LAC team had allocated a random index number to all the children within the sample. The social workers then had to contact the Area Service Manager to obtain the index numbers allocated to their respective children. In addition, to further preserve the confidentiality of both the child and the respondent, rather than writing his or her name, the respondent only had to note the kind of relationship he/she had with the child, for instance, foster parent, residential social worker among others. A question in the CBCL/6-18 which asks for information about the parents' occupations as a basis for scoring socio-economic status, was to be left unanswered so as to maintain confidentiality.

Although the CBCL and SDQ were to be completed by the selected respondents individually, whenever possible, the social worker remained available to provide any assistance that was deemed necessary. In those cases when the respondents had problems completing the tools by themselves, they were given a copy of the form to look at while the interviewer read out each item. The interviewer then wrote the respondent's answers on

the questionnaire form. The average completion time for the CBCL was 15 minutes, while the average completion time for the SDQ questionnaires was 10 minutes.

With regards to the completion of the SDQ 'teacher' version, a slightly different procedure was followed. As explained above, permission to deliver the questionnaires in schools was obtained from the Education Department. Following that, the social worker delivered the questionnaire to one of the child's teachers, who knew the child most, and collected it after completion. The criteria used by the child's social worker to identify the teacher that should fill in the questionnaire, included the length of time spent with the child, the nature of the teacher's relationship with the child, as well as the context where the teacher was in contact with the child. The chosen respondent was not always the child's Class teacher or the child's Form teacher. In those circumstances where a past teacher or a teacher of a different subject, other than the Form teacher, knew the child better, or in those cases where the child had a Learning Support Assistant, he or she was asked to fill in the questionnaire.

The protocols had to be collected by the end of April 2009. However, these were not all handed in on time due to several factors that included the fact that the research work incurred an extra demand on the social workers' already stretched work load. An industrial action taken by teachers at the time also hindered the data collection process. Due to these factors, the deadline was extended to the end of August 2009.

3.5.5 Piloting the Research Tools

The Demographic Sheet was piloted amongst the LAC social workers. Following the training of these professionals, the research team received comments from them about how this sheet could be modified so as to allow better representation of the population under study. The CBCL and SDQ were not piloted since the research team had no intention of making any modifications to these tested and validated tools.

3.6 Analysis of Data

This section describes data collection procedures and organisation of data followed by data analyses.

3.6.1 General Description of Data

Statistical analysis for this research was carried out using the *Statistical Package for the Social Sciences (SPSS),* Version 19 for Windows. Chapter 4 describes the characteristics of children who are currently in out-of-home care. For the purpose of describing this sample, frequency distributions and descriptive statistics using raw data were obtained for all variables within the Demographics sheet, the CBCL Syndrome scales and DSM-Oriented scales, and the SDQ scales and the SDQ Impact Supplement Sheet. Moreover, raw scores are categorised to cluster children's scores in the Normal, Borderline or Clinical ranges, for both the CBCL and the SDQ, in order to provide a snapshot of children's functioning. Response rates and margin of error for the study were calculated. A sample of 269 participants from a population size of 291 guaranteed a maximum margin of error of 1.65%.

3.6.2 Inferential Data Analysis

The research questions for this study have been addressed in chapter 5. This section describes in further detail the statistical analyses used to test our hypotheses.

3.6.2.1 Comparison of children in this study with normative populations

In order to obtain a more complete profile of children in care than that provided by the descriptive statistics, further analysis was carried out, comparing scores obtained by the children in our sample to scores obtained with children of the same age across 2 normative populations.

In the case of the CBCL, the One-sample T-test was used to compare the mean raw scores obtained by the children in the current sample with mean raw scores obtained in the sample presented in the CBCL manual of children, aged 6-18, coming from 40 US states and District of Columbia. Results obtained by children in the current sample were compared to results obtained by the above cohort in a non-referred normative sample, and in a clinical sample of children making use of mental health services, substance abuse services or specialised educational services. Analysis was separated according to age and gender, in order to obtain a more accurate picture of the children's performance.

The results obtained on the SDQ were compared with the population norms in Malta, as presented in the above described national study by Cefai, Cooper and Camilleri. (2008). The One-sample T-test was again used to compare raw scores obtained by Maltese students in the latter study, with the mean scores obtained by the children in care in this study. Children were categorised by gender, so a separate analysis was carried out for boys and girls.

3.6.2.2 Identifying and addressing children's mental health needs

The CBCL DSM – Oriented scales were used in order to explore whether children's mental health needs are being identified, as these particular scales are more directly comparable to specific diagnostic labels used by professionals, such as those provided by the DSM-IV. Using cross-tabulations and the Chi-square test, these categorised scores were compared to mental health disorders identified by mental health professionals. The children's formal diagnosis and scores obtained on the DSM scales were also similarly contrasted with the use of services that might address the children's mental health needs, namely the psychiatric services and psychotherapy.

3.6.2.3 Examining differences between children in foster care and children in residential care

Further analysis was carried out in order to highlight any differences between children in residential care and children in foster care. All of the variables in the study, including the demographic variables, as well as the scores obtained on the CBCL and the SDQ, were taken into account. The first part of the analysis focused on differences between children in residential care and children in foster care. In addition, statistical tests were also carried out in order to bring out any differences between children in residential care, children in unrelated foster care and children in kin care.

All variables in the demographic sheet were analysed, using the Chi-Square test in the case of nominal categorical variables, and Independent Sample T-tests, Pearson Correlations, and One-way ANOVA, in the case of continuous variables. The choice of the appropriate test relies on the type of variables being examined.

The same procedures were then used in order to determine any significant differences in the children's SDQ and CBCL mean scores. Four subscales which provide a comprehensive picture of the children's scores on the CBCL were explored. These include: the Total Internalising, Total Externalising, Total Syndrome scales and the Total Competence which is a strength-based scale. Analysis on SDQ focused on the Total Difficulties scale, which captures children's total scores on all the SDQ subscales, and the Pro-Social Behaviour that is also a strength-based scale. This was conducted for the 3 informant versions (self, teacher and carer assessments).

Raw scores were used throughout the analyses. The Two Independent Samples T-test was used to determine whether differences in mean scores are significant between children in residential care and children in foster care in all subscales. The One-Way ANOVA test was used to determine whether mean scale scores differed significantly between children in residential care, unrelated foster care and kin care. Post-hoc Sceffe tests were included for pairwise comparisons.

The results obtained by the children on the Impact Supplement Sheet of the SDQ were also considered in this part of the analysis, in order to obtain as detailed a picture as possible. The Mann-Whitney U-test was used to compare mean scores obtained by children in foster care and children in residential care in the Impact Supplement Sheet. This non-parametric test was preferred over the Two Independent Samples T-test, since the data was ordinal in nature and did not have a metric scale.

A second additional step in the analysis, comparing the outcomes of children in residential care and those in foster care, was performed to ensure that any differences in outcomes emerging between these groups could not be attributed to possible differences in the children's care history. Thus, children in residential care were matched to the children in foster care on two important variables, namely the age of their first admission into care and the total duration of time they spent in care (thus generating 2 x 2 x 3 = 12 subgroups). The mean Total Competence, mean Total Internalising, mean Total Externalising' and mean Total Syndrome scores on the CBCL, together with the mean Total difficulty and Pro-social scores derived from teachers' and parents' evaluations of the SDQ were compared between the twelve groups. The mean Total difficulty and Pro-social

scores derived for self-report evaluations were not compared between these groups since the data was sparse (given that only children older than 11 years were asked to fill in these questionnaires). ANCOVA regression analysis was used to identify significant predictors of these dependent variables.

3.6.2.4 Variables affecting children's psychosocial functioning

In order to obtain a clearer indication of factors which may be affecting children's psychosocial adjustment to the care experience, further analyses were necessary.

The analysis carried out aimed to outline the effects of the demographic variables and the variables outlined in the first section of the CBCL questionnaire on children's CBCL and SDQ scores. As mentioned above, for SDQs, the Pro-social Behaviour and the Total Difficulties scale were considered for all versions, that is, the self-report, Teacher and Carer versions. With regards to the CBCL, the scales considered were Total Competence, Total Internalising, Total Externalising and Total Syndrome. This was considered sufficient to bring out the main effects of these factors on children's scores, since each subscale is incorporated in these major scales in both instruments.

The Two Independent Samples T-Test and the One-Way ANOVA test were used according to necessity. Pearson correlation analysis was also used to bring out relationships between continuous variables having a metric scale.

After providing an analysis for the whole sample, the sample was divided into two groups, namely children who are in residential care and children who are in foster care. The rationale behind this clustering was that several significant differences emerged between children in residential care and foster care in the demographic variables, and in the CBCL and SDQ scores. Hence, it was deemed essential to conduct separate analysis that would give a more accurate picture of the needs of the two groups.

Lastly, it was not sufficient to solely establish a relationship between specific variables and children's psycho-social functioning (as assessed through the CBCL and SDQ). Rather, this study sought to determine the particular combination of factors which may predict children's scores on these measures, as well as the relative importance of each factor when

compared with the other factors. Regression analysis was carried out, using an ANCOVA regression model. For this analysis only factors which were found to have a significant effect on children's scores in the previous analysis were considered. Analysis was first carried out among the combined sample, then among children in residential care, and subsequently among the children in foster care.

3.7 Conclusion

In this chapter the methodology adopted for this study was presented. The findings that emerged from the survey will be presented in the subsequent chapters.

Study 2 Chapter 4: Results – Sample Characteristics

4.0 Introduction

This chapter provides an overview of the sample's characteristics and the responses obtained on all the measures through the Demographic data sheet, the Child Behaviour Checklist, and the Strengths and Difficulties Questionnaire. Further analyses that address the research questions posed in this study will be presented in chapter 5.

4.1 Presenting the Demographic Data

Demographic information for the whole sample is presented in this section. Details regarding the children's diagnoses, the reasons for admission into care, the transitions they experienced, the child-to-adult ratio within care, contact with their family of origin, the professional services they received, and their educational profile are provided.

4.1.1 Demographic Details

The demographic data sheet was returned for 270 out of the 291 participants who were eligible for this study. There were 262 (97%) Maltese participants, while 8 (3%) were Non- Maltese. Their ethnicity varied with 212 (79.4%) being Caucasian, 4 (1.5 %) African, 2 (0.7%) Eastern European, and 49 (18.4%) coming from a mixed race[1].In addition, 154 (57%) participants were living in a residential home, 56 (20.7%) in unrelated foster care, 52 (19.3%) in related foster care, and 8 (3%) in a mental health setting.

A large number of the participants (n = 229, 84.8%) had no diagnosed medical condition; however, 13 (4.8%) had asthma, 6 (2.2%) were obese, 4 (1.5%) suffered from epilepsy, 3 (1.1%) had diabetes, and 1 (0.4%) had cardiac problems. Moreover, 14 (5.2%) had other medical conditions, including hernia, kidney problems, hepatitis C, and ear complications. This sub-group also includes 4 children (1.5%) who were born with drugs withdrawal symptoms, and 5 children (1.9%) with a physical disability.

[1] Unless otherwise stated, frequencies are expressed as a percentage of the number of responses, rather than the number of respondents, so that percentages would still add up to 100% in the case of missing values.

The majority of the sample (n = 222, 82.2%) had no diagnosed mental health condition. However, 28 (10.4%) were diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), 3 (1.1%) with Conduct Disorder, 1 (0.4%) with Oppositional Defiant Disorder (ODD), 1 (0.4%) with Encopresis, and 1 (0.4%) with Anxiety Disorder. Furthermore, 6 (2.2%) participants had other diagnoses, including Post Traumatic Stress Disorder (PTSD), attachment difficulties, and behavioural problems that did not reach caseness for a specific diagnosis. Another 8 (3%) children had comorbid conditions such as ADHD, ODD and Conduct Disorder, and ADHD and Conduct Disorder.

A large proportion of the respondents (n = 228, 84.4%) did not have any learning disability or development disorder. There were 10 (3.7%) diagnosed with Dyslexia, 16 (5.9%) had a Global Developmental Delay, 4 (1.5%) were diagnosed with Autistic Spectrum Disorder, and 5 (1.9%) had other disorders, including global learning difficulties. Only 7 (2.6%) had comorbid conditions such as Dyslexia and Global Developmental Delay.

The children's age at their first admission ranged from 0 to 17 years (M = 3.83, SD = 3.77, mode = 0 years). At the time of the study, the duration that the sample group spent in care ranged from 47 days to 17 years 10 months (M = 6.82, SD = 4.01, mode = 11 years). Table 11 provides a separate breakdown of the age of admission and the duration in care for children in residential care and those in foster care. A noteworthy fact is that children in foster care tend to enter care at a younger age, and subsequently also spend more years in care.

Table 11*: Descriptive statistics for Age of admission into care and Total length of time spent in care categorised by type of child's present placement*

		N	*Min*	*Max*	*Mean*	*Mode*	*St Dev*
Residential Care	**Age of Admission into Care (in years)**	158	0	15	4.87	2	3.73
	Total Length of Time in Care (in years)	153	0.50	17	5.76	4	3.89
Foster Care	**Age of Admission into Care (in years)**	106	0	17	2.29	0	3.28
	Total Length of Time in Care (in years)	108	0.13	17.83	8.32	11	3.69

4.1.2 Reasons for Admission into Care

The reasons for entry into care were various, including issues related to the parents, issues related to the child, and external factors. The minimum number of issues cited was 1, whereas the maximum number of issues cited was 14. Multiple risk factors for one's admission into care are implied in most cases (M = 5.25, SD = 2.79, mode = 5).

Table 1 displays the parental issues that influenced the decision for admission into care. Among these, 60 (22.6%) participants had one issue identified as influencing the decision for admission, whereas 205 (77.4%) had two or more parental issues. The most common problem was that of inadequate parental skills (n = 190, 70.6%). Apart from the other difficulties listed in the table, other influential predicaments for the admission of 50 (18.6%) participants included domestic violence, financial difficulties, unemployment, death of a parent, mother's risky or abusive relationships, and abandonment.

Table 1: Parental issues that influenced children's admission into care according to the number of times they were cited

		Present		Not Present	
Parental Issues	**Mental Health**	100	37.2%	169	62.8%
	Rejection	68	25.3%	201	74.7%
	Marital Breakdown	91	33.8%	178	66.2%
	Single Parenthood	93	34.6%	176	65.4%
	Substance Abuse	75	27.9%	194	72.1%
	Imprisonment	38	14.1%	231	85.9%
	Inadequate Parental Skills	190	70.6%	79	29.4%
	Prostitution	65	24.2%	204	75.8%
	Other	50	18.6%	219	81.4%

Table 2 (overleaf) displays the main child issues that influenced the decision for an admission into care. The most common reason cited was that of emotional neglect (n = 142, 52.8). From the participants, 18 (6.7%) were admitted because of other issues, including trauma from their parent's death and exposure to drugs.

Table 2*:* Child issues that influenced children's admission into care according to the number of times they were cited

		Present		Not Present	
Child Issues	**Emotional Abuse**	100	37.2%	169	62.8%
	Sexual Abuse	28	10.4%	241	89.6%
	Physical Abuse	93	34.6%	176	65.4%
	Physical Neglect	136	50.6%	133	49.4%
	Emotional Neglect	142	52.8%	127	47.2%
	Behaviour Problems in Child	35	13%	234	87.0%
	Physical Disability	3	1.1%	266	98.9%
	Other	18	6.7%	251	93.3%

Table 3 displays the external factors that influenced the decision for an admission into care. Those living in substandard housing amounted to 68 (25.3%) of the sample, whereas 14 (5.2%) were either homeless, or lacked a sense of stability as a result of constantly moving from one residence to another.

Table 3: External factors that influenced children's admission into care by the number of times they were cited

		Present		Not Present	
External Factors	**Substandard Housing**	68	25.3%	201	74.7%
	Other	14	5.2%	255	94.8%

Among the current sample the majority of the children (n = 120, 50.6%) had been issued with a care order, while 90 (38%) were in care through a voluntary placement. Only 27 (11.4%) of the children had a court order. Cross-tabulation analysis and the Chi-square test were used to explore the association between all the issues contributing towards an admission into care and the children's legal status.

Significant associations were found between the child's legal status and admission into care due to parental mental health, prostitution, emotional abuse, physical abuse, physical neglect, emotional neglect, and substandard housing. The majority of children who entered into care because of these reasons were under a care order. On the other hand, the majority of children who entered care with single parenthood as a reason for admission were placed in care voluntarily. On further examining reasons for admission into care, no association was found between the child's legal status and the following issues: parental rejection, marital breakdown, substance abuse, imprisonment, inadequate parental skills, child sexual abuse, or the presence of behavioural problems or a physical disability in the child. Only data that were statistically significant for associations are presented in Table 12 (overleaf).

Table 12: *Significant associations between reasons for entry into care and children's legal status*

Reasons for entry into care				Child's legal status			P-value
				Voluntary Placement	Care Order	Court Order	
Parental Issue	Mental Health	Not Present	Count	62	65	22	0.010
			%	41.6%	43.6%	14.8%	
		Present	Count	28	55	5	
			%	31.8%	62.5%	5.7%	
	Single Parenthood	Not Present	Count	39	90	22	0.000
			%	25.8%	59.6%	14.6%	
		Present	Count	51	30	5	
			%	59.3%	34.9%	5.8%	
	Prostitution	Not Present	Count	76	83	24	0.010
			%	41.5%	45.4%	13.1%	
		Present	Count	14	37	3	
			%	25.9%	68.5%	5.6%	
Child Issue	Emotional Abuse	Not Present	Count	70	56	23	0.000
			%	47.0%	37.6%	15.4%	
		Present	Count	20	64	4	
			%	22.7%	72.7%	4.5%	
	Physical Abuse	Not Present	Count	70	66	19	0.002
			%	45.2%	42.6%	12.3%	
		Present	Count	20	54	8	
			%	24.4%	65.9%	9.8%	
	Physical Neglect	Not Present	Count	56	43	18	0.000
			%	47.9%	36.8%	15.4%	
		Present	Count	34	77	9	
			%	28.3%	64.2%	7.5%	
	Emotional Neglect	Not Present	Count	48	46	17	0.020
			%	43.2%	41.4%	15.3%	
		Present	Count	42	74	10	
			%	33.3%	58.7%	7.9%	

Table 12 (continued)

External Factors	Substandard Housing	Not Present	Count	70	80	25	0.012
			%	40.0%	45.7%	14.3%	
		Present	Count	20	40	2	
			%	32.3%	64.5%	3.2%	

4.1.3 Transitions in Care

The majority of the children (n = 246, 92.5%) entered into care from their parents' home, whereas 18 (6.8%) were taken into care from hospital. Only 2 respondents (0.8%) entered into care after they spent some time being looked after by their relatives. A breakdown of the participants' mode of entry into care shows that, for the majority (n = 217, 81.6%) the first experience in the care system was in a residential home setting, whereas 30 (11.3%) were placed in kin care and 17 (6.4%) in unrelated foster care. The number of participants initially admitted to a mental health setting was 2 (0.8%).

As can be seen from Figure 4 (overleaf), the number of transitions experienced by 269 of the participants while in out-of-home care ranged from 0 to 11. The majority of children, 113 (42%) experienced no transitions, while 63 (23.4%) experienced one transition, 41 (15.2%) experienced two transitions, 24 (8.9%) experienced three transitions, and 10 (3.7%) experienced four transitions and 18 (6.8%) experienced five or more transitions. These changes included moves in and out of residential homes into mental health settings, or to foster care, or back to their parents' homes. Shifts from one residential home to another are also included.

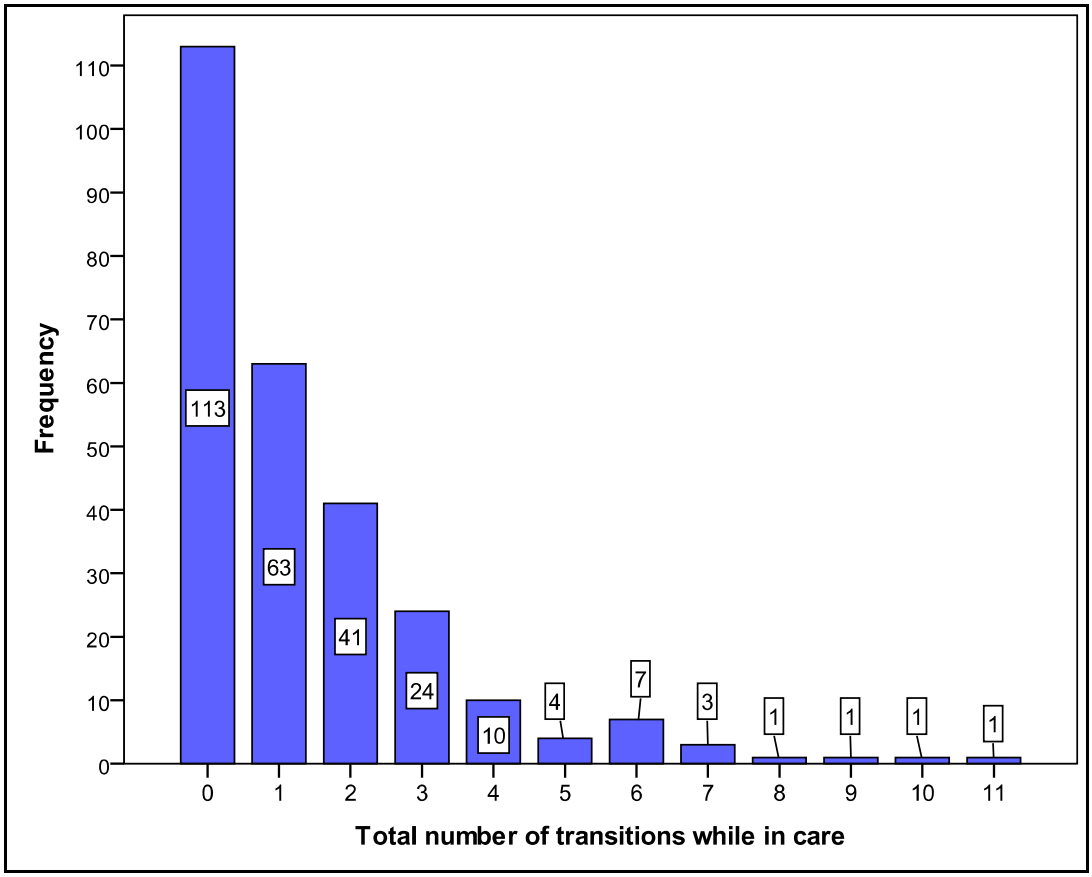


***Figure 4*:** Number of transitions experienced by children while in care

There was no significant difference between boys and girls in the number of transitions experienced. Nonetheless, a significant difference was noted when age and gender were taken into consideration. Older boys aged more than 10 years were likely to experience more transitions (M = 2, SD = 2.18) than younger boys aged less than 10 years (M = 0.81, SD = 0.99). Difference between mean number of transitions is significant at the 0.05 level of significance. No significant difference was found between younger and older girls. There was also no significant difference with regards to transitions experienced by children in residential care and children in foster care.

Consideration was also given to the nature of children's transitions. It is significant that from 265 participants, 73 (27.5%) children experienced only a move from their parents' home to a residential home. Other transition patterns included a move from the parents' home to two different residential homes (n = 32, 12.1%). It is worth noting that 33 children moved from their parents' home into either kin care (n = 22, 8.3%) or unrelated foster care (n = 11, 4.2%).

Figure 5 gives a graphic representation of the most common moves experienced. 73 (27.5%) of the children had different patterns of moves. These patterns are represented under the heading 'other moves' and include children who had multiple moves.

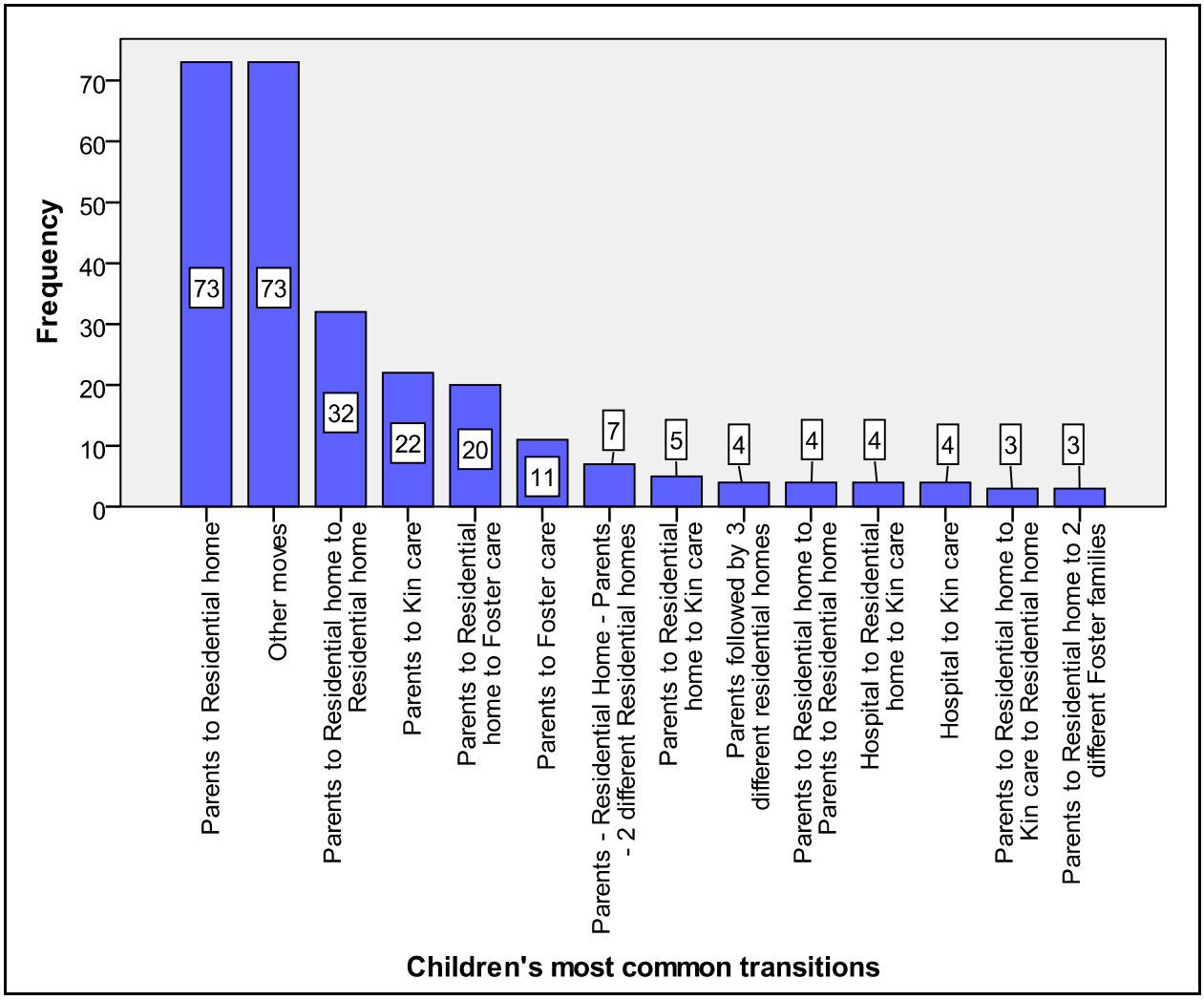


Figure 5: Children's most common transitions while in care

4.1.4 Child-To-Adult Ratio within the Setting

The child-to-adult ratio varied considerably between placements. Whereas the majority of children in residential care had a ratio of 1 adult to 6 children (M = 5.91, SD = 2.2, mode = 6), the majority of children in foster care benefitted from a ratio of 1 adult to 1 child (M = 1.52, SD = 0.77, mode = 1).

Figure 6 (overleaf) shows that 95 (88.8%) of fostered children had a ratio of 1 child to 1 or 2 adults, whereas 12 (11.2%) had a ratio of 1 child to 3 or 4 adults. However, children in residential care presented a different experience in this regard, as only 11 (7%) of them had a

ratio of 1 child to 1 or 2 adults. The vast majority (n = 120, 75.9%) were being cared for by people who had between 4 and 8 children in their care. 13 (8.2%) children had to share the same carer with up to 9 other children.

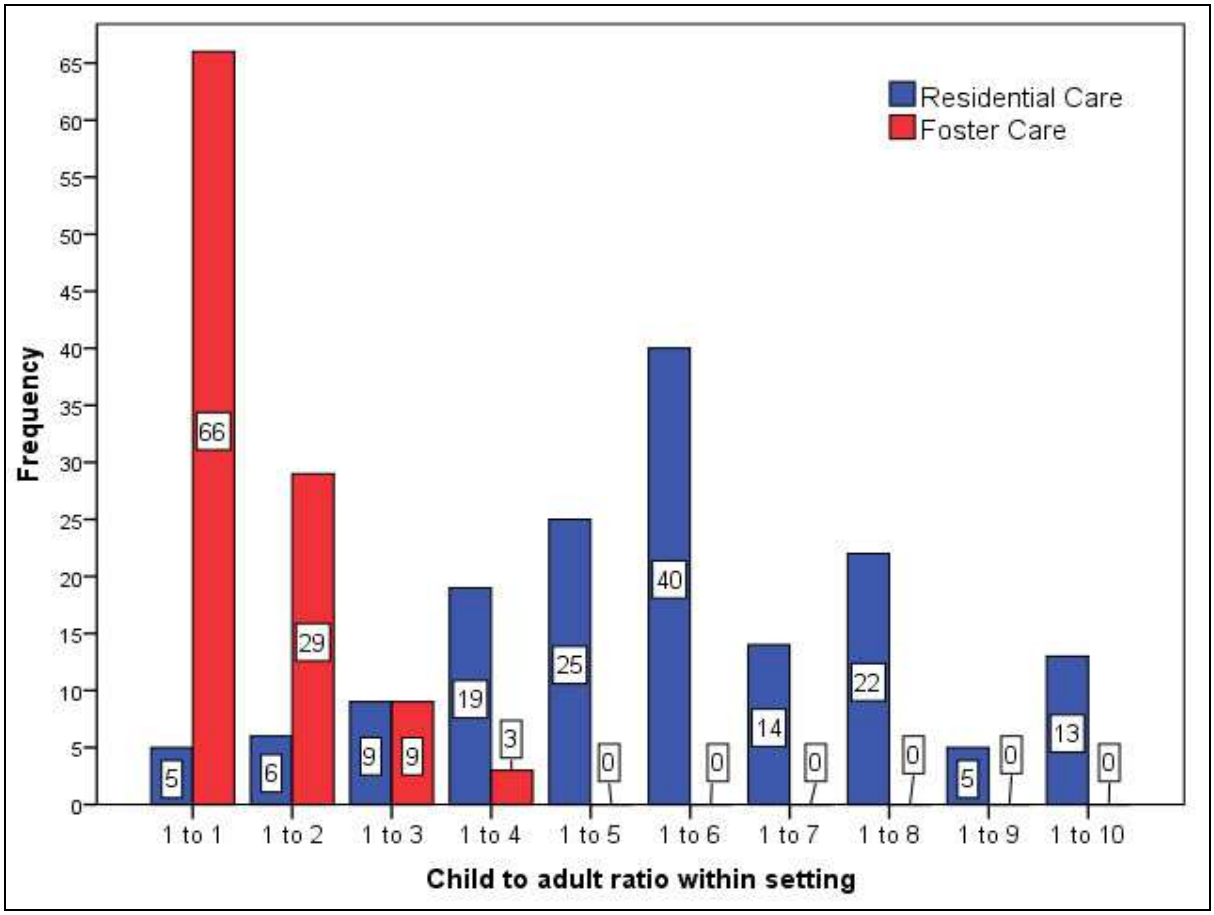


Figure 6: Child-to-adult ratios according to placement type

4.1.5 Siblings in care

Number of siblings ranged from 0 to 12. A small number of participants (n = 21, 7.9%) had no siblings, even when including both full siblings and half-siblings. The most common number of siblings was two (n = 57, 21.3%), while 10 (3.7%) participants had at least eight siblings.

Table 13: *Descriptive statistics for siblings in care*

	N	*Min*	*Max*	*Mean*	*Mode*	*SD*

Number of Siblings	267	0	12	3.40	2	2.35
Number of Siblings in Care	243	0	6	1.70	1	1.38
Number of Siblings in same placement as child	149	0	4	0.78	0	0.97

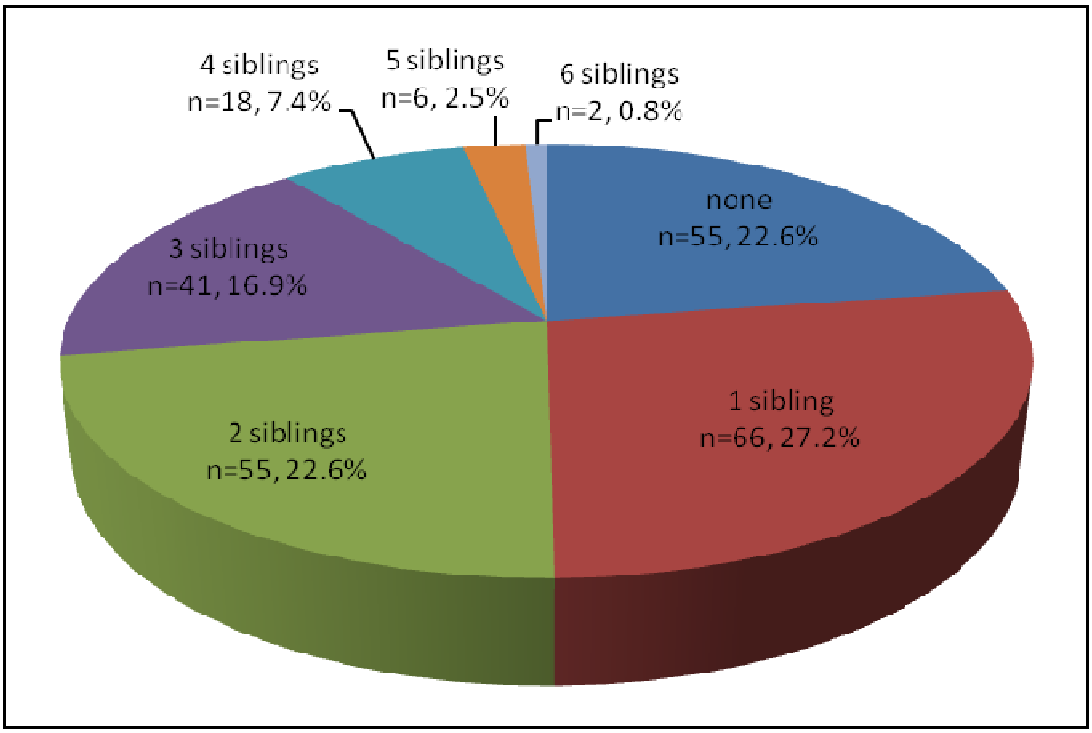


***Figure 7*:** Number of siblings in care

As noted in Figure 7, athough 55 (22.6%) participants had no siblings in care, the majority of the participants, 162 (66.7%), had 1, 2, or 3 siblings in care. Respondents who had 4, 5, or 6 siblings in care amounted to 26 (10.7%). The number of siblings in care was compared to the number of siblings within the family to provide an estimated percentage number of children in care within each family. Figure 8 shows that 89 (34%) of the participants have 81% to 100% of their siblings in care. Relatively equal sample proportions have between 21- 40%, 41- 60% and 61- 80% of children within the family that are in care.

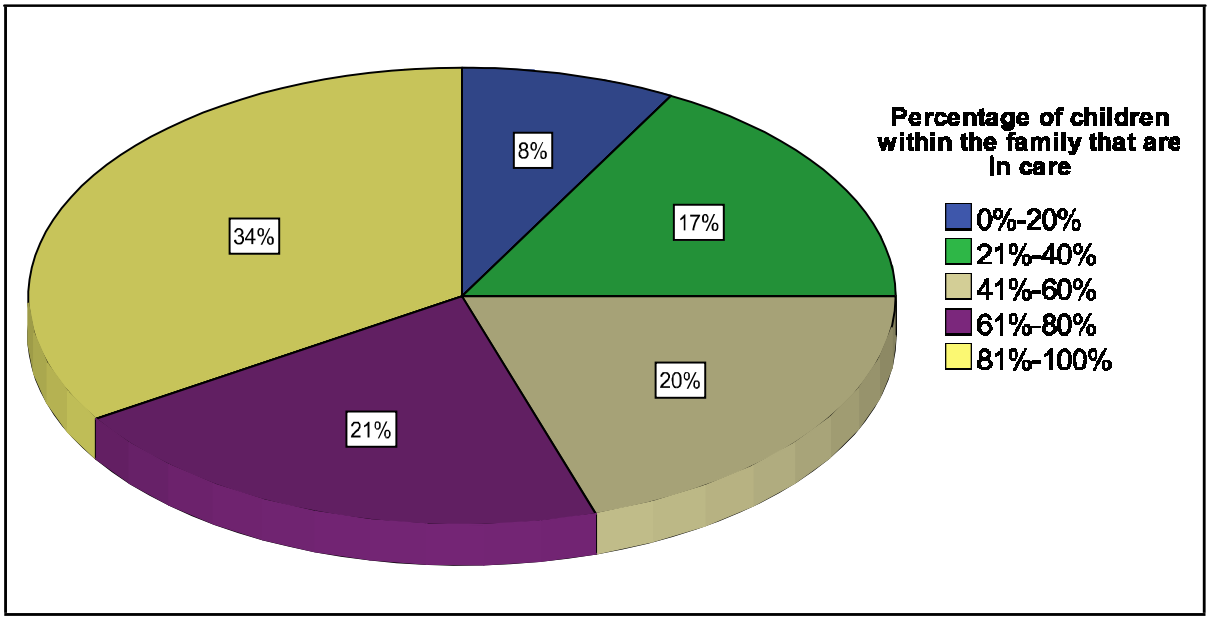


Figure 8: Percentage of children within each family that are in care

Figure 9 shows the frequency of contact children in care have with at least one sibling. Of these, 69 (39.2%) had supervised visits, whereas 107 (60.8%) had unsupervised visits.

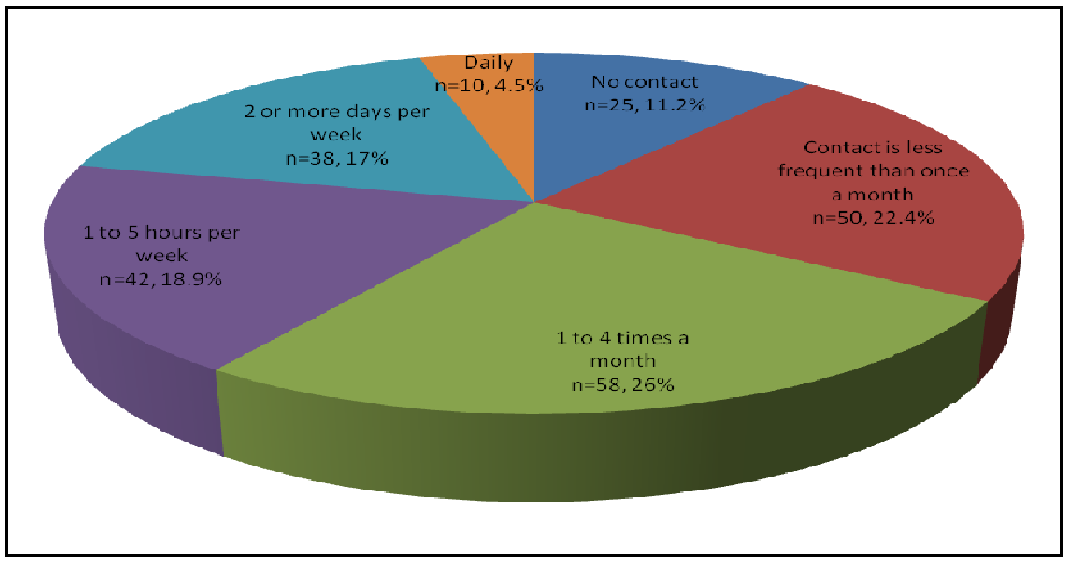


***Figure 9*:** Frequency of contact with at least one sibling

4.1.6 Contact with Biological Parents

With regards to frequency of contact with the biological mother, 85 (31.5%) participants had no physical contact. However, 6 (2.2%) had daily contact, 52 (19.3%) saw their mother at least two days per week, 51 (18.9%) saw their mother between 1 to 5 hours weekly, 32 (11.9%) saw their mother 1 to 4 times a month, and 29 (10.7%) had contact less frequent than once a

month. A group of 15 (5.6%) participants had other contact frequencies, including getting in touch through phone calls, sporadic contact, or contact was established when requested by the child. Of those participants who had some form of contact with their mother, 109 (64.9%) had unsupervised contact with her, while 59 (35.1%) had supervised contact.

With regards to frequency of contact with the biological father, the majority of the respondents (n = 102, 38.3%) had no physical contact. On the other hand, 7 (2.6%) had daily contact, 45 (16.9%) saw their father 2 or more days per week, 16 (6%) saw their father between 1 to 5 hours weekly, 23 (8.6%) saw their father 1 to 4 times a month and 11 (4.1%) had contact less frequent than once a month while 6 (2.3%) had other contact frequencies, such as through phone calls. It is important to note that 56 (21.1%) had an unknown biological father, whereas 22 had a father who had passed away. Whereas 27 (27.3%) participants had visits carried out under supervision, 72 (72.7%) participants spent time with their biological father unsupervised.

4.1.7 Professional Services Received

4.1.7.1 Professional services received in the past

The majority of the participants received services from professionals in the past. Out of 270 participants 175 (64.8%) benefitted from at least one professional service, whereas 95 (35.1%) did not receive any professional service in the past. A breakdown of the services availed of by the participants in the past is presented in Table 14.

Table 14. Professional services received in the past

		Yes		***No***	
Professional Services Received in the Past	***Psychotherapy***	***145***	***53.7%***	***125***	***46.3%***
	Psychiatry	***52***	***19.3%***	***218***	***80.7%***
	Speech therapy	***42***	***15.6%***	***228***	***84.4%***
	Occupational therapy	***35***	***13.0%***	***235***	***87.0%***
	Physiotherapy	***18***	***6.7%***	***252***	***93.3%***
	***Other** (e.g. Drama therapy, family therapy, private lessons etc.)*	***28***	***10.4%***	***242***	***89.6%***

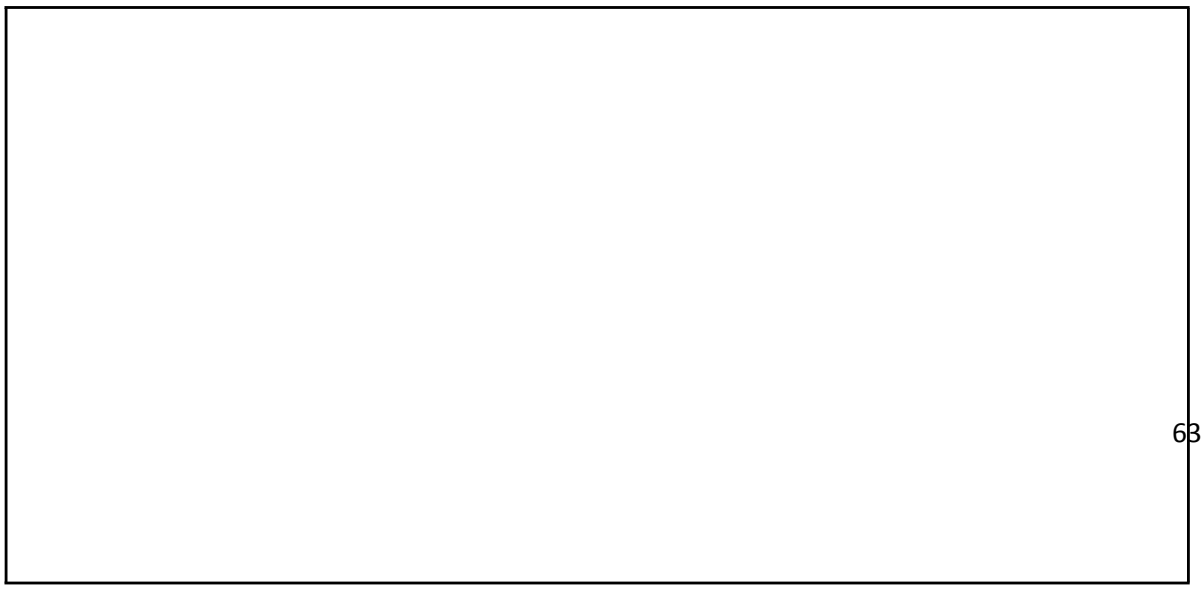
4.1.7.2 Professional services being received at the time of the study

At the time of the study 159 (58.9%) participants were benefitting from at least one professional service. In total 111 (41.1%) of the participants were not receiving any professional services while 12 (4.4%) were on a waiting list to start receiving a professional service, including family therapy, speech therapy, occupational therapy, multi-sensory therapy, and psychotherapy. Table 15 provides an overview of the professional services the children were benefitting from at the time of the study.

Table 15. Professional services received at the time of the study

		Yes		***No***	
Professional Services Received at Present	***Psychotherapy***	***130***	***48.1%***	***140***	***51.9%***
	Psychiatry	***55***	***20.4%***	***215***	***79.6%***
	Speech therapy	***25***	***9.3%***	***245***	***90.7%***
	Occupational therapy	***11***	***4.1%***	***259***	***95.9%***
	Physiotherapy	***4***	***1.5%***	***266***	***98.5%***
	***Other** (e.g. Drama therapy, family therapy, private lessons etc.)*	***31***	***11.5%***	***239***	***88.5%***

Help from a high support worker was offered to 20 (8.3%) of the children; from these, 17 were in residential care and 3 in foster care. One participant was awaiting allocation of a high support worker. As shown in Figure 10, the number of hours per week spent with a high support worker varied between participants. The mean number of hours received was 51.6 hours.



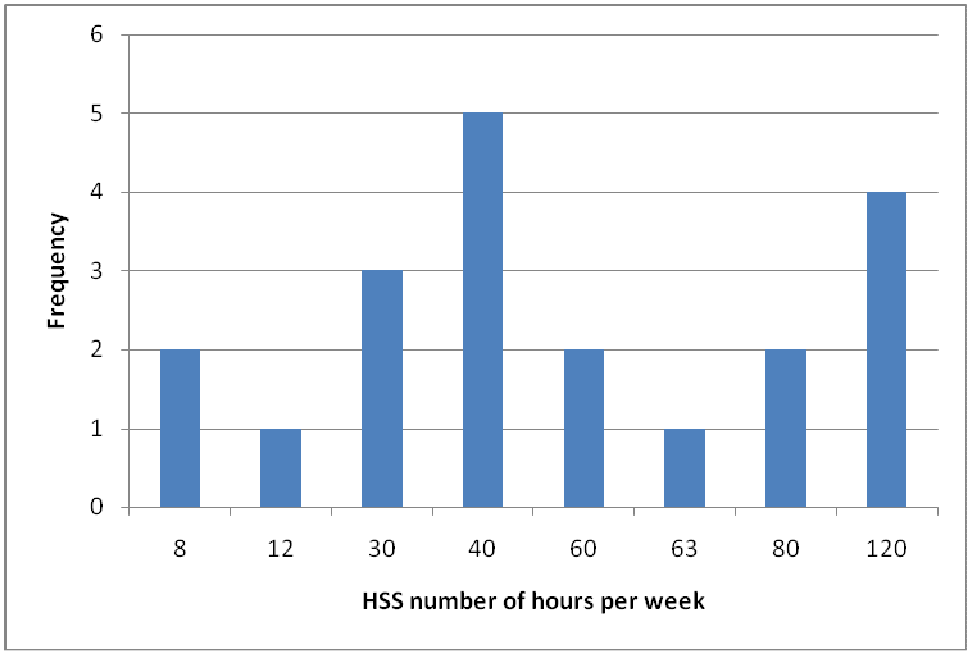


Figure 10: Number of contact hours per week for those benefitting from High Support Services

4.1.8 The Educational Profile

Only 5 (1.9%) of the participants were in Kindergarten. The majority, 141 (52.8%), were in Primary school, 89 (33.3%) in Secondary school, 10 (3.7%) participants were following Tertiary education, while 14 (5.2%) were no longer attending school as they were older than the 16 years, which is the age limit for compulsory education. From the participants, 8 (3%) were attending a Special School. The majority of the children (n = 203, 76.6%) were not receiving help from a Support Learning Assistant, whereas 61 (23%) participants were statemented. There was also 1 participant (0.4%) whose application for statementing was being processed. Of the children who were statemented 28 (46.7%) had full-time one-to-one assistance, 22 (36.7%) had full-time shared assistance and 10 (16.7%) had shared support.

The large majority of participants in the sample (n = 211, 81.5%) were never absent during the scholastic year in which the study was being conducted, 3 (1.2%) were absent on a weekly basis, another 3 (1.2%) were absent for more than once a week. There were 33 (12.7%) who were absent, at most, once a month, while 7 (2.7%) were absent once a month. Only 1 (0.4%) of the participants had been excluded and another (0.4%) was suspended from school.

HSS number of hours per week

The vast majority of the sample (n = 225, 84.3%) did not repeat any school years, whereas 39 (14.6%) repeated one year, and 3 (1.1%) repeated more than one year. Analysis of the grades

obtained in the three main school subjects during the previous year (where applicable) show that the grades for Maltese of 134 participants ranged from 0 to 95 (*M* = 52.41, *SD* = 22.2), grades for English of 132 participants ranged from 0 to 98 (*M* = 47.91, *SD* = 22.71), whereas the grades for Mathematics of 131 participants ranged from 0 to 96 (*M* = 45.36, *SD* = 25.87). The distribution of grades in these three subjects can be observed in Figures 11, 12, and 13.

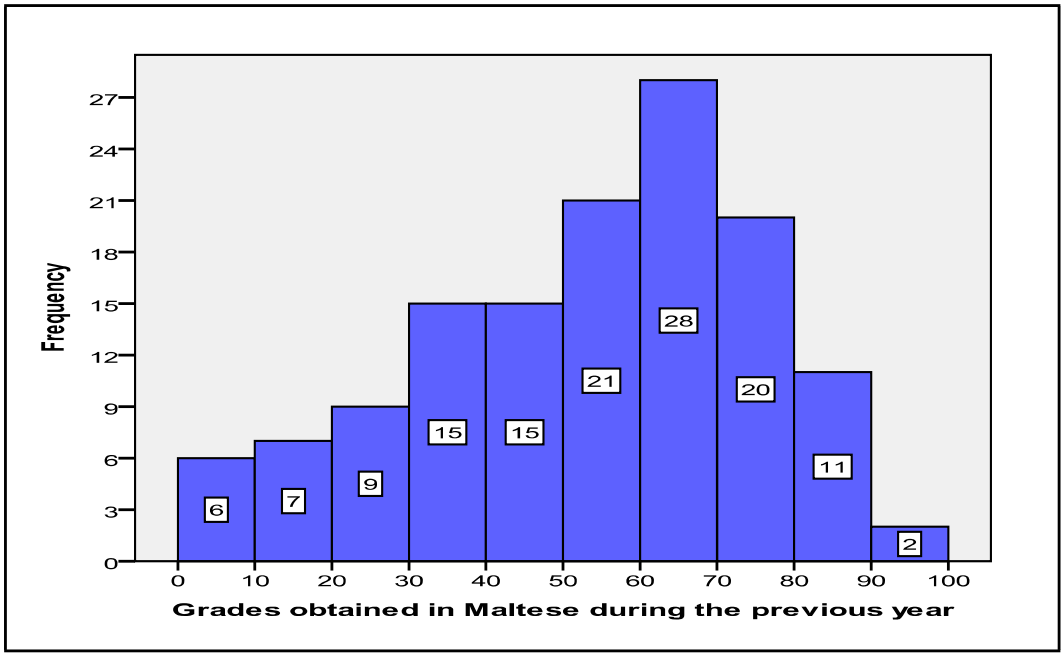
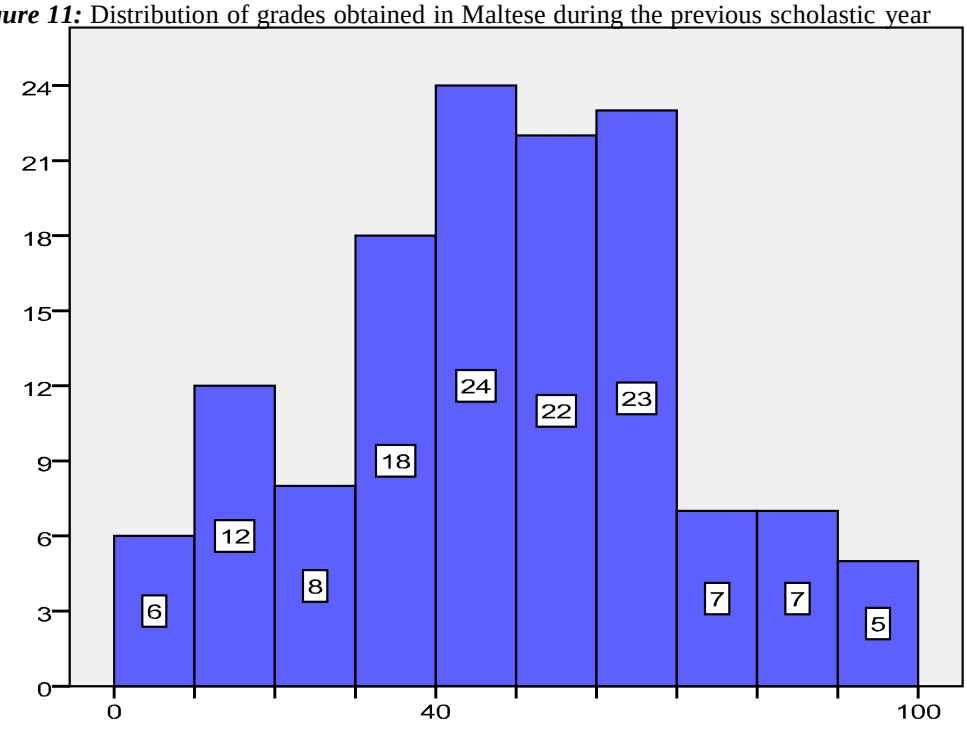


Figure 11: Distribution of grades obtained in Maltese during the previous scholastic year



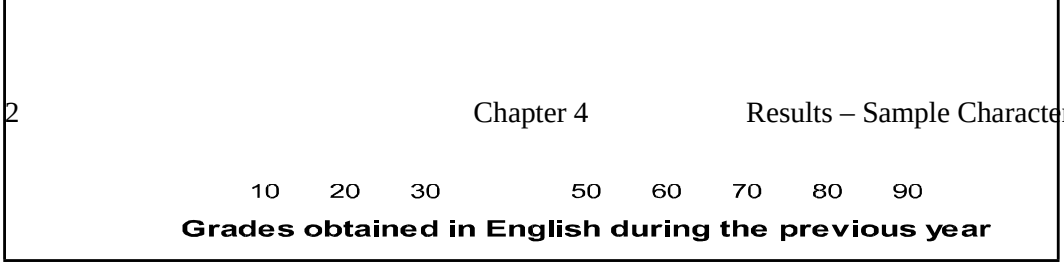


Figure 12: Distribution of grades obtained in English during the previous scholastic year

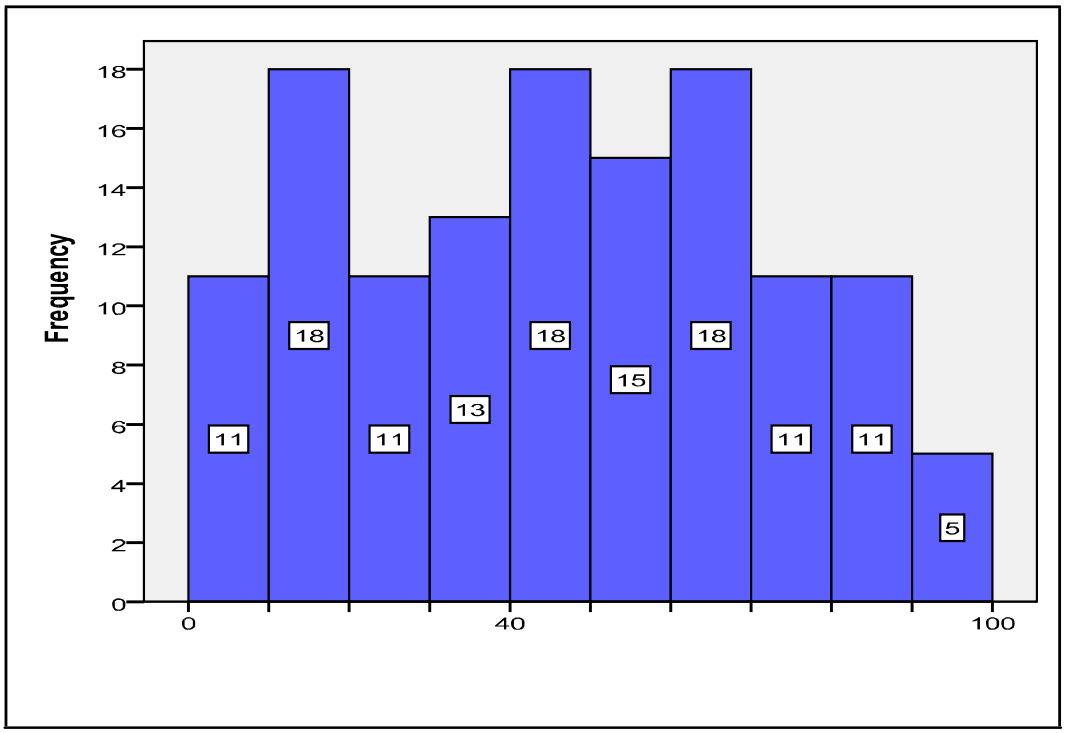


Figure 13: Distribution of grades obtained in Maths during the previous scholastic year

Significantly, 113 (48.5%) of the participants did not need special examination arrangements. However, 30 (12.9%) needed particular examination arrangements, including extra time, aid of a reader, prompter and modified examination papers. This item was not applicable for 90 (38.6%) of the participants.

4.2 The Child Behaviour Checklist

This section presents descriptive statistics that emerged from data collected from 224 participants (121 (54%) boys, and 103 (46%) girls) for whom the CBCL was returned. The respondents' ages ranged from 5 to 18 (M = 10.83, SD = 3.41). The majority of the CBCL protocols were filled in either by the foster carers (n=84, 41.8%) or by the residential social workers (n=82, 40.8%). The remaining 35 (17.5%) protocols were filled in by the child's house mother, main guardian, or home director.

4.2.1 Extra-Curricular Activities

Of 224 participants, 43 (19.2%) did not participate in any particular sport. The most popular sports were swimming (n = 110, 49.1%) and football (n = 87, 38.8%). Other less popular sports included cycling (n=42, 18.8%), dancing (n=22, 9.8%), basketball (n=19, 8.5%), and athletics (n=19, 8.5%).

With regards to favourite hobbies, activities, and other games practiced, 25 (11.2%) of the participants did not engage in any form of activity. The majority of children (n = 129, 57.6%) spent time playing computer games (including PlayStation® games). This was followed by other activities including, making crafts (n = 52, 23.2%), reading (n = 39, 17.4%), and playing with toys (n = 37, 16.5%).

The majority of the sample, 111 (49.8%), were not members of any organisation, club, or team. Of the remaining 112 respondents, the majority were members in a football club (n = 32, 14.3%), attended MUSEUM (n = 26, 11.7%), or attended a dancing group/school (n = 25, 11.2%). Out of 221 participants, 57 (25.8%) participants did not have any jobs or chores. However, the remaining participants (n = 164, 75.2%) were expected to make their bed, help out with the dishes, and/or help in the general up keep of the household.

With regards to their ability to play and work alone, the majority of the children (n = 128, 61.5%) were rated by their carers as comparing well to other children of the same age. Besides, 47 (22.6%) were rated as performing better in this area than children of the same age, whereas 33 (15.9%) were rated as performing worse in this area than same aged peers.

4.2.2 Number of friends

Figure 14 shows that only a small proportion of the sample, (n = 34, 16.3%) had no close friend. The majority of the participants, (n = 83, 39.7%) had 2 to 3 close friends.

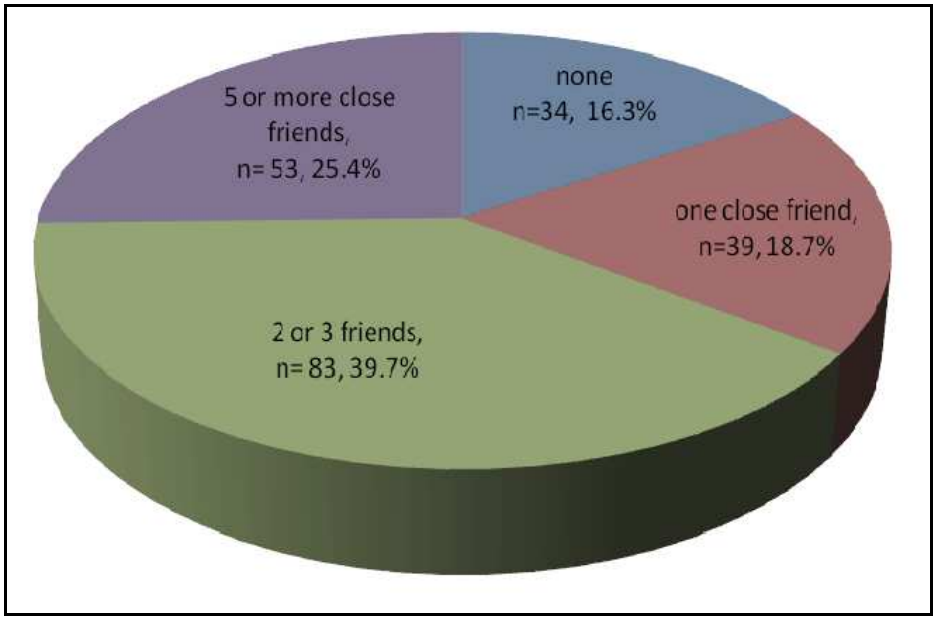


***Figure 14*:** Number of close friends

Figure 15 (overleaf) shows that 82 (40%) of the participants meet with friends outside school hours less than once a week, whereas 57 (27.8%) of the respondents meet at least three times weekly with friends. The majority of the children (n = 66, 32.2%) in the sample meet their friends once or twice weekly.

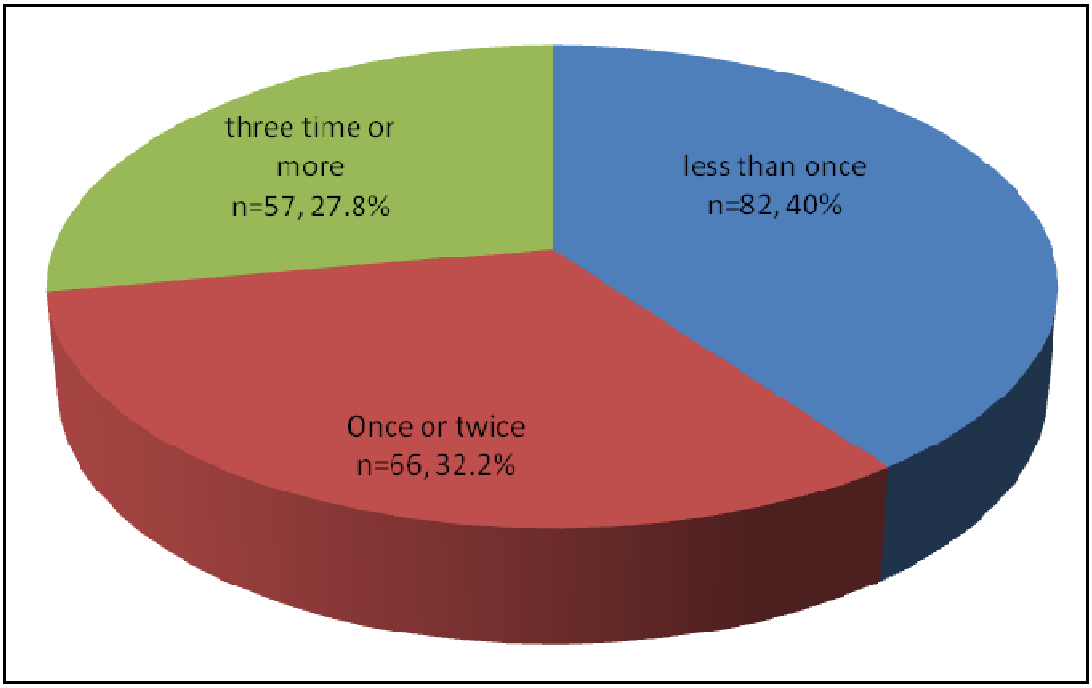


Figure 15: Frequency of meeting with friends outside regular school hours per week

4.2.3 Getting Along with Family Members and Other Children

The participants were rated by their carers on how well they behaved with members of their family and other children when compared to others of the same age. With regards to getting along with their brothers or sisters, the majority (n=123, 66.1%) had an average relationship, whereas 25 (13.4%) had a better relationship, and 38 (20.4%) had a poorer relationship compared to other children. With regards to their behaviour with their parents, 97 (47.3%) of the children had an average behaviour, 57 (27.8%) had better behaviour, and 51 (24.9%) had worse behaviour compared to other children.

When rated on how well they got along with other kids, the majority (n = 128, 60.9%) had an average relationship, whereas 52 (24.8%) had a better relationship, and 30 (14.3%) had a poorer relationship, when compared to other children.

4.2.4 Breakdown of Scores Obtained on the CBCL Scales

The CBCL Scales were duly filled in for 210 out of the 224 participants for whom the CBCL was returned. The following section presents an overview of the scores obtained by the participants on each of the CBCL variables, using the three-category classification (Normal, Borderline, and Clinical) described in the methodology chapter. A breakdown of scores for the six problem scales, which are scored on the DSM-Oriented Scale, will be presented using this three-category classification. A breakdown of scores for each variable measured through the CBCL is found in Appendix F. Scores are categorised by age, gender, and the three-category classification.

Further analysis of the CBCL scale is presented in Chapter 5. Tables 14, 15, and 16 give an overall picture of how the total sample fared on each variable. They also give a breakdown of scores by age and gender. 54 girls and 68 boys aged between 6 and 11 years, and 43 girls and 45 boys aged between 12 and 18 had their CBCL filled in. Percentages quoted for each scale in Tables 14, 15, and 16 are out of the whole sample (i.e.210 participants) and not for each individual sub-group.

Table 14*: Competence Scale scores categorised by age and gender for the Normal, Borderline and Clinical ranges*

		Girls				Boys				Total	
		6 to 11		12 to 18		6 to 11		12 to 18			
Activities scale	**Normal**	44	20.95%	25	11.90%	43	20.48%	28	13.33%	140	66.67%
	Borderline	7	3.33%	11	5.24%	9	4.29%	4	1.90%	31	14.76%
	Clinical	3	1.43%	7	3.33%	16	7.62%	13	6.19%	39	18.57%
Social scale	**Normal**	39	18.57%	28	13.33%	51	24.29%	23	10.95%	141	67.14%
	Borderline	10	4.76%	5	2.38%	7	3.33%	14	6.67%	36	17.14%
	Clinical	5	2.38%	10	4.76%	10	4.76%	8	3.81%	33	15.71%
School Scale	**Normal**	38	18.10%	24	11.43%	27	12.86%	19	9.05%	108	51.43%
	Borderline	10	4.76%	2	0.95%	11	5.24%	4	1.90%	27	12.86%
	Clinical	6	2.86%	9	4.29%	29	13.81%	15	7.14%	59	28.10%
Total competence	**Normal**	21	10.00%	10	4.76%	18	8.57%	12	5.71%	61	29.05%
	Borderline	8	3.81%	7	3.33%	14	6.67%	4	1.90%	33	15.71%
	Clinical	25	11.90%	18	8.57%	35	16.67%	22	10.48%	100	47.62%

Table 14 shows that the majority of the sample scored in the normal range on the Activities, Social, and School Scale. Nonetheless, the majority of the sample fell in the clinical range on the Total Competence score. The scores on the CBCL Syndrome profile are given in table 15 (overleaf).

Table 15*: Syndrome Scale scores categorised by age and gender for the Normal, Borderline and Clinical ranges*

		Girls				Boys				Total	
		6 to 11		12 to 18		6 to 11		12 to 18			
Anxious Depressed	**Normal**	37	17.62%	32	15.24%	45	21.43%	27	12.86%	141	67.14%
	Borderline	7	3.33%	4	1.90%	13	6.19%	10	4.76%	34	16.19%
	Clinical	10	4.76%	7	3.33%	10	4.76%	8	3.81%	35	16.67%
Withdrawn / Depressed	**Normal**	38	18.10%	28	13.33%	37	17.62%	29	13.81%	132	62.86%
	Borderline	10	4.76%	7	3.33%	13	6.19%	7	3.33%	37	17.62%
	Clinical	6	2.86%	8	3.81%	18	8.57%	9	4.29%	41	19.52%

Somatic Complaints	**Normal**	51	24.29%	36	17.14%	64	30.48%	39	18.57%	190	90.48%
	Borderline	1	0.48%	1	0.48%	3	1.43%	2	0.95%	7	3.33%
	Clinical	2	0.95%	6	2.86%	1	0.48%	4	1.90%	13	6.19%
Social problems	**Normal**	42	20.00%	29	13.81%	40	19.05%	26	12.38%	137	65.24%
	Borderline	4	1.90%	8	3.81%	15	7.14%	9	4.29%	36	17.14%
	Clinical	8	3.81%	6	2.86%	13	6.19%	10	4.76%	37	17.62%
Thought problems	**Normal**	42	20.00%	35	16.67%	51	24.29%	30	14.29%	158	75.24%
	Borderline	5	2.38%	3	1.43%	5	2.38%	9	4.29%	22	10.48%
	Clinical	7	3.33%	5	2.38%	12	5.71%	6	2.86%	30	14.29%
Attention problems	**Normal**	37	17.62%	30	14.29%	38	18.10%	28	13.33%	133	63.33%
	Borderline	5	2.38%	8	3.81%	17	8.10%	7	3.33%	37	17.62%
	Clinical	12	5.71%	5	2.38%	13	6.19%	10	4.76%	40	19.05%
Rule-breaking	**Normal**	34	16.19%	32	15.24%	38	18.10%	35	16.67%	139	66.19%
	Borderline	5	2.38%	7	3.33%	9	4.29%	6	2.86%	27	12.86%
	Clinical	15	7.14%	4	1.90%	21	10.00%	4	1.90%	44	20.95%
Aggressive behaviour	**Normal**	33	15.71%	28	13.33%	34	16.19%	31	14.76%	126	60.00%
	Borderline	5	2.38%	7	3.33%	13	6.19%	5	2.38%	30	14.29%
	Clinical	16	7.62%	8	3.81%	21	10.00%	9	4.29%	54	25.71%
Total Internalising	**Normal**	32	15.24%	23	10.95%	30	14.29%	25	11.90%	110	52.38%
	Borderline	5	2.38%	5	2.38%	11	5.24%	3	1.43%	24	11.43%
	Clinical	17	8.10%	15	7.14%	27	12.86%	17	8.10%	76	36.19%
Total Externalising	**Normal**	27	12.86%	24	11.43%	26	12.38%	20	9.52%	97	46.19%
	Borderline	3	1.43%	4	1.90%	6	2.86%	10	4.76%	23	10.95%
	Clinical	24	11.43%	15	7.14%	36	17.14%	15	7.14%	90	42.86%

Table 15 (continued)

Total Syndrome Scale	**Normal**	26	12.38%	21	10.00%	26	12.38%	18	8.57%	91	43.33%
	Borderline	11	5.24%	3	1.43%	9	4.29%	10	4.76%	33	15.71%
	Clinical	17	8.10%	19	9.05%	33	15.17%	17	8.10%	86	40.95%

When each of the Syndrome Scales is analysed independently, the majority of the scores fall in the normal range. However, over 35% of respondents were reported to exhibit clinical problems. This was also true when the scores were added to give the Total Internalising, Total Externalising and Total Syndrome Scale scores. There are higher proportions of boys, rather than girls, falling in the clinical range for the Total Internalising, Total Externalising, and Total Syndrome scale scores.

Table 16*: DSM-Oriented Scale scores categorised by age and gender for the Normal, Borderline and Clinical ranges*

		Girls				**Boys**				**Total**	
		6 to 11		**12 to 18**		**6 to 11**		**12 to 18**			
Affective Problems	**Normal**	36	17.14%	31	14.76%	43	20.48%	35	16.67%	145	69.05%
	Borderline	7	3.33%	6	2.86%	12	5.71%	2	0.95%	27	12.86%
	Clinical	11	5.24%	6	2.86%	13	6.19%	8	3.81%	38	18.10%
Anxiety Problems	**Normal**	35	16.67%	32	15.24%	37	17.62%	26	12.38%	130	61.90%
	Borderline	9	4.29%	4	1.90%	14	6.67%	4	1.90%	31	14.76%
	Clinical	10	4.76%	7	3.33%	17	8.10%	15	7.14%	49	23.33%
Somatic Problems	**Normal**	52	24.76%	36	17.14%	64	30.48%	40	19.05%	192	91.43%
	Borderline	0	0.00%	2	0.95%	3	1.43%	4	1.90%	9	4.29%
	Clinical	2	0.95%	5	2.38%	1	0.48%	1	0.48%	9	4.29%
Attention Deficit/Hyperactivity Problems	**Normal**	42	20.00%	34	16.19%	46	21.90%	30	14.29%	152	72.38%
	Borderline	2	0.95%	4	1.90%	10	4.76%	9	4.29%	25	11.90%
	Clinical	10	4.76%	5	2.38%	12	5.71%	6	2.86%	33	15.71%
Oppositional Defiant Problems	**Normal**	38	18.10%	35	16.67%	45	21.43%	34	16.19%	152	72.38%
	Borderline	4	1.90%	5	2.38%	4	1.90%	5	2.38%	18	8.57%
	Clinical	12	5.71%	3	1.43%	19	9.05%	6	2.86%	40	19.05%
Conduct Problems	**Normal**	32	15.24%	31	14.76%	31	14.76%	29	13.81%	123	58.57%
	Borderline	6	2.86%	6	2.86%	13	6.19%	10	4.76%	35	16.67%
	Clinical	16	7.62%	6	2.86%	24	11.43%	6	2.86%	52	24.76%

The majority of scores on all the DSM-Oriented Scales fell in the normal range. The Somatic Problems Scale had the highest percentage of scores in the normal range. On the contrary, the Conduct Problems Scale had the highest percentage of scores in the clinical range.

In addition, the highest percentage of scores in the clinical range on the Affective Problems Scale, Anxiety Problems Scale, Attention Deficit Hyperactivity Scale, Oppositional Defiant Scale, and Conduct Problems Scale, was for boys and girls aged from 6 to 11 years.

4.3 The Strengths and Difficulties Questionnaire

Data analysis for the SDQ subscales will be presented first, followed by scores obtained on the Impact Scale.

4.3.1 The SDQ Subscales

The SDQ forms were filled in as follows: 233 carers filled in the Carer-Form; 201 teachers filled in the SDQ-teacher form; and 108 participants (aged between 11 and 18 years) completed the SDQ self- report version. Table 17 provides the descriptive details for each of the six SDQ subscales including the sample size, minimum, maximum, mode mean and standard deviation of the raw scores. Each score ranged from 0 to 10.

Table 17*: Descriptive statistics on the different SDQ scales by carer, teacher and self-report*

		N	*Min*	*Max*	*Mode*	*Mean*	*St. Dev*
Emotional Symptoms	**Carer**	232	0	13	2	3.55	2.56
	Teacher	201	0	9	0	2.54	2.33
	Self	108	0	9	3	4.25	2.57
Conduct Problems	**Carer**	233	0	10	1	3.58	2.60
	Teacher	201	0	10	0	3.14	2.49
	Self	108	0	8	2	3.09	1.76
Hyperactivity	**Carer**	233	0	10	5	5.34	2.88
	Teacher	201	0	10	10	5.32	3.21
	Self	108	0	10	6	4.73	2.52
Peer Problems	**Carer**	232	0	10	4	3.56	2.31
	Teacher	199	0	10	2	2.85	2.10
	Self	108	0	9	3	3.42	2.24
Total Difficulties	**Carer**	233	1	33	13	15.70	7.44
	Teacher	199	0	31.5	6	13.81	7.37
	Self	108	1	29	14	15.49	6.44
Prosocial Behaviour	**Carer**	233	0	10	10	7.43	2.58
	Teacher	199	0	10	10	6.97	2.88
	Self	108	2	10	10	8.34	1.90

Table 18 shows the proportion of participants falling in the Normal, Borderline and Abnormal ranges for each subscale using evaluations provided by carers, teachers and self- reports.

Table 18*: SDQ subscales scores for the Normal, Borderline and Clinical ranges using the carer, teacher and self-informant evaluations*

		Normal Range		***Borderline Range***		***Abnormal Range***	
Emotional Symptoms	**Carer**	154	*66.4%*	40	*17.2%*	38	*16.4%*
	Teacher	139	*69.2%*	39	*19.4%*	23	*11.4%*
	Self	61	*56.5%*	14	*13.0%*	33	*30.6%*
Conduct Problems	**Carer**	121	*51.9%*	26	*11.2%*	86	*36.9%*
	Teacher	93	*46.3%*	50	*24.9%*	58	*28.9%*
	Self	67	*62.0%*	21	*19.4%*	20	*18.5%*
Hyperactivity	**Carer**	149	*63.9%*	27	*11.6%*	57	*24.5%*
	Teacher	123	*61.2%*	36	*17.9%*	42	*20.9%*
	Self	61	*56.5%*	19	*17.6%*	28	*25.9%*
Peer Problems	**Carer**	126	*54.3%*	40	*17.2%*	66	*28.4%*
	Teacher	134	*67.3%*	22	*11.1%*	43	*21.6%*
	Self	62	*57.4%*	11	*10.2%*	35	*32.4%*
Total Difficulties	**Carer**	119	*51.1%*	31	*13.3%*	83	*35.6%*
	Teacher	108	*54.3%*	31	*15.6%*	60	*30.2%*
	Self	55	*50.9%*	12	*11.1%*	41	*38.0%*
Prosocial Behaviour	**Carer**	137	*58.8%*	19	*8.2%*	77	*33.0%*
	Teacher	160	*80.4%*	14	*7.0%*	25	*12.6%*
	Self	90	*83.3%*	5	*4.6%*	13	*12%*

The majority of scores, for each respondent and on each of the SDQ scales, fell in the normal range. This is also true for the Total Difficulties scale which groups together the four subscales that measure the children's difficulties.

By considering solely those children that fall in an abnormal range, one notices that carers and teachers are more likely to allocate participants in the abnormal range for their poor

conduct, whereas children are more likely to allocate themselves in the abnormal range for their peer problems and emotional difficulties. Very often, teachers and carers are more concerned about the children's conduct and hyperactivity problems, whereas children are more concerned about their emotional difficulties and their relationship with their peers.

To gain a better understanding of the scores obtained, Pearson product-moment correlations were computed to assess the relationship between the carers', teachers', and children's scores on each variable of the SDQ. As highlighted in the table below, all pair-wise relationships are positive and most of them are significant at the 0.05 level of significance indicating good inter-rater reliability. Interestingly, in almost all subscales, the scores provided by children are more correlated with those provided by carers than teachers, which may indicate that the carers are more aware of the children's difficulties than the teachers.

Table 19*: Pearson correlations relating scores provided by different raters on the SDQ scales*

SDQ Scales	Correlations		
	Carer - Teacher	**Carer - Child**	**Teacher - Child**
Emotional Symptoms	r = 0.21*	r = 0.47**	r = 0.25*
Conduct Problems	r = 0.32**	r = 0.39**	r = 0.20
Hyperactivity Scale	r = 0.50 **	r = 0.45**	r = 0.43**
Peer Problems Scale	r = 0.39**	r = 0.56**	r = 0.40**
Total Difficulties Scale	r = 0.39**	r = 0.52**	r = 0.34**
Pro-Social Scale	r = 0.22 *	r = 0.32**	r = 0.26*

* $p < 0.05$, ** $p < 0.001$

4.3.2 SDQ – Impact Supplement Scores

The tables below provide a breakdown of the scores elicited from the carer, teacher, and self-report Impact Supplement sheets. It is important to note that 104 out of the 108 participants who returned the SDQ- Self Version filled in the Impact Supplement Sheet. Also, 224 out of the 233 Cares who filled in the SDQ-Carer Form completed the SDQ – Impact Supplement Form, and 191 out of the 201 teachers who filled in the SDQ-Teacher Form completed the Impact Supplement Form. In this section the actual percentages instead of valid percentages are quoted as the perception of difficulties is treated as the main question on which further questions were built.

Hence, the replies were calculated on a sample of 224 Carers, 191 Teachers, and 104 youngsters. Percentages do not always add up to 100% due to missing replies.

Table 20*: Perception of difficulties according to Carer, Teacher, and Self*

		No Difficulties		Minor Difficulties		Definite Difficulties		Severe Difficulties	
Perception of difficulties	***Carer***	**36**	16.1%	**67**	29.9%	**75**	33.5%	**46**	20.5%
	Teacher	**31**	16.2%	**55**	28.8%	**67**	35.1%	**38**	19.9%
	Self *	**28**	26.9%	**49**	47.1%	**18**	17.3%	**9**	8.7%

The majority of carers who noted that the child is experiencing difficulties are of the opinion that the difficulties are 'definite' ones. On the other hand, the majority of children who think they have a difficulty, perceive their difficulties as being 'minor' ones. Moreover, more than one fourth of the children who could answer the impact supplement sheet stipulated that they do not have any difficulties.

Table 21: *Perception of duration of difficulties according to Carer, Teacher, and Self*

		Less than a month		1 to 5 months		6 to 12 months		Over a year		No Difficulties Perceived	
Duration of Difficulties	***Carer***	**3**	1.3%	**10**	4.5%	**22**	9.8%	**149**	66.5%	**36**	16.1%
	Teacher	**1**	0.5%	**17**	8.9%	**60**	31.4%	**79**	41.4%	**31**	16.2%
	Self	**7**	6.7%	**4**	3.8%	**9**	8.7%	**53**	51.0%	**28**	26.9%

Table 21 shows how the majority of the carers, teachers, and children who perceive that the child is experiencing a difficulty, are of the opinion that these difficulties have been present for over a year, indicating that they perceive them not to be transitional problems.

Table 22*: Perception of the how the difficulties upset the child, and impact on his or her functioning at home, with peers, in classroom learning, leisure time, and with people around the child*

		Not at all		Only a little		Quite a lot		A great Deal		No Difficulties Perceived	
Difficulties upset or distress the child	***Carer***	**54**	24.1%	**83**	37.1%	**33**	14.7%	**16**	7.1%	**36**	16.1%
	Teacher	**34**	17.8%	**75**	39.3%	**31**	16.2%	**12**	6.3%	**31**	16.2%
	Self	**8**	7.7%	**37**	35.6%	**12**	11.5%	**18**	17.3%	**28**	26.9%
Difficulties presenting problems at home	***Carer***	**26**	11.6%	**75**	33.5%	**57**	25.4%	**23**	10.3%	**36**	16.1%
	Teacher*	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a
	Self	**25**	24.0%	**33**	31.7%	**12**	11.5%	**5**	4.8%	**28**	26.9%
Difficulties presenting problems with friends	***Carer***	**37**	16.5%	**65**	29.0%	**49**	21.9%	**26**	11.6%	**36**	16.1%
	Teacher	**28**	14.7%	**59**	30.9%	**41**	21.5%	**27**	14.1%	**31**	16.2%
	Self	**23**	22.1%	**34**	32.7%	**10**	9.6%	**7**	6.7%	**28**	26.9%
Difficulties presenting problems in classroom learning	***Carer***	**26**	11.6%	**57**	25.4%	**53**	23.7%	**37**	16.5%	**36**	16.1%
	Teacher	**7**	3.7%	**54**	28.3%	**46**	24.1%	**51**	26.7%	**31**	16.2%
	Self	**14**	13.5%	**29**	27.9%	**18**	17.3%	**10**	9.6%	**28**	26.9%
Difficulties presenting problems in leisure time	***Carer***	**53**	23.7%	**71**	31.7%	**41**	18.3%	**12**	5.4%	**36**	16.1%
	***Teacher**[c]*	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a	**N/a**	N/a
	Self	**38**	36.5%	**16**	15.4%	**8**	7.7%	**12**	11.5%	**28**	26.9%
Difficulties make it harder for people around the child	***Carer***	**25**	11.2%	**77**	34.4%	**47**	21.0%	**35**	15.6%	**36**	16.1%
	Teacher	**32**	16.8%	**55**	28.8%	**46**	24.1%	**23**	12.0%	**31**	16.2%
	Self	**20**	19.2%	**35**	33.7%	**11**	10.6%	**9**	8.7%	**28**	26.9%

In all the areas of difficulty identified in the Impact Supplement of the SDQ, the majority of scores provided by carers, teachers, and self, fall in the 'only a little' category. By considering solely those children that fall in 'a great deal' category, one notices that carers and teachers are more likely to allocate participants in this category through their perception that the child's difficulties affect classroom learning, whereas children are more likely to allocate themselves in this category based on their perception that their difficulties upset or distress them, and present problems in their leisure time.

4.4 Conclusion

The above findings provided an insight of the sample characteristics through the information that emerged from the Demographic data sheet, the Child Behaviour Checklist, and the Strengths and Difficulties Questionnaire. The subsequent chapter will describe the analyses that were carried out to address the research questions posed in this study.

Study 2 Chapter 5: Presentation of Findings

5.0 Introduction

This chapter addresses more directly the research questions posed in this study. So as to offer a more detailed picture of the mental health of children in care, results comparing children in care with normative and clinical samples in other studies will be presented. The identification of mental health problems and the manner in which they are addressed will be explored in the subsequent section. A description of the differences noted between children in residential care and children in foster care, both unrelated foster care and related foster care, or kin care, will follow. Through the use of regression analysis, this section also provides a more direct comparison of children in residential care and those in foster care, who were matched on age of admission into care and the duration of time spent in care. In addition, an analysis of the factors affecting the children's mental health will be presented by exploring the impact of several variables on scores obtained on the CBCL and SDQ. This analysis will first be presented for the whole sample, and then separately for children in residential care, and children in foster care. Finally, the regression analysis used to identify the specific factors predicting children's mental health will be presented at the end of the chapter.

5.1 Comparing Maltese Children in Care with Clinical and Normative Samples in Other Studies

The children in the current study consistently demonstrated significant lower scores in both the CBCL and the SDQ, when compared with children in normative populations. With regards to the CBCL, the children in this study obtained significant lower scores in the four subscales considered: Total Competence, Total Internalising, Total Externalising and Total Syndrome Score in all ages and genders ($p<0.01$ in all cases), when compared to a non-referred[1] normative sample of American children on whom the CBCL was standardised. This

[1] The non-referred normative sample is composed of a randomly selected sample of American children from 40 states, who did not make use of any specialized mental health services, substance abuse services or special educational services during the past 12 months. Standardised norms are provided for the Child Behaviour Checklist on the basis of this sample (Achenbach & Rescorla, 2001).

comparison was carried out using the One Sample T-test. Descriptive statistics tables are provided in Appendix O, for boys (6-11 and 12-18 years) and girls (6-11 and 12-18 years).

CBCL scores for the children in care in the current study were also compared to a clinical sample[2] of American children. In some instances, the children in this study were found to resemble more closely children from the clinical sample. No significant differences were observed between children in this sample, when compared to the referred children in the Total Competence scale with regards to boys of all ages and girls aged between 12 and 18 years. Moreover, no major differences were observed between referred children and the children in this study, in the Total Internalising and Total Syndrome Scale scores for boys aged between 12 and 18 years. Tables presenting means and standard deviations for this sample and the clinical sample are presented in Appendix P. These tables reveal that Maltese children in care scored significantly better than the USA clinical sample on several other scales. Young boys (6-11 years) showed fewer difficulties as they obtained lower scores than the clinical sample in terms of Internalising, Externalising and Total problems. Younger girls present a similar picture, in that they too scored better than the clinical sample in these three scales and also in the Competence scale. Older boys showed significantly less Externalising problems than the clinical sample; however their scores were comparable to the clinical sample in the three other scales. Although competence scores in older girls in out-of-home care resembled those in the clinical sample, older girls presented less behaviour problems than the clinical sample on the remaining three scales.

Similar results were observed when analysing children's SDQ scores. Scores obtained by the sampled group were compared to children's scores in the Maltese general population that were provided in the study by Cefai, Cooper and Camilleri (2008) using a normative sample of approximately 7000 participants. Once more, children in the current sample obtained significantly lower scores than Maltese children in all the subscales of the SDQ, in all the Self, Teacher and Parent report versions. The only exceptions were the Self and Teacher Prosocial Behaviour scales for both boys and girls, as no significant differences were noted. Significant differences were observed between the Maltese children in care and Maltese children in the general population, in both genders, in all versions, in the following subscales:

[2] The clinical sample is composed of American children who had made use of mental health services, substance abuse services or special education services over the last 12 months. They have been selected from a larger random sample of children from 40 American states (Achenbach & Rescorla 2001).

Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems and Total Difficulties ($p<0.05$ in all subscales). Further details are provided in Appendix Q.

5.2 Identifying and Addressing Mental Health Problems among Children in Care

This section provides a comparison between the formal diagnosis provided to children by professionals working with them and the scores the children obtained on the DSM–oriented Scales of the CBCL, in order to explore whether children in out-of-home care are being adequately diagnosed. The services used by children will be compared to both these variables, to further examine the manner in which mental health problems are being addressed.

5.2.1 Overlap between the child's formal diagnosis and scores obtained on the CBCL DSM–Oriented scales

An overview of the rating scores obtained by the total sample on each of the 6 DSM-oriented CBCL scales is provided in Table 28. The highest percentages of children scoring within the clinical range were those having conduct and anxiety problems; whereas the lowest percentages were obtained in the somatic problems category. A strict inclusion criterion was used by considering only those children that fell within the clinical range of the DSM-oriented scales to prevent false positives.

Table 28: *Percentages of the total sample rated on the normal, borderline, and clinical range of the CBCL DSM scales*

CBCL DSM scales	Sample Size	Normal	Borderline	Clinical
Affective Problems	210	69.0 %	12.9 %	18.1 %
Anxiety Problems	210	61.9 %	14.8 %	23.3 %
Somatic Problems	210	91.4 %	4.30 %	4.30 %
Attention Deficit/Hyperactivity Problems	210	72.9 %	11.4 %	15.7 %
Oppositional Defiant Problems	210	73.3 %	7.60 %	19.0 %
Conduct Problems	210	57.1 %	17.6 %	25.2 %

Crosstabular analysis was utilised to explore the association between the score categories obtained for each DSM-oriented scale of the CBCL, and the formal diagnosis provided by the professionals working with the child. In order to compute this analysis, children who were labelled by professionals as having comorbid disorders, for example, ADHD and conduct

disorder, were classified as having each of these disorders separately and included in the respective analysis of both the ADHD crosstabulation and the Conduct Disorder crosstabulation.

Table 29: *Crosstabulation of the ratings on the Attention Deficit/Hyperactivity Problems scale of the CBCL (DSM scale) and the children's formal diagnosis of ADHD*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of ADHD	No	Count	137	19	24	180
		Percentage	76.1%	10.6%	13.3%	100.0%
	Yes	Count	16	5	9	30
		Percentage	53.3%	16.7%	30.0%	100.0%
Total		Count	153	24	33	210
		Percentage	72.9%	11.4%	15.7%	100.0%

Table 29 presents a crosstabulation of the diagnosis of ADHD provided by professionals and the categorised scores obtained on the Attention Deficit Hyperactivity Problems scale of the CBCL. Of particular interest in this table are the 16 children who fall within the normal category of the CBCL scale, but who were diagnosed as having ADHD by professionals working with them. In fact, 53.3% of those formally diagnosed as ADHD cases fell within the normal range on the DSM scale. Conversely, 24 children who fell within the clinical range on the CBCL, which comprises 13.3% of this subgroup, were not formally diagnosed as having ADHD according to professionals. However, the Chi-square test reveals (χ^2 = 7.22, v = 2, p = 0.027) that there is a significant association between the professional's formal diagnosis of ADHD and the categorisation obtained on the DSM ADHD scale. This implies that the proportion of children falling within the clinical DSM category that are diagnosed by professionals as having ADHD (30.0%) is significantly higher than the proportion of children not diagnosed as having ADHD (13.3%).

Table 30: *Crosstabulation of the rating on the Affective Problems scale of the CBCL (DSM scale) and the children's formal diagnosis of Depression*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of Depression	No	Count	145	27	38	210
		Percentage	69%	12.9%	18.1%	100.0%
	Yes	Count	0	0	0	0
		Percentage	0%	0%	0%	0%
Total		Count	145	27	38	210
		Percentage	69%	12.9%	18.1%	100.0%

Table 30 (previous page) shows that none of the children were formally diagnosed as having depression or any other mood disorder according to the professionals working with the children. However, 38 children presented enough symptoms to fall in the clinical range of the Affective Problems subscale on the CBCL. This implies that 18.1% of the children, who were not diagnosed by professionals to have depression, scored within the clinical range of the DSM scales, indicating an under-diagnosis of depressive symptoms among this population.

Table 31: *Crosstabulation of the rating on the Anxiety Problems scale of the CBCL (DSM scale) and the child's formal diagnosis of Anxiety Disorder*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of Anxiety Disorder	No	Count	130	31	47	208
		Percentage	62.5%	14.9%	22.6%	100.0%
	Yes	Count	0	0	2	2
		Percentage	0%	0%	100%	100%
Total		Count	130	31	49	210
		Percentage	61.9%	14.8%	23.3%	100.0%

Table 31 shows that only 2 children have been identified by professionals as having some type of Anxiety Disorder. These children, in fact, obtained scores within the clinical range of the DSM Anxiety problems scale. A group of 47 children, comprising 22.6% of the participants not diagnosed to have anxiety disorder by professionals, obtained scores on the clinical range of the DSM scale. However, the Chi-square test reveals ($\chi^2 = 6.63$, v = 2, $p = 0.036$) that there is a significant association between the professional's formal diagnosis of anxiety disorder and the categorisation obtained on the DSM anxiety scale.

Table 32: *Crosstabulation of the rating on the Somatic Problems scale of the CBCL (DSM scale) and the children's formal diagnosis of Somatic Disorder*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of Somatic Disorder	No	Count	192	9	9	210
		Percentage	91.4%	4.3%	4.3%	100.0%
	Yes	Count	0	0	0	0
		Percentage	0%	0%	0%	0%
Total		Count	192	9	9	210
		Percentage	91.4%	4.3%	4.3%	100.0%

Table 32 (previous page) shows that none of the children have been identified by professionals as having a diagnosis of Somatic Disorder. However, nine children presented enough symptoms to score in the clinical range of Somatic problems according to the DSM scales, thereby indicating that this problem is also under-diagnosed among this population.

Table 33 shows that only four children have been formally diagnosed with Oppositional Defiant Disorder, with three of these children scoring within the normal range on the Oppositional scale of the CBCL. On the other hand, 39 children who were not diagnosed by professionals to have Oppositional Defiant Disorder, comprising 18.9% of the group, scored in the clinical range. The Chi-square test supports the claim that there is no association between a formal diagnosis of ODD and the DSM score categorisation obtained on the Oppositional Defiant Problems scale (χ^2 = 0.38, v = 2, p = 0.824), indicating considerable discrepancy between the two classification procedures.

Table 33: *Crosstabulation of the rating on the Oppositional Defiant Problems scale of the CBCL (DSM scale) and the child's formal diagnosis of Oppositional Defiant Disorder*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of Oppositional Defiant Disorder	No	Count	151	16	39	206
		Percentage	73.3%	7.8%	18.9%	100.0%
	Yes	Count	3	0	1	4
		Percentage	75%	0%	25%	100%
Total		Count	154	16	40	210
		Percentage	73.3%	7.6%	19.0%	100.0%

Table 34 (overleaf) shows that only seven children have been formally diagnosed by professionals as having Conduct Disorder, with three of these children (42.9%) obtaining scores within the normal range according to the CBCL Conduct Problems subscale. On the other hand, 50 children (24.6%), who fell within the clinical range of this subscale, have not been formally diagnosed by the professionals working with them. The Chi-square test supports the claim that there is no association between formal diagnosis of Conduct Disorder and the DSM score categories obtained on the Conduct Problems scale (χ^2 = 1.19, v = 2, p = 0.550), indicating considerable discrepancy between the two methodologies.

Table 34: *Crosstabulation of the ratings on the Conduct Problems scale of the CBCL (DSM scale) and the children's formal diagnosis of Conduct Disorder*

			DSM score category			
			Normal	Borderline	Clinical	Total
Formal diagnosis of Conduct Disorder	No	Count	117	36	50	203
		Percentage	57.6%	17.7%	24.6%	100.0%
	Yes	Count	3	1	3	7
		Percentage	42.9%	14.3%	42.9%	100%
Total		Count	120	37	53	210
		Percentage	57.1%	17.6%	25.2%	100.0%

In summary, it can be noted that there has been a general trend of under-diagnosing mental health problems among children who obtained scores within the clinical range of the respective CBCL scales, and in other cases formally diagnosing some children who score within the normal range. Formal diagnoses by professional on Oppositional Defiant and Conduct disorders contrasted heavily with the DSM score categorisation and the number of mismatches was evident.

5.2.2 The Relationship between A Child's Formal Diagnosis and the Services being utilised by the Child

Besides exploring the presence of mental health problems within this population, this study also investigates the manner in which these problems are being addressed. This section provides an overview of the pattern of service utilisation, specifically the use of psychotherapeutic and psychiatric services among children in relation to the presence of mental health problems. Differences within the use of services according to the presence of a mental health diagnosis will be explored. Given the tendency towards under-diagnosis in several of the disorders, this data will be compared not only through formal diagnosis provided by professionals, but also through clinical DSM score categorisation. Most of the associations between diagnoses of mental health problems and use of psychiatric and psychotherapeutic services are revealed through cross-tabular analysis, and tested for significance using the Chi-square test.

Among the 42 children having a formally diagnosed mental health problem, 69% were currently attending psychotherapy. On the other hand, there were 76 children who presented sufficient difficulty to warrant a referral to attend psychotherapy, but did not have a

diagnosed mental health problem. Thus, 45.8% of children who do not have a formal diagnosis also attend psychotherapy. The Chi-square test ($\chi^2 = 7.26$, v = 1, $p = 0.007$) reveals that those who are formally diagnosed as having mental health problems are more likely to attend therapy than those who are not.

A striking fact is that only 27 (64.3%) of the 42 children who are formally diagnosed as having mental health problems are attending such psychiatric services. Thus, 15 children with a formal diagnosis do not have psychiatric follow-up. On the other hand, there are 17 children (10.2% of those who do not have a formal diagnosis) who present with sufficient symptoms to be psychiatrically followed up. However, the Chi-square test ($\chi^2 = 58.7$, v = 1, $p < 0.001$) reveals a significant association between the two variables, implying that the majority of those who do not have a diagnosis do not have psychiatric follow-up and that those who have a diagnosis are also psychiatrically followed up.

Nearly half of the children who did not have a diagnosed mental health problem (48.2%) attended either psychotherapeutic or psychiatric services. Globally, 114 children attended at least one of these services; whereas 94 children attended none. Only eight children (19%) of the 42 who have a formal diagnosis did not receive any of these services. The Chi-square test ($\chi^2 = 14.52$, v = 1, $p<0.001$) reveals a significant association between the child's formal diagnosis and the use of mental health services. This result is further consolidated by another finding that shows that children who make use of either of these services score considerably higher in the Total Syndrome scale ($M = 53.87$, $SD = 33.56$) than those who do not make use of these services ($M = 41.46$, $SD = 28$). The Independent Samples t-test reveals that this difference is significant and not attributed to chance (t (201) = 2.83, $p = 0.005$), which implies that the children making use of mental health services are the ones presenting with more difficulties.

Given the discrepancies between the number of children who had a formal diagnosis and those who scored within the clinical ranges of the DSM-oriented scales, it was deemed necessary to use the DSM score categorisation. Data on the DSM scales were re-coded so that children who scored on the clinical range on at least one of the six DSM profiles were categorised as having a mental health problem. 101 children (49%) of the total sample had at least one DSM profile that was categorised in the clinical range and 62 of these children (61.4%) were attending psychotherapy. Furthermore, 43 of a total of 105 children (41%)

who did not fall in the clinical range in any of the DSM profiles were also attending psychotherapy. However, the Chi-square test (χ^2 = 8.6, v = 1, p = 0.003) reveals that children with mental health problems are more likely to make use of psychotherapy.

Only 27 children (26.7 %) of the 101 having at least one DSM profile in the clinical range used the psychiatric services. Furthermore, 17 children (16.2%) of the 105 having no DSM profiles in the clinical range were also using the psychiatric services. The Chi-square test (χ^2 = 3.4, v = 1, p = 0.065) reveals that there is considerable association between present psychiatric assistance and the presence of mental health problems; however it is not significant at the 0.05 criterion.

The majority (67.3%) of children having at least one DSM profile in the clinical range are currently attending psychotherapy or have psychiatric support. The Chi-square test indicates (χ^2 =11.52, v = 1, p = 0.001) a significant association between the presence of mental health problems and the use of mental health services.

A concluding remark is that there is a general trend that children with mental health problems make use of mental health services. In spite of this fact, there are still a confounding number of children who do not receive any assistance although they have either a formal diagnosis or fall with the clinical range of the DSM-oriented subscales of the Child Behaviour Checklist.

5.3 Comparing Children in Residential Care and Foster Care

In order to capture the differences between children who are currently in foster care and those in residential care, several comparisons were carried out between these two subgroups. These subgroups were compared on a number of variables including demographic variables, reasons for entry into care, type and frequency of contact with family of origin, type of services used, educational profile and scores on the CBCL and SDQ scales. Comparisons are firstly reported between children in residential care and foster care and secondly between children in kin care, unrelated foster care and residential placements.

The last section provides a comparison of the outcomes on the CBCL and SDQ scales between children in residential care and foster care that were matched by age of admission into care, and the duration of their care experience

5.3.1 Differences in Demographic variables

Initial comparison between children in residential care and foster care focused on possible differences in demographic variables, as presented in the Demographic Variables Sheet, which can be found in Appendix A. Several disparities emerged between the two groups of children, as well as between children in residential care, in unrelated foster care and related foster care or kin care, suggesting that these children may have different needs due to their diverse profiles. Results will be presented according to the order of the variables as shown in the Demographic Variables Sheet.

No significant differences were noted between children in residential care and those in foster care regarding nationality and presence of diagnosed medical conditions, mental health problems, diagnosed learning disabilities or developmental disorders. This was also the case when comparing children in residential care, unrelated foster care and kin care. It was not possible to determine whether there were siginificant differences in physical disability between the groups, since only five children had a physical disability.

Significant variations were noted between the residential care and foster care groups in the mean age of admission into care and the mean total length of time children spent in care. The Independent Samples t-test, (t (255) = 6.37, $p < 0.001$) demonstrates that children in residential care (M = 4.87, SD = 3.73) have a significantly higher age of entry into care, than children in foster care (M = 2.17, SD = 3.09). Moreover, the Independent Samples t-test, (t (255) = 5.33, $p < 0.001$) reveals that children in residential care have a significantly lower mean duration in care (M = 5.76, SD = 3.89) than children in foster care (M = 8.35, SD = 3.71).

Important dissimilarities were noted between the mean admission ages into care when comparing children in residential care, unrelated foster care and related foster care using the One-way ANOVA test [F (2, 260) = 23.19, $p < 0.001$]. Children in residential care had the highest mean age of admission (M = 4.87, SD 3.73), followed by those in related foster care (M = 3.14, SD = 3.93) and others in unrelated foster care (M = 1.26, SD = 1.55). Scheffe

post-hoc test reveals a major difference between all the three groups. Substantial discrepancies were again noted between the mean durations in care between the three groups [F (2, 254) = 14.76, p < 0.001]. On average, children in residential care spend significantly less time (*M* = 5.76, *SD* = 3.89) in care than those in kin care (*M* = 7.95, *SD* = 4.11) and those in unrelated foster care (*M* = 8.72, *SD* = 3.29). Scheffe post-hoc tests show noteworthy distinctions between all subgroups except those in unrelated foster care and those in kin care. Moreover, there were no significant differences in the total number of transitions experienced while in care between children in residential care and those in foster care and between children in residential care, unrelated foster care and kin care.

Crosstabular analysis was carried out in order to compare children in different care placements with several categorical demographic variables. The Chi-square test reveals a significant association (χ^2 = 35.13, v = 4, p < 0.001) between type of care and child's legal status at present. As seen in Figure 13, more children who are under a care order are in residential care (57.2%) compared to foster care (40.2%); while more children who are under a court order are in foster care (19.6%) compared to residential care (6.2%). The proportion of children placed in foster care under voluntary placement (40.2%) is comparable to the proportion of children placed in residential care (36.6%).

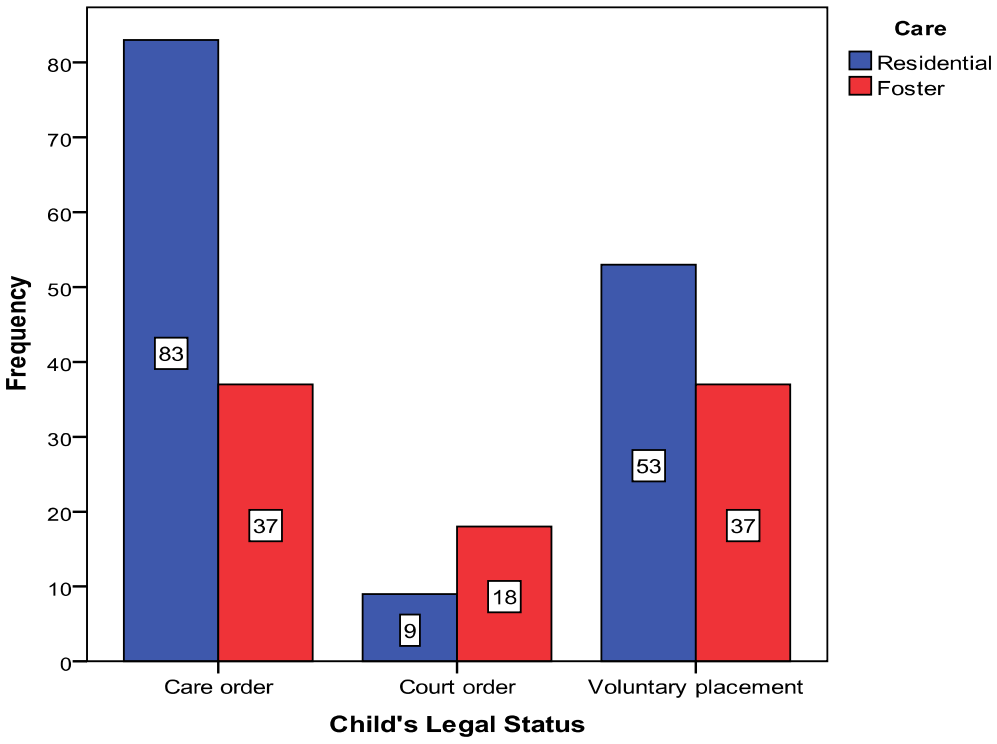


Figure 13: Frequency of children in residential and foster care by their current legal status

Table 35 shows the number of children clustered by type of current placement and child's present legal status. The Chi-square test reveals significant differences between proportions ($\chi^2 = 12.24$, v = 2, $p < 0.005$).

Table 35: *Crosstabulation of the child's current placement and legal status*

			Child's legal status at present			Total
			Voluntary Placement	Care Order	Court Order	
Current Placement	Residential care	Count	53	83	9	145
		Percentage	36.6%	57.2%	6.2%	100.0%
	Unrelated foster care	Count	18	28	3	49
		Percentage	36.7%	57.1%	6.1%	100.0%
	Kin care	Count	19	9	15	43
		Percentage	44.2%	20.9%	34.9%	100.0%
Total		Count	90	120	27	237
		Percentage	38.0%	50.6%	11.4%	100.0%

There are higher proportions of children in kin care that had a voluntary placement and there are higher proportions of children in residential care and unrelated foster care under a care order. A contrasting pattern was observed with regards to children who have a court order, where only 6.2% of children in residential care were in this category, compared to 6.1% of children in unrelated foster care and 34.9% of the children in kin care.

The Independent sample t-test reveals that the child to adult ratio in residential care (M = 5.91, SD = 2.19) is significantly higher than the child to adult ratio in foster placements (M = 1.52, SD = 0.77).

5.3.2 Comparison of Children according to Reason for Entry into Care

The next step involves a comparison of the proportion of children, in different placements, categorised by parental issues that emerge as main reasons for their entry into care. Each reason was considered separately, even when children had multiple reasons for entry into care. Associations between these two categorical variables were analysed through the Chi-square tests. Significant differences between proportions for the residential and foster care groups were observed in children who experienced the following parental issues which

resulted in reasons for entry into care: marital breakdown (χ^2 = 3.92, v = 1, p < 0.05), substance abuse (χ^2 = 4.79, v = 1, p < 0.05), inadequate parental skills (χ^2 = 5.12, v = 1, p < 0.05) and prostitution ($\chi 2$ = 4.02, v = 1, p < 0.05). Table 36 (overleaf) shows higher proportions of children in residential care when marital breakdown and inadequate parental skills are the reasons for entry into care, and higher proportions of children in foster care when parental substance abuse and prostitution are the reasons for care placements. No important variations were found between proportions for the residential and foster care groups when mental health problems, parental rejection, single parenthood, imprisonment and other issues were the main reasons for entry into care.

A comparison of the proportion of children in different placements categorised by child issues that emerge as main reasons for their entry into care reveals notable differences in the following: sexual abuse (χ^2 = 6.46, v = 1, p < 0.05), physical abuse (χ^2 = 16.09, v = 1, p < 0.001), emotional neglect (χ^2 = 8.95, v = 1, p < 0.005) and behavioural problems in the child (χ^2 = 6.8, v = 1, p < 0.01). Table 36 (overleaf) shows higher proportions of children in residential care that experienced these child issues. No significant differences between proportions were found for the residential and foster care groups when emotional abuse, physical neglect, physical disability and other issues were the main reasons for entry into care.

A comparison of the proportion of children in different placements categorised by external factors reveals a significant difference in substandard housing (χ^2 = 7.09, v = 1, p < 0.01). There are distinctly higher proportions of children in residential care that experienced substandard housing compared to children in foster care.

Table 36: *Percentage of children in residential and foster care by reason for care admission*

Parental Issues	Residential Care		Foster Care	
	Not present	Present	Not present	Present
Marital Breakdown	61.5%	38.5%	73.1%	26.9%
Substance Abuse	77.0%	23.0%	64.8%	35.2%
Inadequate Parental Skills	24.2%	75.8%	37.0%	63.0%
Prostitution	80.1%	19.9%	69.4%	30.6%
Child Issues	**Residential Care**		**Foster Care**	
	Not present	Present	Not present	Present
Sexual abuse	85.7%	14.3%	95.4%	4.6%
Physical abuse	55.9%	44.1%	79.6%	20.4%
Emotional neglect	39.8%	60.2%	58.3%	41.7%
Behaviour problems in child	82.6%	17.4%	93.5%	6.5%
External Issues	**Residential Care**		**Foster Care**	
	Not present	Present	Not present	Present
Substandard housing	68.9%	31.1%	83.3%	16.7%

Further comparison was carried out by clustering children in care into three subgroups - residential care, unrelated foster care and kin care. Percentage differences between these three subgroups were examined for all parental issues, child issues and external issues. The Chi-square test was again used to assess whether differences between percentages were significant at the 0.05 level of significance. Table 37 (overleaf) shows those items where percentage differences between the residential care and foster care groups were significant at the 0.05 criterion. Items not reaching statistical significance are not displayed in the table.

Percentage differences in care placements were found to vary significantly in the following parental issues: parental mental health problems (χ^2 = 16.72, v = 2, $p < 0.001$), single parenthood (χ^2 = 7.44, v = 2, $p < 0.05$), substance abuse (χ^2 = 10.79, v = 2, $p = 0.005$) and other issues (χ^2 =9.38, v = 2, $p < 0.01$). No significant differences between proportions were

noted for the three subgroups in parental rejection, marital breakdown, inadequate parental skills, imprisonment and prostitution.

Table 37: *Percentage of children in residential and foster care by reason for care admission*

Parental Issues	Residential Care		Kin Care		Unrelated Foster Care	
	Not present	Present	Not present	Present	Not present	Present
Parental Mental Health Problems	62.7%	37.3%	82.7%	17.3%	44.6%	65.4%
Single Parenthood	69.6%	30.4%	69.2%	30.8%	50%	50%
Substance Abuse	77%	23%	53.8%	46.2%	75%	25%
Other Issues	80.7%	19.3%	94.2%	9.8%	71.4%	28.6%
Child Issues	**Residential Care**		**Kin Care**		**Unrelated Foster Care**	
	Not present	Present	Not present	Present	Not present	Present
Emotional abuse	59%	41%	78.8%	21.2%	58.9%	41.1%
Sexual abuse	85.7%	14.3%	96.2%	3.8%	94.6%	5.4%
Physical abuse	55.9%	44.1%	92.3%	7.7%	67.9%	32.1%
Emotional neglect	39.8%	60.2%	69.2%	30.8%	48.2%	51.8%
Behaviour problems in child	82.6%	17.4%	94.2%	5.8%	92.9%	7.1%
External Issues	**Residential Care**		**Kin Care**		**Unrelated Foster Care**	
	Not present	Present	Not present	Present	Not present	Present
Substandard housing	68.9%	31.1%	92.3%	7.7%	75%	25%

Child issues demonstrating significant differences between proportions for the three groups include: emotional abuse ($\chi^2 = 7.08$, v = 2, $p < 0.05$), sexual abuse ($\chi^2 = 6.53$, v = 2, $p < 0.05$), physical abuse ($\chi^2 = 23.22$, v = 2, $p < 0.001$), emotional neglect ($\chi^2 = 13.73$, v = 2, $p = 0.01$) and behavioural problems in the child ($\chi^2 = 6.84$, v = 2, $p < 0.05$). No significant differences between the groups were observed for physical neglect, physical disability and other factors. Substandard housing also emerged as the external factor ($\chi^2 = 11.36$, v = 2, $p < 0.005$), where the proportion of children allocated in residential care, unrelated foster care and kin care

notably differed. No significant differences were noted among children in the diverse placements as regards the number of reasons for entry into care.

5.3.3 Children's Contact with their Family of Origin

The next aspect of the analysis compared children's contact with different members of their family of origin across various placements. The Independent Samples t-test and the One-Way ANOVA test were used to determine whether the number of child's siblings and the number of child's siblings in care differed significantly between types of placements. No significant differences were noted in the number of siblings the children had according to their placements. However, children in residential care had a significantly higher number of siblings in care (M = 1.79, SD = 1.43) than children in foster care (M = 1.41, SD = 1.3), t (249) = 2.16, $p < 0.05$). This major discrepancy was not noted when comparing children in residential care, children in kin care and children in unrelated foster care.

Once more, the number of siblings being in the same placement as the child was significantly higher among children in residential care (M = 0.78, SD = 0.96) when compared to children in foster care (M = 0.29, SD = 0.52) in general $t\ (240)$ = 4.48, $p<0.001$). This was also the case when the comparison was carried out across the 3 groups: children in residential care, children in kin care and children in unrelated foster care [F (2, 239) = 14.42, $p<0.001$]. Scheffe post-hoc tests demonstrate that the mean number of siblings in the same placement as the child differ significantly between children in residential care (M = 0.78, SD = 0.96) and children in kin care (M = 0.39, SD = 0.62), and between children in residential care and children in unrelated foster care (M = 0.2, SD = 0.41).

A significant association was noted also in the frequency of contact with at least one sibling (χ^2 = 17.51, v = 5, $p < 0.005$) and children's current placement. Contact with siblings was less frequent among children in foster care (52.6% met their siblings less often than once a month or between 1-4 times a month) with 19.2% having no contact with their siblings. However children in residential care, on average, met their siblings more often, with 46.5% connecting more than once a week. This pattern was noted also when the three groups were analysed separately (χ^2 = 30.86, v = 10, p = 0.001). Of significance is the finding that 57.2% of children in unrelated foster care had no contact, or met their siblings less than once a month. Similarly, 44.4% of children in kin care had this type of contact with siblings; however 47.2% also met their siblings more than once a week. No significant differences

were noted in the type of contact with at least one sibling (whether supervised or unsupervised) according to the children's current placement.

Crosstabulations and Chi-square analysis demonstrated that with regards to contact with the biological parents, children in residential care had more contact with their biological mother than children in foster care, ($\chi^2 = 28.58$, $v = 5$, $p < 0.001$). Of the fostered children, 60.2% either had no contact with their mother or met her less than once a month, when compared to 35.3% in residential care. There were 28.3% of children in residential care who met her for two or more days per week, compared to 8.2% of fostered children. This was also the case when comparing children in residential care, children in kin care and children in unrelated foster care ($\chi^2 = 37.39$, $v = 10$, $p < 0.001$), where 50% of children in unrelated foster care had no contact with their mother, compared to 29.5% in residential care and 28.3% in kin care. No significant differences were noted across the different groups in relation to the type of contact with the biological mother, whether supervised or unsupervised.

In order to determine whether there are any significant associations between frequency of contact with the biological father and type of placement, children whose father is listed as unknown were excluded from the analysis. Results of the analysis of the remaining children, demonstrated, once more, a significantly higher proportion of contacts with the biological father among children in residential care when compared to children in foster care in general ($\chi^2 = 18.47$, $v = 6$, $p = 0.005$). 42.3% of fostered children had no contact with their father compared to 36.8% of children in residential care. Notably, 23.9% of children in the latter group met their father for two or more days a week compared to 7.7% of fostered children.

This percentage difference was even larger when comparing children in residential care with children in kin care, and children in unrelated foster care ($\chi^2 = 38.81$, $v = 12$, $p < 0.001$). Those in unrelated foster care had the least contact, with only 5.4% meeting on a weekly basis compared to 32.3% of those in residential care and 30.6% in kin care. From the children in unrelated foster care, 56.4% had no contact with their father compared to 36.8% in residential care and 26.5% in kin care. The type of contact with the biological father also differed significantly across groups, but only when comparison was carried out among children in residential, kin and unrelated foster care ($\chi^2 = 7.88$, $v = 2$, $p < 0.05$). The proportion of children in unrelated foster care who had supervised contact (71.4%) was significantly larger compared to the proportions of children in residential care (25.7%) and kin care (18.2%). Conversely, the proportion of children in kin care (81.8%) and residential

care (74.3%) whose contact with the biological father is not supervised, is significantly larger compared to the proportion of children in unrelated foster care (28.6%). It should however be noted that only seven children in unrelated foster care have contact with their biological father, compared to 22 children in kin care and 70 children in residential care.

5.3.4 Services utilised by Children

The next section of the questionnaire focuses on past and present services that were or are still used by children. Crosstabulations and Chi-square analyses are again used to investigate associations that may exist between type of service used and type of placement. Table 38 (overleaf) demonstrates a significantly higher proportion of children in residential care who in the past made use of psychotherapy ($\chi^2 = 13.65$, $v = 1$, $p < 0.001$), psychiatric services ($\chi^2 = 11.74$, $v = 1$, $p = 0.001$), and occupational therapy ($\chi^2 = 5$, $v = 1$, $p < 0.05$), compared to children in foster care in general. Children in foster care, on the other hand, made significantly more use of 'other' services ($\chi2 = 9.99$, $v = 1$, $p < 0.005$). A description of these 'other' services is provided in Section 4.1.7. No significant percentage differences were noted between children in residential care and foster care regarding past use of physiotherapy and speech therapy.

Notable differences in children's current use of psychotherapy ($\chi^2 = 44.49$, $v = 1$, $p < 0.001$), psychiatric services ($\chi^2 = 11.68$, $v = 1$, $p < 0.001$) and 'other' services ($\chi^2 = 13.85$, $v = 1$, $p < 0.001$) were also noted. Once more children in residential care are currently making more use of psychotherapy and psychiatric services, while children in foster care in general are making more use of 'other' services. A significant percentage difference was also observed between children in foster and residential care who receive help from a high support worker ($\chi^2 = 6.51$, $v = 2$, $p < 0.05$). Children in residential care make more use of this service. No significant differences were noted between children in residential care and those in foster care regarding their current use of physiotherapy, occupational therapy and speech therapy. Table 38 displays the percentages of children making past use and present use of services according to their current care placement.

Table 38: *Percentages of children making past use of services according to their current placement (Residential vs. Foster care)*

Services used in the Past	Residential Care		Foster Care	
	Not used	Used	Not used	Used
Psychotherapy	37.3%	62.7%	60.2%	39.8%
Psychiatric services	73.9%	26.1%	90.7%	9.3%
Occupational therapy	83.2%	16.8%	92.6%	7.4%
Other services	94.4%	5.6%	82.4%	17.6%

Services used currently	Residential Care		Foster Care	
	Not used	Used	Not used	Used
Psychotherapy	35.4%	64.6%	76.9%	23.1%
Psychiatric services	72.7%	27.3%	89.8%	10.2%
Other services	94.4%	5.6%	3.1%	96.9%
Receives help from support worker	11.9%	87.4%	96.9%	3.1%

Table 39: *Percentages of children making past use of services according to their current placement (Residential vs. Kin care vs. Unrelated foster care)*

Past use of Services	Residential Care		Kin Care		Unrelated Foster Care	
	Not used	Used	Not used	Used	Not used	Used
Psychotherapy	37.3%	62.7%	67.3%	32.7%	53.6%	46.4%
Psychiatric Services	73.9%	26.1%	96.2%	3.8%	85.7%	14.3%
Other Services	94.4%	5.6%	75%	25%	89.3%	10.7%

Current use of Services	Residential Care		Kin Care		Unrelated Foster Care	
	Not used	Used	Not used	Used	Not used	Used
Psychotherapy	35.4%	64.6%	82.7%	17.3%	71.4%	28.6%
Psychiatric Services	72.7%	27.3%	94.2%	5.8%	85.7%	14.3%
Other Services	94.4%	5.6%	78.8%	21.2%	80.4%	19.6%

A similar analysis was carried out to compare past and current use of services between children in residential care, kin care, and unrelated foster care. Table 39 shows that significant percentage differences between the placement groups were noted in past use of psychotherapy ($\chi^2 = 15.69$, $v = 2$, $p < 0.001$), psychiatric services ($\chi^2 = 13.62$, $v = 2$, $p < 0.001$) and other services ($\chi^2 = 15.87$, $v = 2$, $p < 0.001$). Significant percentage differences were also noted with regards to current use of psychotherapy ($\chi^2 = 45.86$, $v = 2$, $p < 0.001$), psychiatric help ($\chi^2 = 12.83$, v = 2, $p < 0.005$) and other services ($\chi^2 = 13.91$, v = 2, $p = 0.001$). In general, it is more probable for children in residential care to have used or to be currently using psychotherapy and psychiatric services; whereas children in unrelated foster care and kin care are more likely to have used or to be presently using 'other' services. Past and current use of occupational therapy, physiotherapy and speech therapy were not found to differ significantly between the groups.

5.3.5 The Educational Profile

Upon examining aspects of children's experiences at school, no significant associations emerged between the type of care placement and the type of assistance children received from Learning Support Assistants (LSA) at school. Moreover, no significant connections were noted between absenteeism, repetition of years and special examination arrangements, with type of care placement.

Significant differences emerged between children in residential care and children in foster care in attainment in English, t (129) = 2.42, $p < 0.05$, and Maltese (t (131) = 2.33, $p < 0.05$). Children in residential care performed significantly worse in English (M = 43.8, SD = 22.61) and Maltese (M = 48.98, SD = 22.53) than children in foster care in English (M = 53.38, SD = 21.86) and Maltese (M = 57.89, SD = 20.5). No major discrepancies were observed in children's grades in Mathematics. The Independent sample t-test also showed that there were no significant gender differences in the mean marks obtained in each academic subject, in both the residential and foster care groups. When children's grades were compared through the One-Way ANOVA test across the three care placement groups, a pattern in grades emerged. Children in unrelated foster care got the highest mean grades in all 3 subjects, followed by those in kin care and residential care. However, only English grades differed significantly between the unrelated foster care (M = 55.04, SD = 21.06), kin care (M = 51.72, SD = 22.92) and residential care (M = 43.8, SD = 22.61) groups.

5.3.6 The Relationship Profile

An analysis of the extra-curricular activities engaged in revealed few significant differences among children clustered by care placement. No significant percentage differences were observed regarding the children's gender and age group; engagement in sports and hobbies, and membership in at least one organisation. When children in foster care are compared to those in residential care, the Chi-square test reveals that the latter are more likely to have at least one chore. In fact 82.4% of children in residential care had at least one chore in contrast to 67.5% of children in foster care. This significant percentage difference also emerged when children in residential care were compared to others in kin care and unrelated foster care. The proportions of children in unrelated foster care (72.3%) and in kin care (60.6%) having at least one chore, are significantly less than the corresponding proportion of children in residential care (82.4%).

The Independent Samples T-test was used to assess differences in relationships between foster and residential care groups as regards their relationships with friends and family. Children in foster care had, on average, a higher number of close friends, t (203) = 3.54, p=0.001, more frequent meetings with friends outside regular school hours, t (199) = 1.98, p<0.05); better relationships with other children, t (204) = 2.19, p<0.05), and could work or play alone better, t (202) = 2.82, (p<0.01) than children in residential care. There were no significant differences between the two groups with regards to their relationships with siblings and behaviour with their parents.

Differences between children in kin care and those in unrelated foster care were less conspicuous. As a trend children in kin care tended to behave better with their parents, had more regular meetings with friends outside regular school hours; had better relationships with their siblings, and could work or play alone better than children in unrelated foster care and residential care. However, these differences were not found to be significant at the 0.05 level of significance.

5.3.7 Differences in Children's CBCL scores

The Independent Samples t-test was used to compare mean scores between children in foster and residential care in the four main CBCL scales: Total Competence Scale, Total Internalising Scale, Total Externalising Scale and Total Syndrome Scale. Table 40 reveals

that children in foster care had significantly higher scores in the Total Competence scale; whereas children in residential care had significantly higher scores in Total Internalising, Total Externalising and Total Syndrome scales.

Table 40: *Independent Samples t-test according to the child's current placement (Foster vs Residential) for the CBCL subscales*

	Residential Care		Foster Care		t and *p*-values
	M	SD	M	SD	
Total Competence	17.38	5.45	19.8	4.87	t (189) = 3.12, $p < 0.005$
Total Internalising	12.45	8.97	9.18	7.28	t (204) = 2.73, $p < 0.01$
Total Externalising	19.21	12.4	11.4	7.66	t (203.99) = 5.56, $p < 0.001$
Total Syndrome	55.3	35.4	37.8	21.3	t (201.89) = 3.96 $p < 0.001$

The One-way ANOVA test was used to compare mean scores between children in unrelated foster care, kin care and residential care in the four main CBCL scales. Table 41 (overleaf) shows that children in unrelated foster care had significantly higher scores in the Total Competence scale; whereas children in residential care had significantly higher scores in Total Internalising, Total Externalising and Total Syndrome scales. Results from Scheffe post hoc tests are indicated in small print showing which groups were significantly different.

Table 41: *ANOVA according to the child's current placement (Residential vs Unrelated Foster care vs Kin care) for the CBCL subscales*

	Residential care[1]		Unrelated foster care[2]		Kin care[3]		F and *p*-value
	M	SD	M	SD	M	SD	
Total Competence	17.38	5.45	20.4	4.58	18.9	5.22	F (2,188) = 5.63, $p < 0.005$ [1-2]
Total Internalising	12.45	8.97	8.91	6.53	9.55	8.31	F (2, 203) = 3.76, $p < 0.05$
Total Externalising	19.21	12.4	12.4	7.10	10.1	8.30	F (2,203) = 12.95, $p < 0.001$ [1-2, 1-3]
Total Syndrome	55.30	35.4	40.4	19.9	34.0	23.1	F (2,201) = 8.22 $p < 0.001$ [1-2, 1-3]

5.3.8 Differences in Children's SDQ scores

Analysis of children's scores on the SDQ revealed several significant differences between children in residential care and those in foster care. Children in foster care scored lower in difficulty and higher in Prosocial Behaviour than children in residential care in all versions (Self report, Teacher and Carer versions). Mean scores and standard deviations are presented in table 42 and significance was tested using the Independent Samples t-test. In the Self report version, mean scores differed significantly between the groups in the Emotional Symptoms scale, Conduct Problems scale, Peer Problems scale and Total Difficulty scale. Mean scores did not differ significantly between the groups in the Hyperactivity scale and the Prosocial Behaviour scale. Differences in mean scores between the two groups were less conspicuous in the Teacher version of the SDQ. In fact, mean scores differed significantly solely in the Conduct Problems scale. On the other hand, Carer version of the SDQ yielded significant mean score differences between the two groups of children on all subscales. Children in foster care consistently scored lower in difficulty and higher in Prosocial Behaviour than children in residential care.

Table 42: *Independent Samples t-test according to the child's current placement (Residential vs Foster care) for the SDQ subscales*

	Residential Care		Foster Care		t and *p*-values
	M	SD	M	SD	
Emotional symptoms (Self)	4.97	2.51	2.81	2.12	t (104) = 4.45, $p < 0.001$
Conduct problems (Self)	3.42	1.80	2.43	1.48	t (104) = 2.85, $p = <0.005$
Peers problems (Self)	3.83	2.24	2.57	2.02	t (104) = 2.85, $p = 0.005$
Total Difficulties (Self)	17.1	6.50	12.4	5.26	t (104) = 3.76, $p < 0.001$
Conduct Problems (Teacher)	3.44	2.62	2.68	2.24	t (195) = 2.09 , $p < 0.05$
Emotional Symptoms (Carer)	4.10	2.80	2.59	2.28	t (224) = 4.24 , $p < 0.001$
Conduct Problems (Carer)	4.16	2.64	2.68	2.31	t (224) = 4.29 , $p < 0.001$
Peer Problems (Carer)	3.81	2.40	2.69	1.98	t (224) = 3.65, $p < 0.001$
Total Difficulties (Carer)	17.6	7.36	12.7	6.49	t (224) = 5.03, $p < 0.001$
Prosocial Behaviour (Carer)	6.79	2.69	8.33	2.15	t (210.59) = 4.52, $p < 0.001$
Hyperactivity (Carer)	5.68	2.95	4.82	2.68	t (224) = 2.23 , $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

The children's scores on the SDQ were also compared across children who are in residential care, kin care and unrelated foster care. Results of the Self report version demonstrated significant differences in the Emotional Symptoms, Conduct Problems, Peer Problems and Total Difficulty scales. Children in residential care scored higher in all difficulty scales, while children in unrelated foster care and kin care scored higher in Prosocial Behaviour. Post-hoc Scheffe tests in fact demonstrate a significant difference between children in residential care and those in unrelated foster care, and between children in residential care and others in kin care regarding the Emotional Symptoms Scale and the Total Difficulties Scale. A significant difference in children's scores was observed between children in residential care and children in unrelated foster care on the Conduct Problems Scale. On the the Peer Problems Scale, children in unrelated foster care obtained the best average scores, closely followed by children in kin care, while those in residential care obtained the worse scores. However, post-hoc Scheffe tests did not show statistically significant differences. No significant differences were observed among the three groups as regards the Hyperactivity and Prosocial Behaviour scales.

With regards to the Teacher version, once more the only significant difference noted was in the conduct problems scale, where children in residential care scored significantly higher in conduct problems than children in kin care. Children in kin care had the best scores on this scale, followed by children in unrelated foster care, while children in residential care had the worst scores.

The Carer version once more yielded more differences between the three groups of children. Significant differences were noted in the Emotional Symptoms, Conduct Problems, Peer Problems, Total Difficulties and Prosocial Behaviour scales. Children in residential care had the worse scores, while scores for children in kin care and unrelated foster care were quite similar, except in the Emotional Symptoms scale, where children in kin care had scores which were a bit better than children in unrelated foster care. As regards the Hyperactivity Scale no significant differences were noted. Post-hoc Scheffe tests were carried out to explore among which specific groups the significant differences lie. With regards to the Emotional Symptoms, Peer Problems and Prosocial Behaviour scales, the significant difference was between children in residential care and children in unrelated foster care. With regards to the Conduct problems scale and the Total Difficulty scale, major variations

were noted between both children in residential care and children in unrelated foster care as well as between children in residential care and children in kin care.

Table 43: *Independent Samples t-test according to the child's current placement (Residential vs Unrelated Foster care vs Kin care) for the SDQ subscales*

	Residential care		Unrelated foster care		Kin care		F and *p* values
	M	SD	M	SD	M	SD	
Emotional Symptoms (Self)	4.97	2.51	2.89	2.13	2.72	2.16	F (2, 103) = 9.84, $p < 0.001$
Conduct Problems (Self)	3.42	1.80	2.32	1.20	2.56	1.76	F (2, 103) = 4.13, $p < 0.05$
Peer problems (Self)	3.83	2.24	2.53	2.14	2.61	1.94	F (2, 103) = 4.04, $p < 0.05$
Total Difficulty (Self)	17.1	6.50	12.7	4.98	12.1	5.66	F (2, 103) = 7.06, $p = 0.001$
Conduct Problems (Teacher)	3.44	2.62	3.11	2.39	2.06	1.86	F (2, 194) = 3.85, $p < 0.05$
Emotional Symptoms (Carer)	4.10	2.80	2.18	1.97	3.10	2.56	F (2, 223) = 10.38, p < 0.001
Conduct Problems (Carer)	4.16	2.64	2.71	2.54	2.63	2.00	F (2, 223) = 9.1 9, p < 0.001
Peer Problems (Carer)	3.81	2.40	2.55	1.87	2.86	2.12	F (2, 222) = 6.86, p = 0.001
Total Difficulty (Carer)	17.6	7.36	12.7	6.30	12.8	6.81	F (2, 223) = 12.586, p < 0.001
Prosocial Behaviour (Carer)	6.79	2.69	8.69	1.95	7.87	2.34	F (2, 223) = 11.44, p < 0.001

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Following analysis of the SDQ Scales, Mann-Whitney U-Tests were carried out to compare scores on the SDQ Impact Supplement Sheet according to children's current care placement. The Self report versions exposed a significant difference in perception of difficulties among children in residential care and children in foster care ($U = 836$, $z = -2.74$, $p < 0.01$), where

children in residential care reported more difficulties. No significant differences were observed concerning the duration of difficulties, if difficulties upset or distress the child, whether difficulties present problems at home, with friends, in classroom learning, in leisure time or if difficulties make it harder for people around the child to cope.

In the Teacher version, the same result was obtained where a significant difference was observed between the two groups as to perception of difficulties ($U = 3404$, $z = -2.22$, $p < 0.05$), where once more children in residential care were seen to have more difficulties than children in foster care. When analysing the Carer version, more important discrepancies were observed between children in residential care and children in foster care in perception of difficulties ($U = 3214.5$, $z = -5.39$, $p < 0.001$)), duration of difficulties ($U = 3819$, $z = -4.14$, $p < 0.001$)), whether difficulties upset or distress the child ($U = 4369$, $z = -2.41$, $p < 0.05$)), if difficulties present problems in the classroom ($U = 3655.5$, $z = -2.83$, $p = 0.005$)) and whether the child's difficulties are a burden on the respondent and other persons living with the child ($U = 4402$, $z = -2.17$, $p < 0.01$). Children in residential care were seen as having more difficulties, however foster parents marked duration of difficulties as being greater in children in their care, upset or distress the child more, present more problems in classroom learning and are more of a difficulty to them and other people living with the child.

5.3.9 Matched Comparisons between Children in Residential Care and Children in Foster Care for the CBCL and SDQ Subscales

All participants were grouped by Type of Care (Residential care and Foster care); Age of First Admission into care (Below 2 years and Above 2 years) and Time-in-Care (0-5 years, 5-10 years and 10-18 years). This distribution generated 12 different groups each having a different Type of Care, Age of First Admission and Time-in-Care combination. The category ranges for Age of First Admission were set as indicated above, since most of the literature talks about the 0-2 age bracket as an important cluster regarding children's behavioural formation. The category ranges for Time-in-care were set as indicated above to guarantee similar sample sizes. Means, standard deviations and sample sizes are provided, for each comparison, in Appendix R.

The mean Total Competence scores, mean Total Internalising scores, mean Total Externalising scores and mean Total Syndrome scores were compared between the 12 groups clustered by age of first admission, type of care and time in care. The results are displayed in Figures 14, 15, 16 and 17.

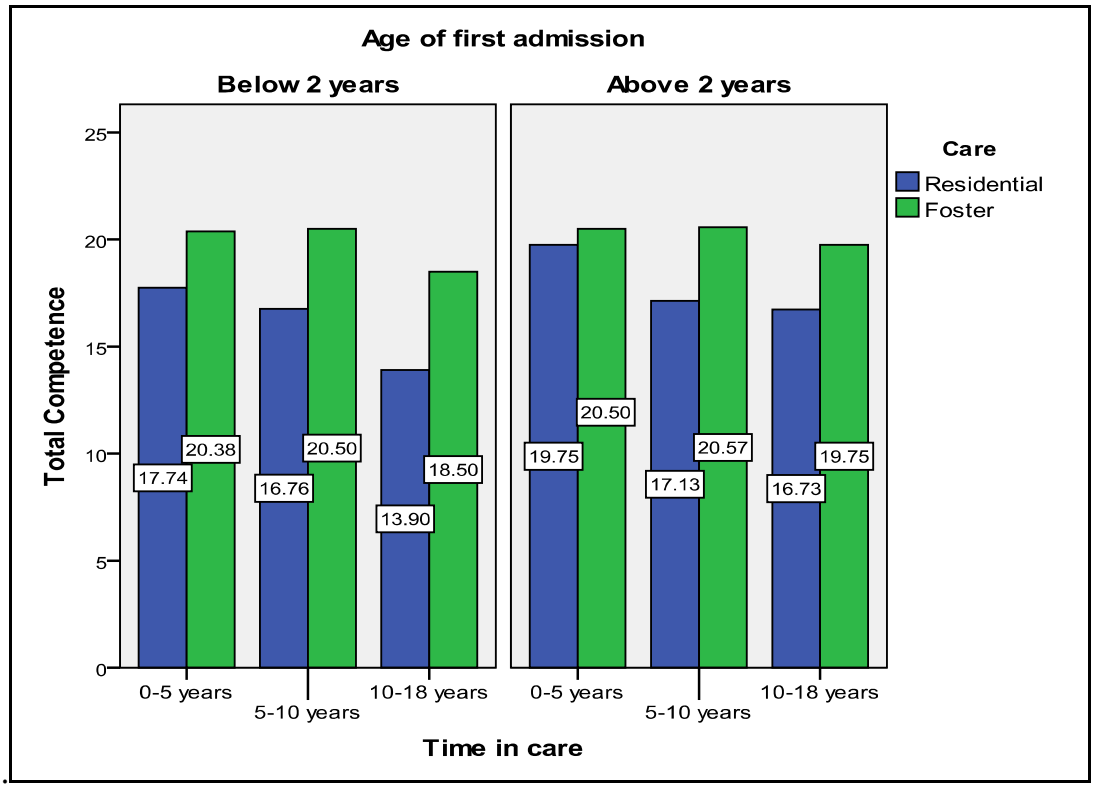


Figure 14: Total Competence scores compared according to type of care, time spent in care and age of admission into care

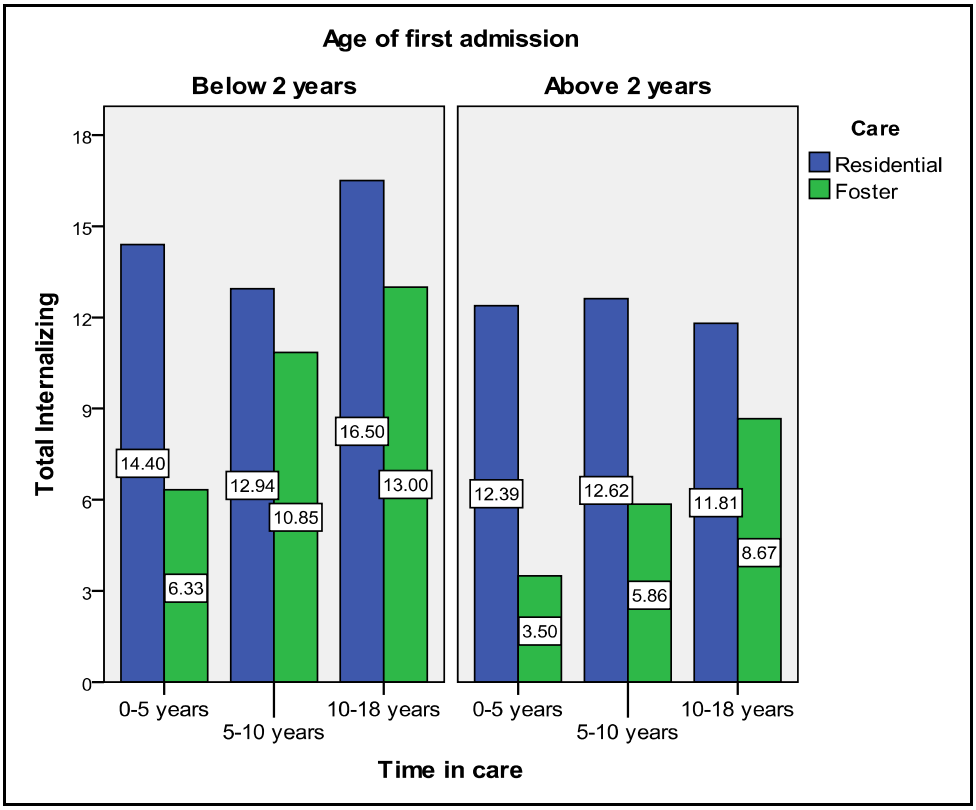


Figure 15: Total Internalising scores compared according to type of care, time spent in care and age of admission into care

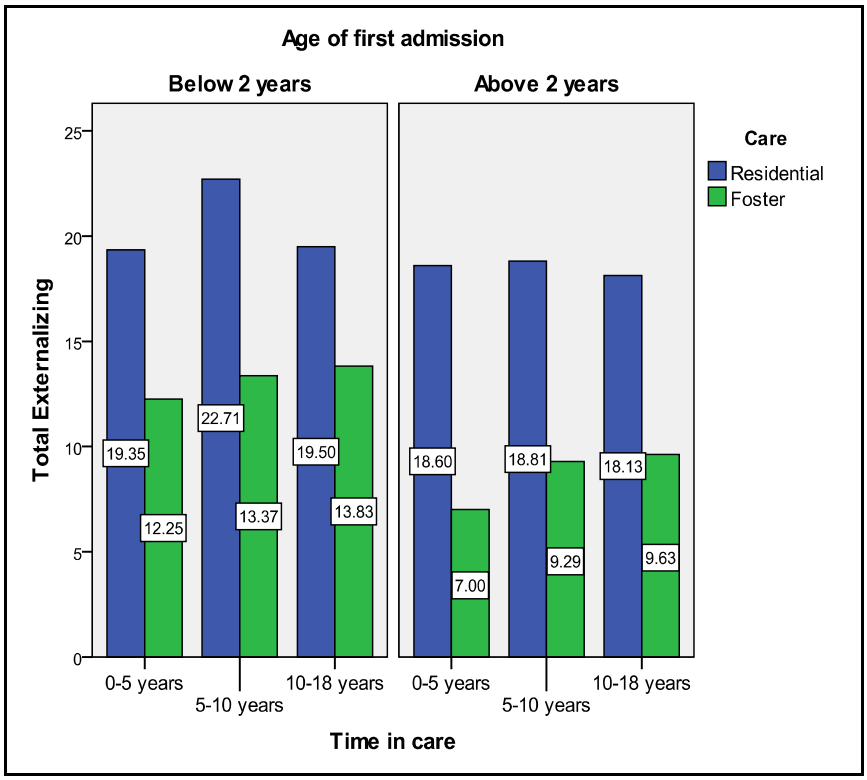


Figure 16: Total Externalising scores compared according to type of care, time spent in care and age of admission into care

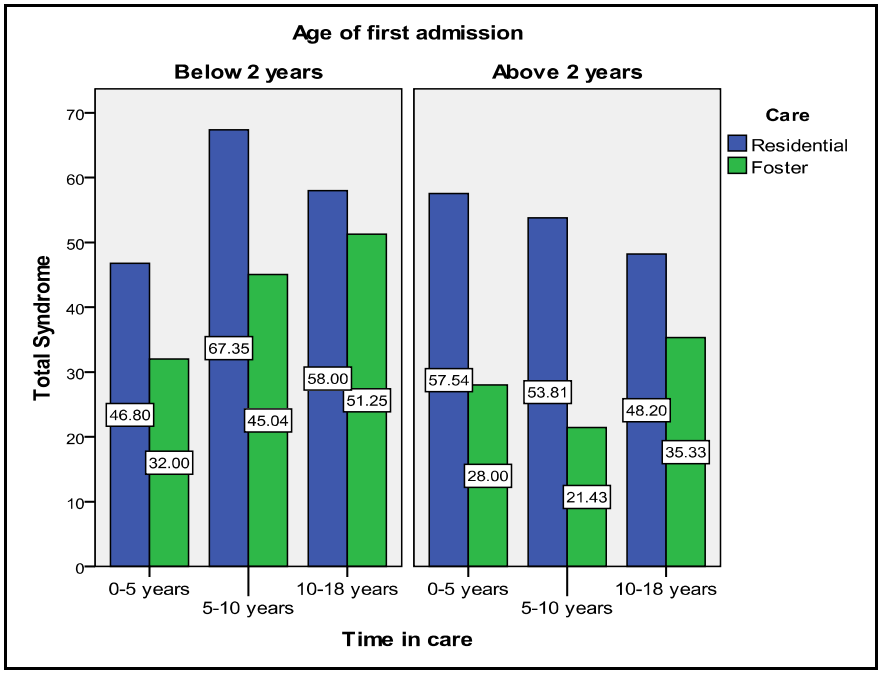


***Figure 17*:** Total Syndrome scores compared according to type of care, time spent in care and age of admission into care

The type of care experienced by the child was the sole predictor of children's scores on all four CBCL subscales. Children in foster care had significantly higher scores on the Total Competence scale [F (1, 176) = 10.28, p = 0.002] compared to children in residential care. On the other hand, children in residential care had significantly higher mean scores on the Total Internalising scale, [F (1, 188) = 5.966, p = 0.016]; the Total Externalising scale, [F (1, 188) = 21.68, $p < 0.0005$] and the Total Syndrome scale, [F (1, 186) = 12.76, $p < 0.0005$].

The mean Total Difficulty and prosocial scores derived for Teachers' and Carers' evaluations were compared between the 12 groups. The mean Total Difficulty and Prosocial scores derived for Self report evaluations were not compared between these groups since the data was sparse. All children below the age of 11 years are not expected to provide a consistent evaluation of their social emotional behaviour difficulties and Prosocial Behaviour. The results are displayed in Figures 18, 19, 20 and 21.

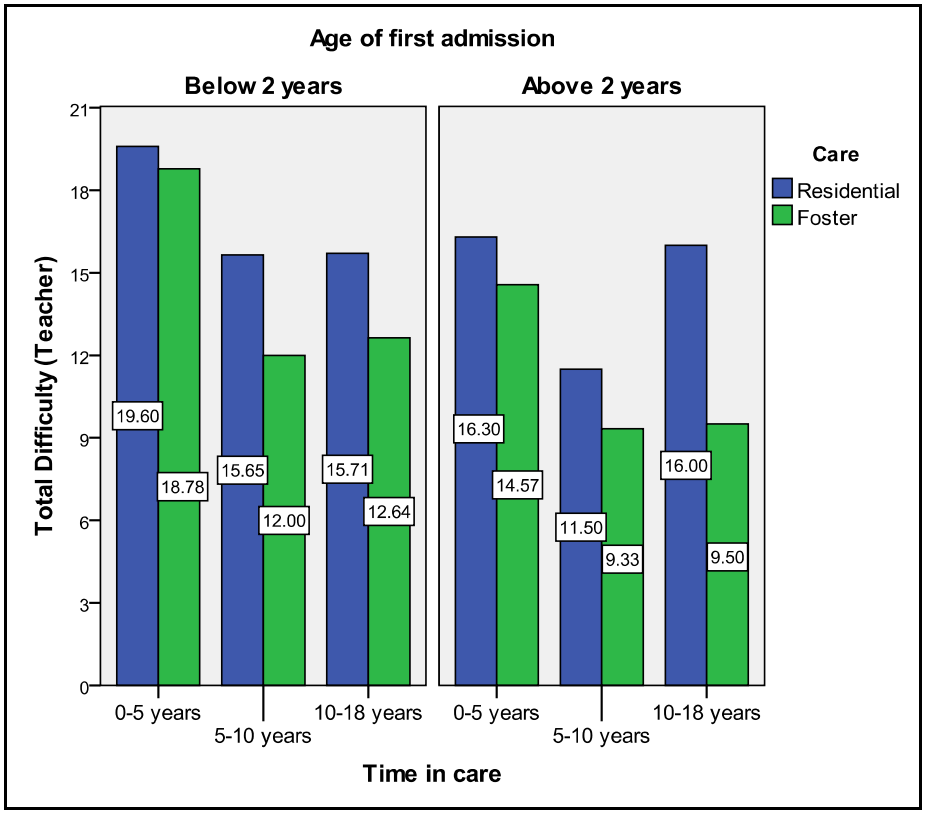


Figure 18: Total Difficulties scores (Teacher version) compared according to type of care, time spent in care and age of admission into care

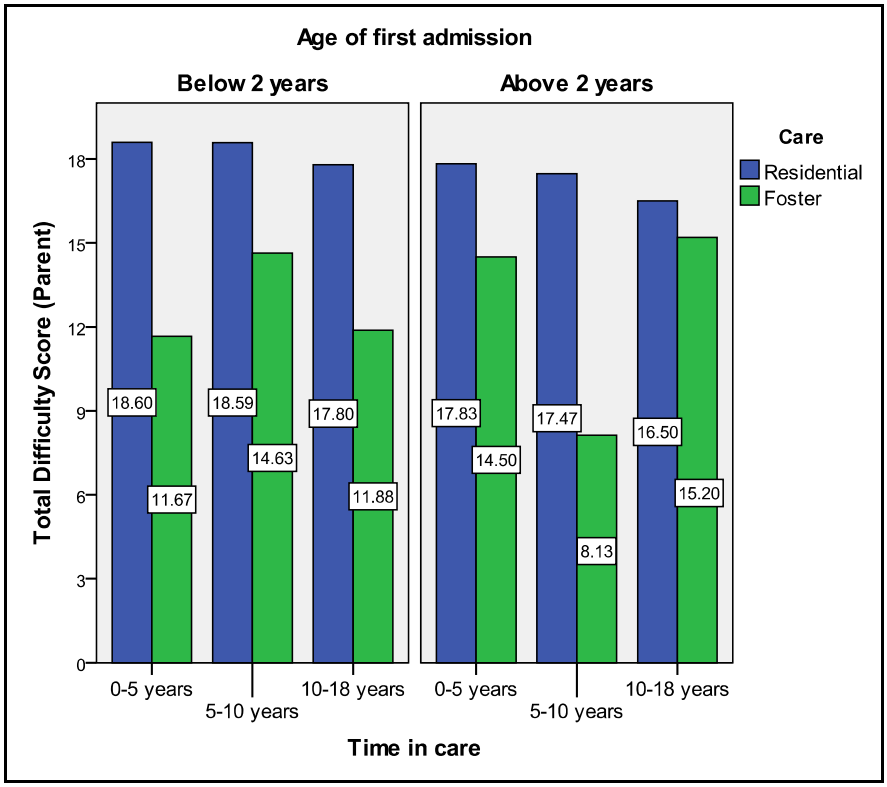


Figure 19: Total Difficulties scores (Carer versions) compared according to type of care, time spent in care and age of admission into care

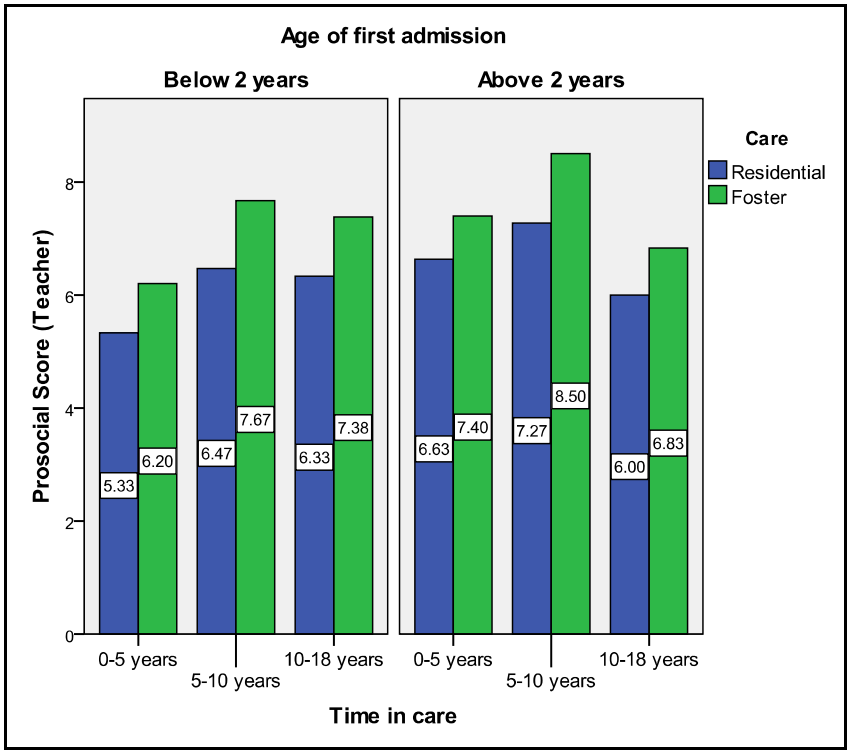


***Figure 20*:** Prosocial scores (Teacher version) compared according to type of care, time spent in care and age of admission into care

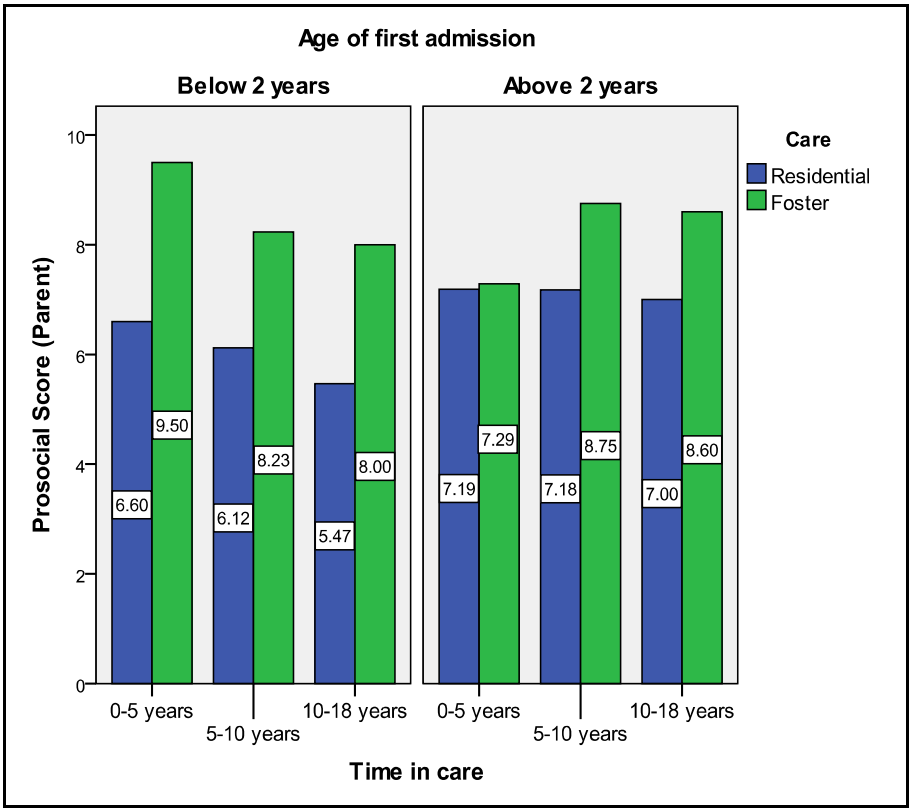


***Figure 21*:** Prosocial scores (Carer versions) compared according to type of care, time spent in care and age of admission into care

The type of care experienced by the child was the dominant predictor of children's scores on all SDQ subscales. Children in foster care had significantly higher Prosocial Behaviour scores provided by Teachers [F (1, 182) = 4.236, p = 0.071] and Carers [F (1, 207) = 21.10, p < 0.0005] compared to children in residential care. On the other hand, children in residential care had significantly higher mean Total Difficulty scores provided by teachers [F (1, 183) = 3.999, p = 0.047] and Carers [F (1, 207) = 20.17, p < 0.0005] compared to children in foster care. Time in care and age of first admission were found to be significant predictors of Total Difficulty in Teachers' evaluations only. According to teachers, children, who were less than two years old, when admitted into care had significantly higher mean Total Difficulty scores than children who were admitted into care at an older age [F (1, 183) =6.373, p=0.012]. Moreover, children who have been more than 5 years in care, scored significantly lower in Total Difficulty, than children who have been in care for less than 5 years [F (2, 183) = 43.496, p = 0.032].

Undoubtedly, Type of Care is the dominant predictor in all 8 regression model fits where the mean CBCL and SDQ scores differed significantly between children in foster and residential care, indicating that differences between these two groups is better predicted by the type of

care placement they have than by the duration of their care history or their age upon admission.

Age of First Admission is also another strong discriminating factor but not as prevailing as Type of Care. Children, whose age of first admission was less than 2 years, tended to have lower mean scores in total competence and Prosocial Behaviour in both Teachers' and Carers' evaluations. Moreover, these children tended to have higher mean scores in Total Internalising, Total Externalising, Total Syndrome and Total Difficulty in both Teachers' and Carers' evaluations. However it should be noted that in most cases these differences were not found to be significant at the 0.05 level of significance.

Time in Care was the least discriminating factor of the three predictors. The mean CBCL and SDQ scores differed, marginally, between children clustered in different time groups and trends are not so obvious.

5.4 Variables Affecting Children's Psychosocial Functioning among the Whole Sample of Children in Out-Of-Home-Care

This section explores the manner in which several variables affect children's scores on the CBCL and SDQ. The subscales included in these analyses for every factor are the Total Competence, Total Internalising, Total Externalising and Total Syndrome scales for the CBCL, and the Prosocial Behaviour and Total Difficulties scales in the Self report, Teacher and Carer Informant versions for the SDQ.

Analyses of the impact of several demographic variables will be presented first, followed by the impact of reasons for admission into care, the impact of children's contact with their family of origin, the services being utilised by children, and lastly the impact of children's involvement in extra-curricular activities and their interpersonal relationships.

5.4.1 The Impact of Demographic Variables on CBCL and SDQ Scores

Independent sample t-tests showed that there were no significant differences among the scores of Maltese and non-Maltese nationals, on any of the 4 CBCL or 6 SDQ subscales

mentioned above. There were also no significant differences on the scores, obtained on the CBCL and SDQ scales, according to the presence or absence of a diagnosed medical condition.

Comparisons according to the presence or absence of mental health problems showed that there were several significant differences on CBCL and SDQ subscale scores. Children who did not have a diagnosed mental health problem (M = 19.28, SD = 4.94) scored significantly higher on the Total Competence scale when compared to those who did (M = 14.5, SD = 5.28), t (189) = 5.26, $p < 0.001$. On the other hand, children who had a diagnosed mental health problem scored significantly higher on both the Total Externalising, t (204) = 2.26, $p < 0.05$ and Total Syndrome scale, t (202) = 2.01, $p < 0.05$, when compared to those that did not have such a diagnosis (Total Externalising M = 19.76, SD = 12.03 compared to M = 15.33, SD = 11.6; and M = 57.33, SD = 32.55 compared to M = 46.33, SD = 31.4 on the Total Syndrome Scale).

Similarly, carers rated children having a diagnosed mental health problem, (M = 19.12, SD = 7.54) as having significantly more Total Difficulties than those who did not have such a diagnosis (M = 14.93, SD = 7.18), t (224) = 3.38, $p < 0.01$. Teachers too reported children diagnosed with a mental health problem (M = 16.92, SD = 7.5) as having, on average, significantly higher scores on Total Difficulties than those who did not (M = 13.15, SD = 7.22), t (194) = 2.8, $p < 0.01$. There were no significant differences in the mean scores of the Self-Informant version of the Total Difficulties scale, and the Prosocial Behaviour scale for all of the informants.

The presence of a diagnosed learning disability also impacted children's scores on some of the CBCL and SDQ scales. Total Competence was significantly lower among those diagnosed with a learning disability (M = 14.42, SD = 5.34) when compared to those that were not (M = 19.09, SD = 5.03), t (189) = 4.68, $p < 0.001$. On the SDQ subscales, carers rated children with a diagnosed learning difficulty as having more Total Difficulties (M = 18.13, SD = 6.98) than those who did not (M = 15.23, SD = 7.41), t (224) = 2.2, $p < 0.05$. Teachers too identified more Total Difficulties among those that were diagnosed with a learning disability (M = 17.23, SD = 6.97) when compared to those not having a learning disability (M = 13.18, SD = 7.32), t (194) = 2.88, $p <0.01$. There were no significant differences on the other subscales.

Pearson's correlation was used to explore the relationship between the scores obtained on the CBCL and SDQ scales, and children's academic grades obtained in 3 main subjects. On the CBCL scale, namely the Total Internalising, Total Externalising, and Total Syndrome scales, no significant relationships emerged, however, children scoring highly on the academic subjects were more likely to also obtain higher scores on the Total Competence scale, as indicated by the positive correlations between this scale and marks in English *(*$r = 0.23$, $p < 0.05$), Maltese *(*$r = 0.31$, $p < 0.005$) and Maths *(*$r = 0.2$, $p < 0.05$).

Children's scores in the SDQ Self reports were not significantly related to the marks they obtained in these 3 academic subjects. However, marks obtained in Maltese were related to Prosocial Behaviour scores on the Teacher Informant version *(*$r = 0.28$, $p = 0.005$) and negatively related to Total Difficulties according to Teachers *(*$r = -0.22$, $p < 0.05$). According to Carers' reports low scores on each of the academic subjects were related to higher scores on the Total Difficulties scales: Maltese *(*$r = -0.27$, $p < 0.01$), English *(*$r = -0.26$, $p < 0.01$), Maths *(*$r = 0.2$, $p < 0.05$).

Pearson's correlation was used to explore the relationship between the total number of transitions made by the child and his/her scores on the CBCL and SDQ scales. Table 44 displays that the number of transitions is positively related to the Total Internalising, Total Externalising and Total Syndrome scales of the CBCLwhich implies that the larger the number of transitions the higher the scores obtained. A greater number of transitions were also positively related to higher scores on the Carer, Teacher and Self ratings of Total Difficulties on the SDQ and to lower scores on the Carers' ratings of Prosocial Behaviour. These findings are significant and indicate that children who experienced a greater number of transitions are also more likely to manifest greater difficulties on several aspects of their behaviour. There was no important relationship between the number of transitions and the remaining, CBCL and SDQ scale scores.

Table 44: *Significant correlations between the number of transitions in care and the CBCL and SDQ subscales*

	Number of transitions	
	Pearson's correlation	P-value
Total Internalising	0.152	$p \leq 0.05$
Total Externalising	0.196	$p \leq 0.001$

Total Syndrome	0.141	$p \leq 0.05$
Total Difficulty (Carer)	0.225	$p \leq 0.001$
Total Difficulty (Teacher)	0.155	$p \leq 0.05$
Total Difficulty (Self)	0.212	$p \leq 0.05$
Prosocial (Carer)	-0.131	$p \leq 0.05$

The age of the children's admission into care was not significantly related to any of the CBCL subscales. However, Pearson's correlation showed that this variable was significantly related to the child's Self report of Prosocial Behaviour ($r = 0.20$, $p < 0.05$) on the SDQ. These results indicate that children admitted into care at older ages are more likely to view themselves as having higher levels of Prosocial Behaviour.

As expected, a positive relationship was found between the length of time in care and the total number of transitions while in care ($r = 0.37$, $p < 0.001$), implying that the greater the length of time spent in care, the more transitions were experienced by the child. Complementing this finding was a significant negative relationship noted between the total number of transitions while in care and the age of entry into care ($r = -0.526$, $p < 0.001$), confirming that children who enter into care at a younger age experience more transitions.

The total length of time in care was not significantly related to any of the CBCL subscales. However, it was significantly related to the Carers' ratings on Total Difficulties ($r = -0.14$, $p < 0.05$) and the Self rating on Prosocial Behaviour ($r = -0.23$, $p < 0.05$) on the SDQ. In line with the above findings, children having spent a larger number of years in care, are more likely to rate themselves as scoring poorly on Prosocial Behaviour. However, with an increasing number of years spent in care, carers are more likely to view the child as having a lower level of difficulties.

The One-Way ANOVA test reveals that the child's legal status is significantly related to two CBCL subscales, namely with the Total Internalising scale, $F(2,181) = 3.7$, $p < 0.05$) and the Total Externalising scale, $F(2, 181) = 4.27$, $p < 0.05$. Scheffe post-hoc analysis indicated that significant differences in the mean Total Internalising scale scores emerged only between children in voluntary care and those placed on a care order, with the former subgroup ($M = 9.13$, $SD = 6.17$) exhibiting less Internalising symptoms than the latter ($M = 12.77$, $SD = 9.07$). Although the ANOVA test reveals that the child's legal status is a significant predictor of Total Externalising scale scores, the post-hoc analysis does not reveal any significant pair-wise comparisons between the groups. Nevertheless, one can claim that the largest difference

in the mean Total Externalising scale scores was between children on a care order (*M* = 18.9, *SD* = 11.04) and children who have been voluntarily placed into care (*M* = 14.51, *SD* = 11.11); the latter group displays less Externalising behaviours.

For the SDQ subscales, significant differences emerged only for the Carers' reports of Total Difficulties, (F (2,196) = 6.52, *p* <0.005). Post-hoc analyses showed that significant differences emerged between the children placed on a care order and the two other subgroups. Children on a care order (*M* = 17.59, *SD* = 6.86) scored significantly higher than both those in voluntary care (*M* = 14.57, *SD* = 7.35) and those on a court order (*M* = 12.48, *SD* = 8.79).

5.4.2 The Impact of Reasons for Entry into Care on CBCL and SDQ scores

The Independent Samples t-test was used to compare the mean scores on the CBCL and SDQ subscales between children clustered by reasons for the child's entry into care. Pearson's correlation was used to explore the relationship between the total number of reasons for admission and the CBCL and SDQ subscales. The two tests revealed that mean scores on the CBCL and SDQ subscales varied marginally, and relationships with the total number of reasons for admission were weak and not statistically significant.

The presence or absence of parental mental health issues, rejection of the child, marital breakdown, imprisonment and prostitution were not significantly related to any of the child's scores on the CBCL and SDQ subscales.

Family structure was found to be significantly related to the child's scores on the Total Competence scale of the CBCL, *t* (189) = 2.52, *p* <0.05. Children for whom single parenthood was a reason for admission into care (*M* = 19.6, *SD* = 5.14) scored significantly higher on this scale than those who did not identify such a reason (*M* = 17.6, *SD* = 5.35). Significant differences also emerged on the Carers' reports of Prosocial Behaviour of the SDQ, *t (224)* = 2.28, *p* < 0.05. Similarly, children of single parents scored significantly higher on this variable (*M* = 7.92, *SD* = 2.5) than children for whom single parenthood was not identified as a reason for entry into care (*M* = 7.1, *SD* =2.62).

Children scored significantly lower on the Total Competence scale of the CBCL, when parental substance abuse was present (M = 17.07, SD = 4.9 compared to when it was absent (M = 18.8, SD = 5.45), t (189) = 2.01, $p < 0.05$. Other CBCL or SDQ scale scores were not found to be significantly related to parental substance abuse.

Children's scores on the CBCL Total Externalising scale and the CBCL Total Syndrome scale, differed significantly between the levels of parenting skills (t (204) = 2.82, p = 0.005 and t (202) = 2.62, $p < 0.01$ respectively). Children of parents with inadequate parenting skills (M = 17.67, SD = 12.15) manifested significantly more Externalising problems than children whose parents had adequate parenting skills (M = 12.82, SD = 8.79). The presence of inadequate parenting skills also impacted children's higher scores on the Total Syndrome scale (M = 52.32, SD = 33.55) when compared to children of parents with adequate parenting skills (M = 39.65, SD = 25.55). The impact of inadequate parenting skills was also reflected in the children's Self reports, t (104) = 2.48, $p < 0.05$, and the Carers' reports of Total Difficulties of the SDQ, t (224) = 2.74, $p < 0.01$. Children of parents with inadequate parenting skills, self reported higher levels of difficulties (M = 16.43, SD = 6.44) when compared to those with adequate skills (M = 13.11, SD = 6.03). Carers too reported this pattern, with the presence of inadequate parenting skills (M = 16.59, SD = 7.49) being related to higher levels of difficulties (M = 13.7, SD = 6.88). Teachers' evaluations showed that children of parents with inadequate parenting skills (M = 6.54, SD = 3.12) have lower levels of Prosocial Behaviour than those who did not (M = 7.72, SD = 2.12), t (193) = 2.72, p <0.01.

The presence of emotional abuse led to higher scores on the Total Externalising scale of the CBCL, (M = 18.25, SD = 10.86), when compared to children who did not have such experiences (M = 14.98, SD = 11.67), t (204) = 2.01, $p < 0.05$. A greater level of Total Difficulties was reported by carers among children who had experienced emotional abuse (M =17.05, SD =7.2) compared to those who had not (M = 14.92, SD = 7.45), t *(224)* = 2.09, $p <$ 0.05. There were no other significant differences in the mean scores of remaining CBCL and SDQ scales between different levels of emotional abuse. Children who had experienced physical abuse (M = 19.76, SD = 11.45) also manifested a higher level of Total Externalising problems than those who had not experienced physical abuse (M = 14.21, SD = 11), t (204) = 3.43, p = 0.001. On the other hand, children who had experienced sexual abuse (M = 17.84, SD = 10.44) manifested greater difficulties on the Total Internalising scale of the CBCL than those who did not experience this type of abuse (M = 10.52, SD = 8), t (204) = 3.69, $p <$

0.001. No significant differences emerged on the other subscales between different levels of physical or sexual abuse.

A higher level of Total Externalising problems was reported among those who had experienced physical neglect (M = 17.82, SD = 12.02) when compared to those who had not (M = 14.62, SD = 10.67), t (204) = 2.02, $p < 0.05$. Carers also reported that the former group of children also experienced more Total Difficulties, t (224) = 2.07, $p < 0.05$, (M = 16.72, SD = 7.64) when compared to those who did not have this experience (M = 14.69, SD = 7.06). The presence of emotional neglect was significantly related to the Total Externalising and the Total Syndrome scales of the CBCL, and the Teachers' and Carers' Informant ratings on Total Difficulties on the SDQ, with the presence of emotional neglect being always related to a higher level of difficulties, as amplified in Table 45.

Table 45: *Independent Samples t-test according to the presence or absence of emotional neglect for the CBCL & SDQ subscales*

	Emotional Neglect				*t and* P-values
	Present		Absent		
	M	SD	M	SD	
Total Externalising	18.21	12.03	13.87	10.30	t (204) = 2.75, $p < 0.01$
Total Syndrome	53.88	33.9	42.16	28.09	t (202) = 2.65, $p < 0.01$
Total Difficulty (Teacher)	15.46	7.56	12.16	6.86	t (194) = 3.2, $p < 0.005$
Total Difficulty (Carer)	16.84	7.58	14.40	7.02	t (224) = 2.5 , $p = 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

The presence of child behaviour problems was significantly related to the majority of scales on the CBCL and SDQ, as indicated in Table 46 (overleaf). As noted in the table, children manifesting behavioural problems as one of the reasons for admission into care scored higher on almost all the Difficulty scales. Moreover, they also obtained lower scores on the strength based scales of Total Competence, and on the Teacher and Carer scales of Prosocial Behaviour, when compared to other peers in care.

Comparison of mean scores on the CBCL and SDQ subscales between children with and without disability was not possible since the sample sizes were too small to enable correct statistical inferences.

Table 46: *Independent Samples t-test according to the presence or absence of Child behaviourbehaviour problems on admission into care for the CBCL & SDQ subscales*

	Child Behaviour Problems				t and P-values
	Present		Absent		
	M	SD	M	SD	
Total Externalising	23.63	13.78	14.97	10.55	t (204) = 3.96, $p < 0.001$
Total Competence	13.36	4.73	19.08	5.04	t (189) = 5.33, $p < 0.001$
Total Syndrome	66.90	39.02	45.56	29.59	t (33.54) = 2.81, $p < 0.01$
Total Difficulty (Self)	21.50	5.25	14.34	6.08	t (104) = 4.42, $p < 0.001$
Total Difficulty (Teacher)	18.67	6.30	13.10	7.29	t (194) = 3.69, $p < 0.001$
Prosocial Behaviour (Teacher)	5.07	2.90	7.21	2.78	t (193) = 3.63, $p < 0.001$
Total Difficulty (Carer)	20.32	7.36	14.97	7.17	t (224) = 3.85, $p < 0.001$
Prosocial Behaviour (Carer)	6.48	2.45	7.53	2.60	t (224) = 2.09, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Presence/Absence of substandard housing was another significant predictor of the Total Externalising, t (204) = 2.59, $p = 0.01$, and Total Syndrome t (202) = 2.65, $p < 0.01$, scales of the CBCL and the Carer Total Difficulties on the SDQ, t (224) = 2.33, $p < 0.05$. Children coming from families with substandard housing (M = 19.7, SD = 11.81) scored higher on Externalising problems than did children who did not come from this environment (M = 15.03, SD = 11.12). Similarly, they also demonstrated higher scores on the Total Syndrome scale (M = 58.43, SD = 32.89) when compared to those who did not have substandard housing (M = 45.14, SD = 30.89). Comparable results were obtained on the Carers' Informant Total Difficulties scales of the SDQ, that is, the presence of substandard housing (M = 17.67, SD = 7.12) resulted in higher scores than its absence (M = 15.04, SD = 7.41).

5.4.3 The Impact of Contact with Family of Origin on CBCL and SDQ scores

Using Pearson's correlation, no significant relationships were found between the CBCL and SDQ scales and the number of siblings the child had in care and elsewhere. Nonetheless, some significant relationships emerged between the CBCL and SDQ subscales and the number of siblings placed in the same placement with the child. A positive relationship (r = 0.20, $p < 0.01$) was found between the number of siblings placed in the same placement with the child and children's scores on the Carer version of the Total Difficulties scale of the SDQ, indicating that children having a higher number of siblings placed within the same placement, are more likely to score higher on Total Difficulties. A similar pattern emerged in the children's scores on the Total Externalising scale of the CBCL. Children having more siblings placed within the same placement were more likely to score higher in Externalising problems (r = 0.20, $p < 0.01$). The number of siblings was positively related to the number of siblings in care (r = 0.48, $p < 0.001$). Moreover, the number of siblings in care was also positively related to the number of siblings placed within the same placement (r = 0.41, $p <$ 0.001). This implies that siblings in care are more likely to be placed within the same placement than be separated.

The frequency of contact with one's siblings was not significantly related to any of the CBCL or SDQ scales, nor was the type of contact (supervised/unsupervised) with one's siblings. However, children who met their mother more frequently were also more likely to meet their siblings more often (r = 0.50, $p < 0.001$).

The child's Self report revealed that frequency of contact with the mother was only significantly related to the Total Difficulties scale on the SDQ (r = 0.21, $p < 0.05$). Children who assessed themselves as having more difficulties were also more likely to have more frequent contact with their mother. On the other hand, Independent sample t-tests show that the type of contact children had with their mother was significantly related to the Teachers' ratings of Total Difficulties (t (113) = 2.25, $p < 0.05$). Children having unsupervised contact with their mother (M = 14.9, SD = 7.46) scored significantly higher than those who had supervised contact (M = 11.69, SD = 6.92).

Contact with one's (biological) father was related to Carers' ratings on Total Difficulties (r = 0.15, $p < 0.05$), indicating that children who had more frequent contact with their father were also more likely to have higher levels of difficulties according to their carers. Irrespective of

whether it was supervised or unsupervised, the type of contact was not related to any of the CBCL or SDQ scales.

5.4.4 The Impact of the Services Being Utilised by the Children on CBCL and SDQ Scores

The children's scores on the CBCL and SDQ were explored further in terms of their relationships with the services utilised by children, both in the past and in the present. Moreover, the relationships between these variables and other predictors, including the use of a High Support Worker within the care placement, Learning Support Assistant (LSA) within the school and the child to adult ratio within the care placement are also provided.

Independent sample t-tests were carried out to assess whether the use of the High Support Service (HSS) affects children's CBCL and SDQ subscale scores. Table 47 shows that children who received HSS support scored significantly higher on the Total Internalising, Total Externalising and Total Syndrome subscales, and scored significantly lower in Total Competence. Children who received HSS had higher levels of difficulty compared to children not receiving the service, when assessed by Carers and by the children.

Table 47: *Independent Samples t-test according to the use or non-use of a high support service (HSS) for the CBCL & SDQ subscales**

	High Support Service (HSS)				t and P-values
	Utilised		Not Utilised		
	M	SD	M	SD	
Total Internalising	19.53	11.71	10.77	7.95	t (182) = 3.91, $p < 0.001$
Total Externalising	28.67	11.90	15.41	10.77	t (182) = 4.53, $p < 0.001$
Total Competence	13.83	4.75	18.83	5.18	t (168) = 3.6, $p < 0.001$
Total Syndrome	81.50	38.88	46.82	30.51	t (180) = 4, $p < 0.001$
Total Difficulty (Self)	20.12	6.85	14.93	6.45	t (96) = 2.17, $p < 0.05$
Total Difficulty (Teacher)	23.56	5.71	15.11	7.18	t (196) = 4.84, $p < 0.001$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Those children who had a higher number of hours allocated with the HSS worker, given that they used this service, were more likely to have higher scores on the Total Competence scale of the CBCL, whereas those with less contact hours, were more likely to have lower scores

on the Total Competence (r = 0.18, p < 0.05). The number of contact hours with a HSS worker was also related to the child's difficulties within the school setting. Specifically, Teachers' evaluations indicated that children who had more contact hours with an HSS worker were less likely to have difficulties, whereas those that had less contact hours were more likely to score higher on the Total Difficulties scale (r = -0.18, p < 0.05).

Children who are statemented receive the support of an LSA within the school setting. Children making use of such a service scored significantly different than their peers on several CBCL and SDQ subscales. Table 48 showed that children who are statemented scored lower than their peers on the scales assessing positive functioning, such as the Total Competence scale of the CBCL, and the Prosocial Behaviour scale of the SDQ, on both the Carer and Teacher Informant versions. Moreover, they scored higher in Total Difficulty indicating more problematic behaviour on both the Teachers' and Carers' evaluations on the SDQ. There were no significant differences between scores on the CBCL and SDQ subscales not mentioned below.

Table 48: *Independent Samples t-test for the CBCL & SDQ subscales according to whether the child is statemented or not*

	Child is statemented		Child is not statemented		t and P-values
	M	SD	M	SD	
Total Competence	15.42	5.10	19.37	5.08	t (186) = 4.66, p < 0.001
Total Difficulty (Teacher)	17.74	6.55	12.47	7.13	t (191) = 4.52, p < 0.001
Prosocial Behaviour (Teacher)	6.21	2.95	7.17	2.82	t (191) = 2.01, p < 0.05
Total Difficulty (Carer)	18.73	7.80	14.75	7.08	t (219) = 3.47, p = 0.001
Prosocial Behaviour (Carer)	6.70	2.66	7.59	2.55	t (219) = 2.11, p < 0.05

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

By exploring the relationship between the child-adult ratio and the CBCL and SDQ subscales, it was interesting to note that the child-adult ratio was positively correlated with both the Total Externalising score on the CBCL scale (r = 0.21, p < 0.01) and the Total Difficulties reported by carers on the SDQ (r = 0.22, p = 0.001). Therefore, children who are cared for by a greater number of adults are also more likely to manifest a greater number of difficulties and externalising behaviours. The other subscales were not significantly related to child-adult ratio.

Children's use of some services was significantly related to a number of CBCL and SDQ subscales; this is particularly true for children making use of the psychiatric services and psychotherapy. Mean scores on CBCL and SDQ subscales are firstly compared between children that used/did not use psychiatric and psychotherapy services in the past. Table 49 shows that children who attended psychotherapy in the past scored significantly lower on the scales measuring competence and Prosocial behaviour, and significantly higher on the Internalising and syndrome scales, when compared to their counterparts who did not attended psychotherapy.

Table 49: *Independent Samples t-test according to the past attendance of psychotherapy for the CBCL & SDQ subscales*

	Attended psychotherapy		Did not attend psychoterapy		t and *p*-values
	M	SD	M	SD	
Total Competence	17.19	5.56	19.75	4.73	t (189) = 3.37, $p = 0.001$
Total Internalising	12.51	9.25	9.53	7.15	t (204) = 2.54, $p < 0.05$
Total Syndrome	53.0	35.4	43.08	26.97	t (202) = 2.24, $p < 0.05$
Prosocial Behaviour (Self)	8.03	1.93	8.91	1.74	t (104) = 2.29, $p < 0.05$
Prosocial Behaviour (Parent)	6.95	2.70	7.85	2.41	t (224) = 2.65, $p < 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

As indicated in Table 50, those having attended the psychiatric services in the past also scored worse on the vast majority of CBCL and SDQ subscales. This subgroup of children obtained lower scores on the strength based scales of the CBCL and the SDQ, namely the Total Competence scale and the Prosocial Behaviour scale (Teacher Informant version). However, they obtained higher scores on all the CBCL scales and the Total Difficulties scale according to all Informants on the SDQ.

Table 50: *Independent Samples t-test according to the past use of psychiatric services for the CBCL & SDQ subscales*

	Used psychiatric services		Did not use psychiatric services		t and *p* -values
	M	SD	M	SD	
Total Competence	14.38	5.26	19.31	4.92	t (189) = 5.45, $p < 0.001$
Total Internalising	14.12	10.02	10.42	7.90	t (204) = 2.6, $p < 0.05$
Total Externalising	21.02	11.88	14.97	11.03	t (204) = 3.15, $p < 0.005$
Total Syndrome	62.21	31.53	44.96	31.07	t (202) = 3.22, $p = 0.001$
Total Difficulties (Self)	18.98	6.56	14.21	6.02	t(104) = 3.48, p = 0.001
Total Difficulties (Carer)	19.18	7.20	14.86	7.23	t (224) = 3.56, p < 0.001
Total Difficulties (Teacher)	17.96	6.88	12.92	7.22	t (194) = 3.82, p < 0.001
Prosocial Behaviour (Teacher)	5.75	2.93	7.19	2.81	t (193) = 2.76, $p < 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Children who have attended physiotherapy in the past were reported by their carers as having more Total Difficulties (*M* = 20.12, *SD* = 5.84) than those who did not (*M* = 15.35, *SD* = 7.42), t (224) = 2.58, *p* = 0.01. The mean scores of the remaining CBCL and SDQ subscales did not differ significantly between the two groups. Mean scores varied marginally for all CBCL or SDQ subscales between children who attended/did not attend speech therapy in the past. On the other hand, significant differences emerged on some of these scales among those who attended occupational therapy in the past. Children who attended occupational therapy (*M* = 14.71, *SD* = 4.8) scored significantly lower than those who did not (*M* = 18.9, *SD* = 5.22) on the Total Competence scale, *t* (189) = 3.84, *p* < 0.001. On the other hand, those who attended were rated by their Carers as having more Total Difficulties (*M* = 19.33, *SD* = 6.09) compared to those that did not attend (*M* = 15.15, *SD* = 7.45), *t* (224) = 2.93, *p* < 0.005.

When examining the existing differences between those who are currently attending/not attending these services, one notices that the largest differences in the mean scores of CBCL and SDQ subscales emerged between groups that are currently using/not using psychiatric services or psychotherapy.

Table 51 exhibits that children currently attending psychotherapy scored significantly higher on the Total Internalising, Total Externalising and Total Syndrome scales of the CBCL and the Carer version of the Total Difficulties scale on the SDQ. According to Carers' reports, these children also scored significantly lower on the strength based scale of Prosocial Behaviour compared to children not currently attending therapy. As seen in table 52, a similar pattern emerged when comparing mean scores of CBCL and SDQ subscales between groups who currently use/not use psychiatric services.

Table 51: *Independent Samples t-test according to current attendance of psychotherapy for the CBCL & SDQ subscales*

	Currently attends psychotherapy		Does not currently attend psychotherapy		t and *p*-values
	M	SD	M	SD	
Total Internalising	13.17	9.12	9.14	7.29	t (197.45) = 3.51 *p*= 0.001
Total Externalising	17.79	11.54	12.53	10.17	t (202.49) = 4.79, *p* < 0.001
Total Syndrome	56.76	31.71	40.27	29.98	t (202) = 3.81, *p* < 0.001
Total Difficulty (Carer)	18.12	7.34	13.42	6.75	t (224) = 5.01, *p* < 0.001

Prosocial Behaviour (Carer)	6.97	2.65	7.78	2.51	t (224) = 2.34, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Table 52: *Independent Samples t-test according to the current use of psychiatric services for the CBCL & SDQ subscales*

	Currently using psychiatric services		Currently not using psychiatric services		t and *p*-values
	M	SD	M	SD	
Total Competence	14.38	5.25	19.34	4.9	t (189) = 5.55, $p = 0.001$
Total Internalising	14.36	10.24	10.33	7.77	t (204) = 2.83, $p = 0.005$
Total Externalising	20.98	11.33	14.94	11.18	t (204) = 3.16, $p < 0.005$
Total Syndrome	61.82	31.71	44.96	31.04	t (202) = 3.18, $p < 0.005$
Total Difficulties (Self)	19.56	5.70	14.28	6.23	t (104) = 3.67, $p < 0.001$
Total Difficulties (Carer)	19.53	6.75	14.75	7.28	t (224) = 4, $p < 0.001$
Total Difficulties (Teacher)	18.63	6.79	12.80	7.13	t (194) = 4.42, $p < 0.001$
Prosocial Behaviour (Teacher)	5.60	2.98	7.22	2.78	t (193) = 3.07, $p < 0.005$
Prosocial Behaviour (Carer)	6.44	2.39	7.62	2.61	t (224) = 2.75, $p < 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Mean scores for children currently attending/not attending speech therapy differed significantly on three scales, namely the Total Competence scale of the CBCL t (189) = 2.23, $p < 0.05$, the Self and Teacher versions of the Total Difficulties on the SDQ t (104) = 2.14, $p < 0.05$, and t (194) = 2.18, $p < 0.05$, respectively. Children attending speech therapy (M = 15.76, SD = 5.74) scored lower in Total Competence than those not attending (M = 18.61, SD = 5.25). According to the Self version, those attending speech therapy (M = 20.83, SD = 5.19) scored higher than those not attending (M = 15.1, SD = 6.42), t (104) = 2.14, $p < 0.05$. This pattern also emerged on the Teacher version, where those attending (M =17.04, SD = 5.63) scored higher than those not attending (M = 13.44, SD = 7.51), t (194) = 2.18, $p < 0.05$.

No significant differences in the mean scores emerged on any of the CBCL and SDQ subscales between those currently attending/not attending for physiotherapy. Significant differences however did emerge among those children attending/not attending occupational therapy. Table 53 (overleaf) shows that children attending occupational therapy scored significantly lower on the strength based scales of Total Competence and Prosocial Behaviour in the Teacher and Carer versions. On the other hand, children attending

occupational therapy scored significantly higher on the Teacher Informant version of Total Difficulties on the SDQ.

Table 53: *Independent Samples t-test according to current attendance of occupational therapy for the CBCL & SDQ subscales*

	Currently attends occupational therapy		Currently not attending occupational therapy		t and *p* values
	M	SD	M	SD	
Total Competence	13.21	6.26	18.52	5.23	t (189) = 2.62, $p = 0.01$
Total Difficulties (Teacher)	20.80	4.60	13.66	7.38	t (194) = 2.15, $p < 0.05$
Prosocial Behaviour (Teacher)	3.40	3.97	7.02	2.80	t (193) = 2.82, $p = 0.005$
Prosocial Behaviour (Carer)	5.56	2.79	7.46	2.57	t (224) = 2.17, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

A further task is to assess the associations, using crosstabs and Chi-square tests, between those who currently make use of the service and those who received this therapy in the past. Significant associations emerged in almost all the services listed above.

A significant association was found between children who are currently attending psychiatric services and those who received the care in the past ($\chi^2 = 144.84$, v = 1, $p < 0.001$). Of the 55 children who currently attend psychiatric services, 42 (76.4%) had received psychiatric follow-up in the past. On the other hand, of the 52 children who used psychiatric care in the past only 10 (19.3%) currently stopped this care.

A significant association was also found between children who are currently undergoing psychotherapy and those who received the service in the past ($\chi^2 = 13.76$, $v = 1$, $p < 0.001$). Of the 130 children who currently go to psychotherapy, 85 (65.4%) had also been to psychotherapy in the past. On the other hand, of the 145 children who received psychotherapy in the past, 60 (41.4%) stopped using this service.

A significant association was also found between children who are currently attending physiotherapy and those who received the care in the past ($\chi2 = 12.25$, $v = 1$, $p < 0.001$). Of the 4 children who currently receive physiotherapy, 2 (50%) had also made use of this service in the past. On the other hand, of the 18 children who attended physiotherapy in the past, 16 (88.9%) stopped going.

A significant association was also found between those who attended occupational therapy in the past and those who currently do so (χ^2 = 61.75, v = 1, p < 0.001). Of the 11 children currently attending occupational therapy, 10 (90.9%) had previously received this service. However, of the 35 children who attended occupational therapy in the past, 25 (71.4%) stopped using this service.

An important connection was also found between those who attended speech therapy in the past and those who currently do so (χ^2 = 76.63, v = 1, p < 0.001). Of the 25 children who currently attend speech therapy, 19 (76%) had also made use of this service in the past. On the other hand, of the 42 children who attended speech therapy in the past, 23 (54.8%) stopped using this service.

A concluding remark is that the discharge rate varies considerably between services. The proportion of children who received a service in the past and were discharged was lowest in psychiatric services and highest in physiotherapy.

5.4.5 The Impact of Extra-Curricular Activities and Interpersonal Relationships on the CBCL and SDQ Scores

This section provides a review of the relationships of the CBCL and SDQ subscales and several other variables presented in the first part of the Child Behaviour Checklist, including the child's participation in leisure, daily activities, and social relationships.

The Independent Samples t-test was again used to establish whether there are significant differences in the mean scores of the CBCL and SDQ scales between children who engage in sports compared to those who do not. Significant differences were found on the Total Competence scale of the CBCL, t (192) = 5.96, p < 0.001. Children who engage in sports scored significantly higher in Total Competence (M = 19.21, SD = 4.98) compared to those who do not engage in sports (M = 12.79, SD = 4.58). On the other hand, the Self report version of the SDQ shows that children who do not engage in sports score higher in Total Difficulties (M = 18.15, SD =6.46) than those who participate in sports (M = 14.77, SD = 6.28), t (100) = 2.28, p < 0.05.

Significant differences in mean scores also emerged on two subscales between groups of children having/not having a hobby. Children who had a hobby scored significantly higher on the Total Competence scale of the CBCL (M = 18.86, SD = 5.03) than those who did not have a hobby (M = 9, SD = 3.26), t (191) = 5.82, $p < 0.001$. On the other hand, the Self report version of the SDQ shows that those who do not engage in at least one hobby score higher on Total Difficulties (M = 20, SD = 5.62) than those who do not have any hobbies (M = 15.09, SD = 6.38), t (100) = 2.34, $p < 0.05$.

Table 54 shows that in the Self and Teacher Informant versions, children who do not belong to any organisation, scored significantly higher on Total Difficulties of the SDQ. However, these children scored significantly lower in the Total Competence scale and the Teacher Informant version of the SDQ Prosocial Behaviour scale compared to their counterparts who are members of at least one organisation.

Table 54: *Independent Samples t-test for the CBCL & SDQ subscales according to whether the child is belongs to at least one organisation*

	Child belongs to at least one organisation		Child does not belong to any organisation		t and *p*-values
	M	SD	M	SD	
Total Competence	20.69	4.79	15.45	4.57	t (192) = 7.69, $p < 0.001$
Total Difficulties (Teacher)	12.73	6.82	15.68	7.93	t (174) = 2.64, $p < 0.01$
Prosocial Behaviour (Teacher)	7.43	2.37	6.35	3.29	t (174) = 2.52, $p < 0.05$
Total Difficulties (Self)	14.28	6.82	16.85	5.85	t (100) = 2.04, $p <0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

The child's participation in chores was not found to be a significant predictor of any of the SDQ subscales. However, mean scores on the Total Competence and Total Internalising scales of the CBCL differed significantly between groups having/not having at least one chore. Participants having at least one chore scored significantly higher on Total Competence (M = 19.26, SD = 5.21) than those who do not (M = 16.02, SD 4.96), t (189) = 3.65, $p<0.001$, indicating the positive effect of doing chores. Similiarly, participants having at least one chore scored significantly lower on the Internalising problem scale (M = 8.48, SD

= 6.98), than those who do not engage in chores (M = 11.46, SD = 7.88), t (205) = 2.32, p < 0.05.

Mean scores on the CBCL and SDQ scales were compared between the levels of a number of predictors related to children's social relationships: number of close friends, frequency of meetings with friends outside school hours, relationship with siblings and peers, child's behaviour with parents and whether child plays and works alone. Table 55 shows the mean scores and standard deviations of all CBCL subscales analysed by predictors related to social relationships using the One Way ANOVA test.

Table 55: *Mean scores for CBCL subscales analysed by child's friendships and parental relationships among the whole sample*

		Total Competence		Total Internalising		Total Externalising		Total Syndrome	
		M	SD	M	SD	M	SD	M	SD
Number of close friends	None	13.31	5.32	17.06	10.91	22.09	13.54	75.42	45.18
	1 friend	16.69	4.62	12.31	8.53	19.10	13.04	54.18	30.45
	2-3 friends	19.25	4.62	10.07	7.09	14.78	10.46	42.39	23.88
	4 or more	21.72	4.15	8.47	7.11	12.23	8.06	36.72	22.69
Weekly meetings with friends	Rarely/Never	16.51	5.66	12.35	8.34	19.22	12.70	56.41	33.91
	1-2 times	19.57	4.25	9.95	7.67	14.17	9.87	39.95	22.86
	3 times or more	20.77	4.62	9.54	7.46	12.61	9.06	41.81	30.04
Rel. with siblings	Worse	16.39	6.22	13.42	10.20	23.37	13.31	68.61	44.33
	Average	18.85	4.82	10.51	6.84	15.03	10.00	44.24	23.31
	Better	19.90	5.73	11.72	10.71	13.48	11.33	44.32	35.03
Rel.with other kids	Worse	14.80	5.71	16.80	10.85	26.00	13.76	77.07	43.61
	Average	17.93	4.79	10.54	7.75	15.59	10.57	46.90	28.25
	Better	21.62	4.67	9.71	7.69	11.65	8.53	36.73	22.61
Beh. with Parents	Worse	17.19	5.67	11.41	8.22	20.22	12.39	58.80	38.97
	Average	18.01	5.13	11.08	8.08	16.94	10.40	47.91	26.48
	Better	20.43	4.95	11.44	9.75	11.39	10.76	40.44	30.90
Plays and works	Worse	14.38	5.47	15.12	10.60	21.36	13.45	66.84	37.91
	Average	18.84	5.17	10.39	7.85	15.88	10.23	45.72	27.40

alone	Better	20.28	4.26	10.96	8.24	13.55	12.15	44.35	34.97

Table 56: *ANOVA values for CBCL subscales analysed by child's friendships and parental relationships among the whole sample*

	Total Competence	Total Internalising	Total Externalising	Total Syndrome
Number of close friends	F (3,192) = 23.28, p<0.0005	F (3,208) = 8.71, p<0.0005	F (3,208) = 6.9, p<0.0005	F (3,206) = 13.88, p<0.0005
Weekly meetings with friends	F (2,188) = 12.85, p<0.0005	F (2,204) = 2.69, p=0.07 n/s	F (2,204) = 7.21, p=0.001	F (2,202) = 6.78, p<0.001
Rel. with siblings	F (2,171) = 3.98, p<0.05	F (2,185) = 1.87, p=0.16 n/s	F (2,185) = 9.57, p<0.0005	F (2,183) = 9.67, p<0.0005
Rel. with other kids	F (2,193) = 19.51, p<0.0005	F (2,209) = 8.19, p<0.0005	F (2,209) = 17.7, p<0.0005	F (2,207) = 17.42, p<0.0005
Beh. with Parents	F (2,191) = 5.53, p=0.005	F (2,204) = 0.04, p=0.96 n/s	F (2,204) = 9.04, p<0.0005	F (2,202) = 4.68, p=0.01
Plays and works alone	F (2,193) = 14.13, p<0.0005	F (2,207) = 4.18, p<0.05	F (2,207) = 4.85, p<0.01	F (2,205) = 6.53, p<0.005

Table 56 displays significantly higher scores on the Total Competence scale of the CBCL, in all the items mentioned corresponding to more positive functioning in interpersonal relationships. On the other hand, the table displays significantly higher scores on the Total Internalising, Total Externalising and Total Syndrome scales of the CBCL in almost all the items corresponding to more negative functioning in interpersonal relationships. Mean Total Internalising scores did not differ significantly between the levels of two predictors related to children's social relationships - mainly rapport with siblings and behaviour with parents.

The connections emerging between these variables and the SDQ subscales present a more complex picture with Tables 57 (continued overleaf) and 59 (overleaf) displaying a general trend that is clear throughout these interrelationships. F values are reported in tables 58 and 60 respectively, and as expected, higher mean scores in Prosocial Behaviour tend to correspond to positive levels of functioning in inter-relationships on most of the items. Conversely, higher mean scores in Total Difficulties tend to correspond to negative levels of functioning in interrelationships on most of the items. It is worth mentioning that predictors

related to peer relations, particularly the number of friends, number of weekly meetings with friends outside school hours, and relationship with peers have the highest number of significant inter-relationships with the SDQ subscales.

Table 57: *Means and standard deviations for Total Difficulty using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the whole sample*

		Total Difficulty (Self)		Total Difficulty (Teacher)		Total Difficulty (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	20.13	5.47	20.04	6.85	20.85	6.73
	1 friend	15.33	6.38	12.61	5.76	18.19	7.43
	2-3 friends	14.98	5.99	12.59	6.80	15.20	6.98
	4 or more	12.94	6.53	12.92	8.08	11.62	6.68
Weekly meetings with friends	Rarely/Never	17.60	6.36	14.20	7.52	17.51	7.66
	1-2 times	14.32	5.94	13.25	6.84	14.55	7.11
	3 times or more	14.15	6.03	13.35	7.76	13.64	6.71
Relationship with siblings	Worse	15.44	8.17	13.82	6.30	19.64	8.20
	Average	15.06	5.70	14.10	7.57	14.87	6.93
	Better	16.70	7.72	13.45	8.83	15.64	7.13
Relationship with other kids	Worse	21.36	5.72	16.06	6.44	22.28	7.46
	Average	15.84	5.92	14.53	6.91	15.59	6.91
	Better	12.56	5.92	11.05	8.41	12.43	6.89
Behaviour with Parents	Worse	17.26	6.45	14.71	7.56	18.21	7.04
	Average	14.82	6.63	13.94	7.31	15.90	7.51
	Better	15.10	6.33	12.89	7.54	13.25	7.54
Plays and works alone	Worse	19.83	5.31	16.21	6.97	19.41	7.39
	Average	15.40	6.15	13.28	7.16	15.21	6.80
	Better	13.64	7.39	13.81	8.22	14.87	9.05

Table 58: *ANOVA for Total Difficulty using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the whole sample*

	Total Difficulty (Self)	Total Difficulty (Teacher)	Total Difficulty (Carer)
Number of close friends	F (3,100) = 5.43, p<0.005	F (3,173) = 8.68, p<0.0005	F (3,202) = 13.88, p<0.0005
Weekly meetings with friends	F (2,98) = 3.19, p<0.05	F (2,169) = 0.31, p<0.73 n/s	F (2,198) = 5.47, p=0.005
Rel. with siblings	F (2,89) = 0.28, p<0.76 n/s	F (2,152) = 0.069, p<0.93 n/s	F (2,179) = 6.05, p<0.005
Rel. with other kids	F (2,101) = 10.97, p<0.0005	F (2,174) = 4.95, p<0.01	F (2,203) = 18.48, p<0.0005

Beh. with Parents	F (2,99) = 1.28, p=0.28 n/s	F (2,172) = 0.67, p=0.51 n/s	F (2,198) = 5.89, p<0.005
Plays and works alone	F (2,99) = 3.7, p<0.05	F (2,174) = 1.8, p=0.17 n/s	F (2,201) = 4.49, p<0.05

Table 59: *Means and standard deviations for Prosocial Behaviour using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships*

		Prosocial Behaviour (Self)		Prosocial Behaviour (Teacher)		Prosocial Behaviour (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	7.75	2.02	5.64	3.40	6.74	2.68
	1 friend	8.20	2.04	7.16	2.78	6.11	2.88
	2-3 friends	8.37	2.02	7.43	2.26	7.63	2.32
	4 or more	8.84	1.52	7.14	3.11	8.83	1.53
Weekly meetings with friends	Rarely/Never	8.10	1.73	6.93	2.96	7.03	2.72
	1-2 times	8.06	2.34	7.31	2.41	7.53	2.45
	3 times or more	8.75	1.65	6.96	2.94	8.19	2.15
Relationship with siblings	Worse	8.11	2.17	6.83	3.11	6.75	2.82
	Average	8.55	1.76	7.00	2.70	7.67	2.39
	Better	8.00	2.11	6.89	3.43	7.96	1.88
Relationship with other kids	Worse	7.79	2.52	6.42	3.25	6.90	2.45
	Average	8.07	1.88	6.90	2.71	7.22	2.51
	Better	9.06	1.48	7.61	2.77	8.59	2.16
Behaviour with Parents	Worse	7.59	2.32	6.53	2.95	7.25	2.79
	Average	8.57	1.48	7.11	2.73	7.48	2.48
	Better	8.79	1.78	7.34	2.85	7.95	2.24
Plays and works alone	Worse	8.50	2.15	6.24	3.08	7.22	2.30
	Average	8.30	1.84	7.18	2.75	7.29	2.62
	Better	8.52	1.89	7.10	2.82	8.41	2.10

Table 60: *ANOVA for Prosocial Behaviour using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the whole sample*

	Prosocial Behaviour (Self)	Prosocial Behaviour (Teacher)	Prosocial Behaviour (Carer)
Number of close friends	F (3,100) = 1.23, p=0.3 n/s	F (3,173) = 2.87, p<0.05	F (3,202) = 11.11, p<0.0005
Weekly meetings with friends	F (2,98) = 1.39, p=0.25 n/s	F (2,169) = 0.33, p=0.72 n/s	F (2,198) = 3.65, p<0.05
Rel. with siblings	F (2,89) = 0.63, p=0.54 n/s	F (2,152) = 0.04, p=0.96 n/s	F (2,179) = 2.47, p=0.089 n/s
Rel. with other kids	F (2,101) = 3.6, p<0.05	F (2,174) = 1.67, p-=0.19 n/s	F (2,203) = 6.88, p=0.001

Beh. with Parents	F (2,99) = 3.48, p<0.05	F (2,172) = 0.94, p=0.39 n/s	F (2,198) = 1.11, p=0.33 n/s
Plays and works alone	F (2,99) = 0.15, p=0.86 n/s	F (2,174) = 1.29, p=0.28 n/s	F (2,201) = 3.8, p<0.05

The Independent Sample t-test reveals significant differences in the mean CBCL and SDQ subscale scores between boys and girls. Girls scored significantly lower than boys on the Total Externalising and the Total Syndrome scales of the CBCL. Girls also scored significantly higher than boys on subscales measuring strengths, namely the CBCL Total Competence scale and the Teacher and Carer Informant versions of the SDQ Prosocial Behaviour scale, as can be displayed in table 61.

Table 61: *Independent Samples t-test for the CBCL & SDQ subscales categorised by gender*

	Boys		Girls		t and p values
	M	SD	M	SD	
Total Competence	17.66	5.48	19.31	5.10	t (192) = 2.17, p < 0.05
Total Externalising	17.81	11.61	14.11	10.99	t (208) = 2.36, p < 0.05
Total Syndrome	53.6	33.4	42.25	28.73	t (206) = 2.6, p = 0.01
Prosocial Behaviour (Teacher)	6.52	3.03	7.50	2.60	t (184) = 2.34, p < 0.05
Prosocial Behaviour (Carer)	7.05	2.69	7.86	2.36	t (215) = 2.33, p <0.05

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Pearson's correlation was used to explore the relationship between the child's current age and the CBCL and SDQ subscales. A significant relationship emerged for only one of the CBCL scales, Total Competence (r = - 0.18, p < 0.05) indicating that younger children are more likely to score higher on this scale than older children. On the SDQ scales the same pattern emerged on the Carer Informant version of the Total Difficulties scale (r = - 0.14, p < 0.05), indicating that younger children are more likely to score higher on this scale. These patterns therefore indicate that although younger children are more likely to have more difficulties, they are also more likely to have higher levels of competence.

This section provided a general overview of the relationships that exist between the CBCL and SDQ scale scores and a number of explanatory variables for the whole sample. The subsequent sections provide a similar review for the residential and foster care groups

separately. The aim is to explore the specific factors affecting the child's mental health and well-being in each of these subgroups.

5.5 Variables Affecting CBCL and SDQ Scores Obtained among Children in Residential Care

Since several significant differences emerged between children in residential care and foster care in the demographic variables, and in the CBCL and SDQ scores, it was deemed essential to provide a separate analysis for the residential and foster care groups separately. The analyses of children in residential care will be presented first using the same methodology and structure of the preceding section.

5.5.1 The Impact of Demographic Variables on CBCL and SDQ Scores

A description of how demographic variables affect the CBCL and SDQ scores of children in residential care is included in this section. The mean scores of CBCL and SDQ subscales, mainly Total Competence, Total Internalising, Total Externalising and Total Syndrome Scales for the CBCL, and Prosocial Behaviour and Total Difficulties in the Self report, Teacher and Parent versions for the SDQ will be compared between the level of each demographic variable.

Nationality was not found to be a significant predictor of CBCL scales; however, it should be noted that sample size of foreigners in residential care was extremely small; only two children did not have a Maltese nationality and so inferences may not be so reliable.

No significant differences in the mean CBCL and SDQ scale scores were observed between children having/not having a diagnosed medical condition. Similarly, the mean Total Internalising, Total Externalising and Total Syndrome scales scores within the CBCL varied marginally between children having/not having a diagnosed mental health problem. A significant difference however emerged in the mean Total Competence scale scores between these two groups, t (114) = 4.94, $p < 0.001$. Children who have a diagnosed mental health problem scored significantly lower in Total Competence (M = 12.92, SD = 4.5) than those who did not have such a diagnosis (M = 18.54, SD = 5.08). Mean Total Difficulties scores in both the Carer (t (137) = 2.58, $p < 0.05$), and Teacher (t *(119)* = 2.32, $p < 0.05$) versions,

varied significantly between children having/not having a diagnosed mental health problem. Children who have a diagnosed mental health problem obtained significantly higher scores in both the Carer (M = 20.71, SD = 6.93) and Teacher (M = 17.82, SD = 7.7) versions compared to their counterparts with no mental health problems (M = 16.77, SD = 7.28) and (M = 13.84, SD = 7.34) respectively. No significant differences were observed in the other SDQ subscales examined, namely in the Prosocial Behaviour subscales in all versions, and the Total Difficulties subscale in the Self report version.

A comparison of children having/not having a diagnosed learning disability or developmental disorder shows that significant differences emerged only on the Total Competence scale, t (114) = 3.87, $p < 0.001$. This indicates that children with a diagnosed learning disability or developmental disorder scored significantly less in Total Competence (M= 13.32, SD = 4.94) than those who did not have such a diagnosis (M = 18.22, SD 5.19). No significant differences were noted in mean scores of these two groups in the Self report and Carer versions of the SDQ. A significant difference was, however, observed between these two groups in the Teacher version within the subscale Total Difficulties. Children who have a diagnosed learning disability or developmental delay scored significantly higher on Total Difficulty (M = 18.21, SD = 7.59) than those who did not (M = 13.84, SD = 7.35), t (119) = 2.47, p <0.05), thus indicating that they experience more difficulties.

Pearson's correlation was used to explore the relationships between the academic marks and scores obtained on the CBCL and SDQ scales. No significant relationships emerged with any of the CBCL scales. However significant relationships emerged with some of the SDQ scales, namely the Teacher report version of Prosocial Behaviour scores with marks in Maltese (r = 0.26, $p < 0.05$), and the Carer Informant version of Total Difficulties with marks in Maltese (r = - 0.34, p = 0.005) and Maths (r = - 0.27, $p < 0.05$). Better grades obtained are linked to better prosocial behaviour and less difficulties in the relevant scales.

Correlational analyses were carried out in order to determine whether there are significant relationships between the child's age of entry into care and their respective CBCL and SDQ scores. The relationships between entry age into care and CBCL scores in all four subscales were not found to be significant. Significant positive relationships were however observed between age of entry into care and the Prosocial Behaviour scale scores in the Self report (r = 0.33, p<0.01) and Carer (r = 0.175, p<0.05) versions. This indicates that the higher the age of entry into care the higher the expected prosocial score.

Pearson's correlation was used to explore the relationship between the children's CBCL scores and the number of transitions they experienced whilst in care. No significant differences emerged on any of the CBCL scales. Correlational analyses indicated two significant relationships of SDQ raw scores with number of transitions. The first was a negative relationship between the Prosocial Behaviour scores in the Self report version and the total number of transitions experienced while in care *(r* = -0.25, *p*<0.05). The second was a positive relationship between Total Difficulties scores in the Carer report version and total number of transitions *(r* = 0.26, *p*<0.01). These results indicate that difficulty increases and Prosocial Behaviour deteriorates with an increase in the number of transitions experienced while in care.

A significant negative relationship was noted also between the time children spent in care and Prosocial Behaviour scores in the Self report SDQ version *(r* = - 0.35, *p*<0.01). This indicates that the longer the period of time spent in care, the lower the scores on Prosocial Behaviour. No other significant relationships were noted relating CBCL and SDQ scale scores to the time spent in care.

As expected, a positive relationship was found between the length of time in care and total number of transitions while in care *(r* = 0.48, p<0.001); the longer the duration in care the more transitions were experienced. Complementing this finding was a significant negative relationship noted between the total number of transitions while in care and age of entry into care *(r* = – 0.27, *p*= 0.001), which confirms that children who enter into residential care at a very young age tend to experience more transitions.

Significant differences emerged in the mean Total Competence score of the CBCL subscale according to the child's present legal status F (2, 105) = 3.84, $p < 0.05$. Post hoc analysis shows that children in voluntary care scored significantly higher in Total Competence (M = 18.36, SD = 5.28) than children who are currently placed on a court order (M = 12.36, SD = 4.09). No significant relationships were noted when relating all the SDQ scales and the three remaining CBCL scales to the child's present legal status.

5.5.2 The Impact of Reasons for Entry into Care on CBCL and SDQ scores

The Independent Sample t-test did not demonstrate significant differences in the mean CBCL and SDQ scale scores between groups of children experiencing/not experiencing the following parental issues: mental health problems, rejection, marital breakdown, single parenthood, imprisonment, prostitution and 'other' issues as reasons for entry into care. Mean scores, however, were found to differ significantly between groups of children whose parents engaged/did not engage in substance abuse or had inadequate parental skills.

Children scored significantly less on the Total Competence scale of the CBCL when their parents had substance abuse problems (M = 15.37, SD = 4.04) compared to those whose parents did not (M = 17.9, SD = 5.66), t (114) = 2.05, $p < 0.05$. Children whose parents had inadequate parenting skills upon entry into care exhibited more Externalising problems (M = 20.84, SD = 12.54) than their peers who had parents with adequate parenting skills (M = 13.19, SD = 9.94), t (125) = 2.93, $p < 0.01$. Moreover, the former group scored higher in the Total Syndrome scale of the CBCL (M = 59.48, SD = 35.92) compared to their peers whose parents had adequate parenting skills (M = 39.96, SD = 29.05), t (124) = 2.6, p = 0.01. Significant differences were also noted in the mean Total Difficulty scores between these groups in both the Teacher (t (119) = 2.17, $p < 0.05$) and Carer (t (137) = 2.69, $p < 0.01$) versions. Children whose parents had inadequate parental skills, showed significantly higher difficulty scores (M = 15.48, SD = 7.78) in the Teacher version and (M = 18.47, SD = 7.11) in the Carer version when compared to their peers whose parents provided adequate parental skills (M=12.16, SD = 6.35) and (M = 14.56, SD = 7.49), respectively. This subgroup also scored significantly lower in Prosocial Behaviour (M = 6.09, SD = 3.18) in the Teacher version, when compared to those who had a good parental experience (M = 8.06, SD = 2.14), t (119) = 3.25, p <0.001.

Children who experienced sexual abuse, prior to admission into care, scored significantly higher on the Total Internalising scale (M = 17.67, SD = 10.73) than those who did not experience such abuse (M = 11.75, = 8.53), t (125) = 2.44, $p < 0.05$. Mean CBCL and SDQ scale scores varied marginally between groups of children experiencing/not experiencing emotional and physical abuse or physical and emotional neglect before admission into care.

Table 62: *Independent Samples t-test by presence or absence of Child behaviour problems for the CBCL & SDQ subscales among children in residential care*

	Child Behaviour Problems		
	Present	Not Present	

	M	SD	M	SD	t and p values
Total Competence	18.41	5.06	12.71	4.74	t (114) = 4.72, $p < 0.001$
Total Internalising	16.0	12.48	11.66	7.86	t (125) = 2.13, $p < 0.05$
Total Externalising	23.16	14.32	17.68	11.46	t (125) = 3.05, $p < 0.005$
Total Syndrome	73.09	40.21	51.33	33.13	t (124) = 2.73, $p < 0.01$
Total Difficulties (Self)	22.49	4.88	15.69	6.18	t (67) 3.78, $p < 0.001$
Total Difficulties (Carer)	21.83	6.98	16.68	7.15	t (137) = 3.22, $p < 0.005$
Total Difficulties (Teacher)	19.69	5.75	13.53	7.46	t (119) = 3.56, $p = 0.001$
Prosocial Behaviour (Teacher)	5.00	3.15	6.95	2.94	t (119) = 2.73, $p < 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Table 62 shows that the child's behavioural problems were also found to affect significantly several CBCL and SDQ scale scores. In all cases children scored significantly higher in Total Competence and Prosocial Behaviour and significantly lower in difficulty scales when behavioural problems were absent.

The number of participants in residential care having physical disability was too small to enable statistical analyses. This was also the case regarding 'other issues' in the External Factors section. No significant differences were found in the mean CBCL and SDQ scale scores between groups of children brought in substandard/appropriate housing.

Correlational analyses were carried out to examine the relationship between the number of reasons for entry into care and CBCL and SDQ scale scores. A significant relationship emerged between the Total Externalising scores of the CBCL and the number of reasons for entry into care ($r = 0.2$, $p < 0.05$), indicating that an increase in the number of reasons for entry into care results in more Externalising problems. Correlational analyses also show a significant negative relationship between Prosocial Behaviour scores in the Self-resport version of the SDQ and the number of reasons for entry into care ($r = -0.24$, $p<0.05$), indicating that a decrease in the number of reasons for entry into care results in better Prosocial Behaviour. A significant positive relationship was also observed between this variable and the Total Difficulties scores in the Carer version of the SDQ subscale ($r = 0.22$, $p<0.05$), indicating that more difficulties arise with an increase in the number of reasons for entry into care.

Significant relationships were observed between the child to adult ratio and CBCL scale scores. Having a larger number of carers within the residential setting, therefore a higher

child to adult ratio, resulted in lower scores on the Total Internalising *(r* = -0.28, *p* = 0.001) and Total Syndrome *(r* = -0.23, *p* < 0.01) scales of the CBCL. Moreover, child-to-adult ratio is also significantly related to the Carer version of the Prosocial Behaviour score *(r* = 0.18, *p*<0.05). This indicates that the child's Prosocial Behaviour improves with an increase in the number of carers involved.

5.5.3 The Impact of Contact with Family of Origin on CBCL and SDQ scores

Pearson's correlation showed no significant relationships between the CBCL and SDQ scale scores and the number of siblings a child has, the number of siblings who are in care, and the number of siblings who are in the same placement with the child.

Significant positive relationships were however observed between the frequency of contact with siblings and Prosocial Behaviour scores in the Self report version of the SDQ *(r* =0.25, *p*<0.05), which indicate that more frequent contact with siblings was linked to better Prosocial Behaviour. No significant differences were found in the mean SDQ scale score between groups of children having supervised/unsupervised contact with siblings.

The frequency of contact with the biological mother was not found to significantly affect children's CBCL and SDQ scale scores. The type of contact with the mother, also did not affect CBCL scale scores; although mean Total Difficulties scores in the Teacher version of the SDQ subscale differed significantly between groups of children having supervised/unsupervised contact with mother, *t* (76) = 2.14, *p* < 0.05. Children whose contact with their mother was unsupervised had a higher mean difficulty score (*M* = 15.88, SD = 7.31) than children whose contact with their mother was supervised (*M* = 12.1, *SD* = 7.22). A significant negative relationship was also found between the number of siblings that the child had and the frequency of contact with the mother *(r* = -0.19, *p*<0.05), as well between the number of siblings in care and contact with mother *(r* = -0.16, *p*<0.05). This indicates that the more siblings the child has in care or elsewhere, the less frequent are the contacts with the mother.

No significant relationships were observed between the CBCL and SDQ scale scores and the frequency and type of contact with the biological father. It should be noted, however, that children whose father is listed as unknown were excluded from this analysis.

5.5.4 The Impact of the Services Being Utilised by the Children on CBCL and SDQ Scores

This section focuses on whether children's use of services in the past and in the present is related to CBCL and SDQ scale scores. Results indicate that where children made use of some services, a number of CBCL and SDQ scale scores differed significantly.

Past use of psychotherapy was linked with lower scores in the Total Competence scale, t (114) = 3.83, $p < 0.001$ and higher scores in the Total Internalising scale, t (125) = 2.18, $p < 0.05$. Children who had attended therapy in the past demonstrated more Internalising problems (M = 13.78, SD = 9.77) and less competence (M = 15.97, SD = 5.27) compared to their peers who did not require psychotherapy (M = 10.25, SD = 7.04) and (M = 19.77, SD = 4.94) respectively. Moreover, mean Prosocial Behaviour scores in the Self report version of children who attended psychotherapy in the past were significantly lower (M = 7.92, SD = 2.03) than the mean Prosocial Behaviour scores of children who did not require past psychotherapy sessions (M = 9.05, SD = 1.54), t (67) = 2.24, $p < 0.05$.

Past use of psychiatric services was also linked to results within some CBCL and SDQ subscales. The mean Total Competence score within the CBCL scale for children who used psychiatric services in the past (M = 13.65, SD = 4.45) was significantly lower than the mean Total Competence score for children who do not require these psychiatric services (M = 18.68, SD = 5.18) t (114) = 4.74, $p < 0.001$. These statistics indicate that children who received psychiatric treatment in the past displayed lower competence than those who did not require this service. No significant differences were found in the mean scores of other CBCL subscales between these two groups.

Table 63 (overleaf) displays the mean scores in Prosocial Behaviour and Total Difficulty where significant differences were observed between the two groups of children in residential care who received/did not receive psychiatric assistance in the past. In accordance with the previously described results in the CBCL, these results indicated worse average scores in all scales when children had received psychiatric help in the past.

Table 63: *Mean and standard deviations of the SDQ scales for children who used and did not use the psychiatric services in the past*

	Past Psychiatric Assistance				P-value
	Received		Did not Receive		
	M	SD	M	SD	
Prosocial Behaviour (Self)	7.57	2.19	8.59	1.76	t (67) = 2.09, $p < 0.05$
Total Difficulties (Self)	19.83	6.55	15.67	6.09	t (67) = 2.6, $p < 0.05$
Total Difficulties (Teacher)	18.85	6.62	13.26	7.35	t (119) = 3.65, $p < 0.001$
Total Difficulties (Carer)	20.29	6.89	16.65	7.32	t (137) = 2.57, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

No significant differences were found in the mean CBCL scale scores between children who attended/did not attend physiotherapy in the past. On the SDQ scale significant differences were found only on the Carer Informant version of Total Difficulties, t (224) = 2.58, p = 0.01. The mean Total Difficulty score of children who attended physiotherapy in the past (M = 20.12, SD = 5.84) was significantly higher than the mean Total Difficulty score of children who did not require this service (M = 15.35, SD 7.42).

Children in residential care who had attended occupational therapy in the past scored significantly lower on the Total Competence scale of the CBCL (M = 13.92, SD = 3.79) than those who had not (M = 18.06, SD = 5.48), t (114) = 3.14, $p < 0.005$. No significant differences emerged in the mean scores of the other CBCL and SDQ subscales between groups of children who had/did not have occupational therapy or speech therapy in the past.

Similar contrasts emerged in the mean CBCL and SDQ scale scores between groups of children who are currently using/not using a particular service. Mean CBCL scale scores varied marginally between the two groups currently making/not making use of psychotherapy. However, mean Total Difficulties scores differed significantly between the two groups in the Carer version t *(137)* = 2.06, $p<0.05$). Children who are currently making use of psychotherapy scored significantly higher in Total Difficulty Scale (M = 18.48, SD =7.21) when compared to those not making use of psychotherapy (M = 15.79, SD =7.40). Mean scores varied marginally between the two groups in other SDQ subscales.

The mean Total Competence score in the CBCL scale of children who are currently making use of psychiatric services (M = 13.6, SD = 4.7), is significantly lower than the mean Total Competence score of children not using the service (M =18.7, SD = 5.08), t 114) = 4.82, $p <$

0.001. Table 64 displays the mean scores in the SDQ scales of Prosocial Behaviour and Total Difficulty where significant differences were observed between the two groups of children in residential care who currently use/do not use psychiatric services. Once more, children who are currently making use of psychiatric services obtained worse scores in all cases.

Table 64: *Mean and standard deviations of the SDQ scales regarding children's current use of psychiatric services*

	Current Psychiatric Assistance				t and *p*-values
	Receive		Do not Receive		
	M	SD	M	SD	
Prosocial Behaviour (Teacher)	5.5	2.9	6.95	3.04	t (119) = 2.23, $p < 0.05$
Total Difficulties (Self)	20.3	5.52	15.74	6.46	t (67) = 2.77, $p < 0.01$
Total Difficulties (Teacher)	19.54	6.68	13.11	7.18	t (119) = 4.22, $p < 0.001$
Total Difficulties (Carer)	20.14	6.48	16.67	7.47	t (137) = 2.48, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

The mean Total Competence score on the CBCL scale of children currently attending speech therapy (M = 13.9, SD = 4.85) is significantly lower than the mean Total Competence score of children not making use of this service (M = 17.71, SD = 5.41), t (114) = 2.14, $p < 0.05$. No further significant differences were observed in the mean CBCL scale scores between groups of children who are currently attending/not attending speech therapy. However, mean Total Difficulties scores on the SDQ of children attending speech therapy in the Teacher version, were signficantly higher (M = 19.41, SD = 4.74) than the mean Total Difficulties scores of children not using this service (M = 14.12, SD = 7.62), t (119) = 2.26, $p<0.05$. Moreover, children who currently attend speech therapy scored significantly higher in the children's own Self reports of Prosocial Behaviour (M = 9.5, SD = 0.58) compared to children who did not attend this service (M = 8.17, SD = 1.99), t (8.76) = 3.5, p = 0.01.

It was not possible to carry out statistical analysis on the CBCL and SDQ scale scores between groups of children who are currently using/not using physiotherapy, because the sample of children in residential care using this service was very small. No significant differences were found in the mean CBCL scale scores between groups of children who are currently attending/not attending occupational therapy. However, significant differences emerged between these two groups on the Total Difficulties, t (119) = 2.22, $p < 0.05$, and Prosocial Behaviour, t (119) = 2.51, $p < 0.05$, scales of the SDQ according to Teachers'

reports. Mean scores on the Total Difficulties scale for those attending occupational therapy (*M* = 24, *SD* = 1.73) were significantly higher than for the group who did not attend (*M* = 14.36, *SD* = 7.48). Whereas those who were attending for occupational therapy scored lower on the Prosocial Behaviour scale (*M* = 2.33, *SD* = 1.53) than those who did not (*M* = 6.72, *SD* = 3.01).

Table 65 shows that children who use the services of a high support worker have significantly lower mean scores on the Total Competence and significantly higher mean scores in Total Internalising, Total Externalising and Total Syndrome scales

Table 65: *Independent Samples t-test for the CBCL subscales according to allocation of a high support worker*

	HSS Support				t and *p* -values
	Utilised		Not utilised		
	M	SD	M	SD	
Total Competence	5.5	2.9	6.95	3.04	t (100) = 2.94, $p < 0.005$
Total Internalising	20.3	5.52	15.74	6.46	t (111) = 2.81, $p < 0.01$
Total Externalising	19.54	6.68	13.11	7.18	t (111) = 3.24, $p < 0.005$
Total Syndrome	20.14	6.48	16.67	7.47	t (110) = 2.9, $p < 0.005$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

According to the Carer version of the SDQ scale, the mean Total Difficulties score of children who make use of the services of a high support worker (*M* = 24.0, *SD* = 5.63) was significantly higher than the mean Total Difficulties score of children who do not have a high support worker (*M* = 16.64, *SD* = 7.23), *t* (120) = 3.89, $p<0.001$.

Children who make use of the services of a Learning Support Assistant in class, also scored significantly lower in the Total Competence scale within the CBCL (*M* = 15.06, *SD* = 5.12), when compared to children who do not have the help of an LSA in class (*M* = 18.42, *SD* = 5.3), *t* (113) = 3.13, $p < 0.005$. Moreover, the former group of children scored significantly higher in the Total Difficulties scale in both the Teacher (*t* (118) = 3.88, $p<0.001$) and Carer (*t* (135) = 2.19, $p < 0.05$) versions of the SDQ. The mean Total Difficulties score of children who have an LSA was significantly higher in the Teacher (*M* = 18.47, *SD* = 6.7) and the Carer (*M* = 19.76, *SD* = 7.42) versions compared to children who did not have an LSA (*M* = 12.91, *SD* =7.29) and (*M* = 16.68, *SD* = 7.26) respectively.

5.5.5 Impact of Gender, Age, Extra-Curricular Activities and Interpersonal Relationships on the CBCL and SDQ Scores

This section of the results outlines findings related to the impact of extra-curricular activities and interpersonal relationships on children's CBCL and SDQ scale scores.

Significant differences emerged on two of the CBCL subscales when comparing boys to girls. Boys scored significantly lower (M = 16.2, SD = 5.27) than girls (M = 18.83, SD = 5.37) on the Total Competence scale t (114) = 2.64, $p < 0.01$ and scored significantly higher (M = 61.49, SD = 37.33) than girls (M = 48.05, SD = 31.74), t (124) = 2.15, $p < 0.05$ on the Total Syndrome scale. No significant differences were observed in the mean scores of any of the SDQ subscales between boys and girls.

Correlation analyses were used to explore the relationship between the CBCL scores and the children's age. A significant relationship between these two variables emerged on only one of the CBCL scales, namely the Total Externalising scale (r = - 0.2, $p < 0.05$), indicating that as children grow up, their Externalising problems tend to diminish. A significant negative relationship (r = -0.14, $p<0.05$) was observed between age and the Total Difficulties scores in the Carer version of the SDQ which implies that according to Carers, older children tend to have significantly less difficulties than younger children.

The next set of variables within the CBCL focused on aspects related to the children's lifestyle and participation in sports. Children who engage in sports scored significantly higher on the CBCL Total Competence scale (M = 18.15, SD = 4.98) than those who do not (M = 10, SD = 4.15), t (114) = 5.23, $p < 0.001$. Moreover, children who are involved in sports scored significantly lower in the Self report version of the Total Difficulties scale (M = 16.04, SD = 6.37) compared to children who do not engage in sports (M = 20.57, SD = 5.96), t (66) = 2.4, $p < 0.05$.

Similar results were observed when comparing groups of children having/not having at least one hobby. Children who have a hobby scored significantly higher (M = 17.82, SD = 5.2) on the Total Competence scale of the CBCL than those who do not have any hobbies (M = 8.75, SD =2.02), t (113) = 4.23, $p<0.001$. A significant difference was also observed in the Total Difficulties scale in the Self report version of the SDQ t (66) = 2.41, $p < 0.05$. Children who

have at least one hobby reported significantly less difficulties (M = 16.3, SD = 6.5) than their peers who do not have a hobby *(*M = 22, SD = 4.07).

Belonging to an organisation was also related to Total Competence in the CBCL scale. Children who belong to at least one organisation scored significantly higher in Total Competence (M = 19.62, SD = 5.16) than their peers who were not members of any organisations (M = 14.89, SD = 4.66), t (114) = 5.16, $p < 0.001$.

Mean Total Difficulties scores in the SDQ also differed significantly between groups of children who belong/do not belong to at least one organisation t (108) = 2.76, $p < 0.01$. Children who do not belong to at least one organisation scored significantly higher in Total Difficulties (M = 16.54, SD = 8.05), compared to children who were members of an organisation (M = 12.53 SD = 7.17).

A significant difference among children's scores in the Total Competence scale of the CBCL was also noted according to whether children have at least one chore. Children who do not have any chores scored significantly lower in Total Competence (M = 14.79, SD = 4.6) than their counterparts who have at least one chore (M = 18.14, SD = 5.41), t (111) = 2.63, p = 0.01. No significant differences were noted in the mean scores of other CBCL and SDQ scales between these two groups.

Tables 66 and 67 (overleaf) show that children in residential care scored significantly higher on the Total Competence scale of the CBCL in all the items (with the exception of relationship with siblings) corresponding to more positive functioning in inter-personal relationships. On the other hand, the tables display significantly higher scores on the Total Internalising, Total Externalising and Total Syndrome scales of the CBCL in almost all the items corresponding to more negative functioning in interpersonal relationships. Mean Total Internalising scores did not differ significantly between the levels of two predictors related to children's social interactions, mainly, child's relationship with siblings and behaviour with parents. Mean Total Externalising scores did not differ significantly between the levels of one predictor indicating whether the child plays and works alone. Mean Total Syndrome scores did not differ significantly between the levels of the child's behaviour with parents.

Table 66: *Means and standard deviations for CBCL subscales analysed by child's friendships and parental relationships among the residential sample*

		Total Competence		Total Internalising		Total Externalising		Total Syndrome	
		M	SD	M	SD	M	SD	M	SD
Number of close friends	None	13.02	4.78	17.70	11.56	23.93	13.90	81.77	46.66
	1 friend	15.48	4.21	14.16	8.95	24.44	12.80	64.28	32.46
	2-3 friends	18.72	4.74	10.25	7.10	16.95	11.36	45.07	25.78
	4 or more	22.68	3.64	9.25	6.27	12.55	7.26	37.80	21.41
Weekly meetings with friends	Rarely/Never	16.05	5.74	14.16	8.63	22.54	13.27	64.18	36.10
	1-2 times	18.34	4.13	9.89	8.24	16.11	10.59	42.18	25.42
	3 times or more	20.18	4.89	10.17	6.49	15.03	10.00	48.62	35.11
Rel. with siblings	Worse	16.77	6.19	14.14	10.23	27.11	12.40	76.32	46.26
	Average	17.60	5.00	10.93	6.64	16.84	11.18	47.15	25.42
	Better	19.09	6.04	13.71	11.95	15.94	12.84	50.24	39.70
Rel.with other kids	Worse	14.52	5.28	17.96	10.65	28.46	13.54	82.91	44.10
	Average	16.70	4.56	11.30	8.35	18.63	11.39	52.75	31.60
	Better	21.56	5.36	10.78	7.33	12.63	9.17	38.96	22.80
Beh. with Parents	Worse	16.86	5.26	12.31	8.54	22.78	12.73	64.56	42.22
	Average	16.54	4.94	12.00	8.23	19.84	11.24	53.48	28.54
	Better	19.82	5.89	13.84	11.03	15.16	12.98	49.68	37.15
Plays &works alone	Worse	14.12	5.16	15.92	10.84	23.88	13.86	71.92	38.80
	Average	17.73	5.35	11.46	8.63	18.29	10.64	50.68	30.56
	Better	20.23	4.22	12.57	7.36	18.57	15.55	56.30	43.73

Table 67: *ANOVA values for CBCL subscales analysed by child's friendships and parental relationships among the residential sample*

	Total Competence	Total Internalising	Total Externalising	Total Syndrome
Number of close friends	F (3,115) = 18.79, p<0.001	F (3,125) = 5.96, p=0.001	F (3,126) = 5.94, p=0.001	F (3,125) = 10.5, p<0.001
Weekly meetings with friends	F (2,111) = 5.99, p<0.005	F (2,122) = 4.05, p<0.05	F (2,122) = 5.3, p<0.01	F (2,121) = 5.46, p=0.005
Rel. with siblings	F (2,104) = 0.89, p=0.41 n/s	F (2,113) = 1.75, p=0.18 n/s	F (2,113) = 8.04, p<0.001	F (2,112) = 7.54, p=0.001
Rel. with other kids	F (2,115) = 14.47, p<0.0005	F (2,126) = 6.06, p<0.005	F (2,126) = 12.48, p<0.0005	F (2,125) = 11.83, p<0.0005
Beh. with Parents	F (2,113) = 3.96, p<0.05	F (2,121) = 0.42, p=0.65 n/s	F (2,121) = 3.31, p<0.05	F (2,120) = 1.69, p=0.19 n/s
Plays and works alone	F (2,115) = 8.26, p<0.0005	F (2,124) = 2.38, p=0.97n/s	F (2,124) = 2.04, p=0.13n/s	F (2,123) = 3.57, p<0.05

Table 68: *Means and standard deviations for Total Difficulty using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the residential sample*

		Total Difficulty (Self)		Total Difficulty (Teacher)		Total Difficulty (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	20.61	5.48	19.79	7.29	21.70	5.82
	1 friend	15.55	6.76	12.79	6.47	21.43	6.52
	2-3 friends	15.93	5.89	12.53	6.65	15.85	7.17
	4 or more	15.00	7.99	13.50	9.87	12.10	6.82
Weekly meetings with friends	Rarely/Never	18.42	6.14	14.32	7.60	19.67	7.18
	1-2 times	15.05	5.76	13.15	6.95	15.51	7.59
	3 times or more	15.86	6.69	14.58	9.01	14.86	6.62
Relationship with siblings	Worse	15.17	9.28	14.23	6.57	20.36	8.01
	Average	17.21	5.12	14.33	8.33	16.40	7.16
	Better	16.63	8.68	14.04	9.27	16.65	7.94
Relationship with other kids	Worse	22.42	5.47	16.88	6.45	22.67	7.57
	Average	16.81	5.94	14.44	7.37	17.01	7.08
	Better	13.84	6.24	11.84	9.31	14.44	6.68
Behaviour with Parents	Worse	17.76	6.83	14.62	8.38	18.44	6.98
	Average	17.31	6.49	14.68	7.59	17.87	7.55
	Better	15.74	6.71	12.89	7.76	15.90	8.32
Plays and works alone	Worse	20.33	5.57	17.45	7.21	19.76	7.78
	Average	16.98	5.96	13.25	7.45	16.73	6.82
	Better	14.58	8.83	14.48	8.97	18.48	9.46

Table 69: *ANOVA for Total Difficulty using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the residential sample*

	Total Difficulty (Self)	Total Difficulty (Teacher)	Total Difficulty (Carer)
Number of close friends	F (3,67) = 2.81, $p<0.05$	F (3,109) = 5.79, $p=0.001$	F (3,124) = 11.52, $p<0.0005$
Weekly meetings with friends	F (2,64) = 1.8, $p=0.17$ n/s	F (2,105) = 0.29, $p=0.75$ n/s	F (2,120) = 5.82 , $p<0.005$
Rel. with siblings	F (2,57) = 0.43, $p=0.65$ n/s	F (2,98) = 0.01, $p=0.99$ n/s	F (2,111) =2.86 , $p=0.06$ n/s
Rel. with other kids	F (2,67) = 7.67, $p=0.001$	F (2,109) = 2.47, $p=0.09$ n/s	F (2,124) = 9.05, $p<0.0005$
Beh. with Parents	F (2,65) =0.51, $p=0.6$ n/s	F (2,107) = 0.52, $p=0.59$ n/s	F (2,119) = 1.02, $p=0.36$ n/s
Plays and works alone	F (2,65) =2, $p=0.14$ n/s	F (2,109) =2.49, $p=0.09$ n/s	F (2,122) = 1.69, $p=0.19$ n/s

Tables 68 and 69 (previous page) display the mean Total Difficulties scores and F values using Teacher, Carer and Self report versions of the SDQ scales. A general trend that is clearly visible in these interrelationships is that higher mean Total Difficulties scores tend to correspond to negative levels of functioning in interrelationships on most of the items. Conversely, lower mean scores in Total Difficulties tend to correspond to positive levels of functioning in interrelationships. Predictors related to peer relations, particularly the number of friends, number of weekly meetings with friends outside school hours, and relationship with peers have the highest number of significant interrelationships with the SDQ subscales. On the other hand, child's behaviour with parents and relationship with siblings are the weakest predictors of Total Difficulty.

Table 70: *Means and standard deviations for Prosocial Behaviour using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships among the residential sample*

		Prosocial Behaviour (Self)		Prosocial Behaviour (Teacher)		Prosocial Behaviour (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	8.00	1.97	5.83	3.47	6.93	2.89
	1 friend	8.45	1.21	7.05	2.96	4.96	2.72
	2-3 friends	8.31	2.22	7.15	2.32	7.29	2.32
	4 or more	8.60	1.78	6.29	3.87	8.35	1.60
Weekly meetings with friends	Rarely/Never	8.21	1.72	6.78	3.00	6.53	2.78
	1-2 times	8.10	2.40	7.37	2.41	7.08	2.51
	3 times or more	8.48	1.86	6.04	3.27	7.52	2.56
Relationship with siblings	Worse	8.17	1.64	6.71	2.97	6.50	2.91
	Average	8.42	1.97	7.00	2.92	7.15	2.52
	Better	8.25	2.25	5.86	3.44	7.65	2.00
Relationship with other kids	Worse	8.08	1.98	6.38	3.17	6.83	2.44
	Average	8.03	1.99	6.73	2.91	6.43	2.67
	Better	8.95	1.72	6.92	3.16	8.48	2.12
Behaviour with Parents	Worse	7.76	2.17	6.62	2.96	7.03	2.86
	Average	8.54	1.56	6.82	2.89	6.92	2.62
	Better	8.68	1.89	6.82	3.28	7.10	2.52
Plays and works alone	Worse	8.33	2.35	6.05	3.02	7.32	2.25
	Average	8.33	1.76	7.04	2.97	6.56	2.71
	Better	8.33	2.10	6.30	3.05	8.10	2.57

Table 71: *ANOVA for Prosocial Behaviour using Teacher, Carer and Self report versions analysed by child's friendships and parental relationships*

	Prosocial Behaviour (Self)	Prosocial Behaviour (Teacher)	Prosocial Behaviour (Carer)
Number of close friends	F (3,67) = 0.24, p=0.87 n/s	F (3,109) = 1.23, p=0.3 n/s	F (3,124) = 7.67, p<0.0005
Weekly meetings with friends	F (2,64) = 0.19, p=0.82 n/s	F (2,105) = 1.41, p=0.25 n/s	F (2,120) = 1.41, p=0.25 n/s
Rel. with siblings	F (2,57) = 0.09, p=0.91 n/s	F (2,98) = 0.83, p=0.44 n/s	F (2,111) = 1.16, p=0.32 n/s
Rel. with other kids	F (2,67) = 1.53, p=0.22 n/s	F (2,109) = 0.19, p=0.83 n/s	F (2,124) = 6.58, p<0.005
Beh. with Parents	F (2,65) = 1.48, p=0.23 n/s	F (2,107) = 0.05, p=0.95 n/s	F (2,119) = 0.04, p=0.96 n/s
Plays and works alone	F (2,65) = 0.00, p=1 n/s	F (2,109) = 1.15, p=0.32 n/s	F (2,122) = 3.16, p<0.05

Tables 70 (previous page) and 71 (above) display the mean Prosocial Behaviour scores using Teacher, Carer and Self report versions of the SDQ scales. Higher Prosocial Behaviour scores tend to correspond to positive levels of functioning in interrelationships, whereas, lower mean scores in Prosocial Behaviour tend to correspond to negative levels of functioning in interrelationships. However, most of the relationships are not significant at the 0.05 level of significance. The child's number of friends and relationship with peers were the only significant predictors of Prosocial Behaviour scores in the Carer report version of the SDQ scales.

5.6 Variables Affecting CBCL and SDQ Scores Obtained among Children in Foster Care

The particular demographic variables relating to children's scores on the CBCL and SDQ were considered separately for the group of children in foster care. The same subscales used in the previous sections were utilised, namely the Total Competence, Total Internalising, Total Externalising and Total Syndrome Scales for the CBCL, and Prosocial Behaviour and Total Difficulties in the Self report, Teacher and Carer versions for the SDQ. Throughout this section the group of children in foster care will be considered as one whole group, rather than conducting separate analyses for those in unrelated foster care and those in kin care.

5.6.1 The Impact of Demographic variables on CBCL and SDQ scores

No significant differences emerged when comparing Maltese and non-Maltese children in foster care on their CBCL and SDQ scores. In the subgroup of fostered children, the presence of a diagnosed medical condition was not significantly related to the participants' scores on any of the CBCL or SDQ scales. Two CBCL subscales were significantly related to the presence/absence of a diagnosed mental health problem in the subgroup of fostered children. Children who had a diagnosed mental health problem scored significantly lower (M = 17.21, SD = 5.57) on the Total Competence scale than their peers who were not diagnosed (M = 20.39, SD = 4.54), t (73) = 2.26, $p < 0.05$. Children with a diagnosed mental health problem also scored significantly higher on the Total Syndrome scale (M = 49, SD = 26) when compared to their peers (M = 35.08, SD = 19.35), thus indicating greater overall problems t (76) = 2.34, $p < 0.05$. Similar trends emerged in SDQ scores: Carers reported a significantly higher score, t (85) = 2.05, $p < 0.05$ on Total Difficulties in the SDQ among children with a diagnosed mental health problem (M = 15.93, SD = 7.96), when compared to their peers who were not diagnosed (M = 12.12, SD = 6.04). Mean scores in other SDQ subscales were not significantly different between these two groups.

Children who had a diagnosed learning disability or developmental disorder scored significantly lower on the Total Competence scale of the CBCL (M = 16.41, SD = 5.69) than their peers who were not diagnosed (M = 20.38, SD = 4.51), t (73) = 2.6, $p < 0.05$. They also showed more overall problems, as indicated by their higher scores (M = 51.42, SD = 26.38) on the Total Syndrome scale when compared to other peers (M =35.27, SD = 19.5), t (76) = 2.49, $p < 0.05$. Mean scores did not vary significantly on the other CBCL subscales. Carers also reported significantly higher scores (M = 17.58, SD = 6.51) on the Total Difficulties scale of the SDQ for children with diagnosed learning disability compared to other peers (M = 11.95, SD = 6.18), t (85) = 2.91, $p<0.01$. This significant difference in mean scores was not reported in the Teacher and Self report versions in either Total Difficulties or Prosocial Behaviour.

Pearson's correlation was used to explore the relationships between the children's academic attainment with scores obtained on the CBCL and SDQ scales. Significant positive relationships emerged between the 3 academic subjects and the scores obtained on the CBCL Total Competence scale. Children with high scores in the academic subjects are more likely

to score high in the Total Competence scale - Maltese *(r* = 0.42, *p* = 0.005), English *(r* = 0.39, *p* = 0.01), Maths *(r* = 0.42, *p* = 0.005). No significant relationship*s* emerged between the marks in academic subjects and SDQ scale scores.

Relationships between the child's age of entry into care and their CBCL and SDQ scale scores were examined using Pearson's correlation. None of the CBCL and SDQ scale scores were significantly related to the age of entry into care. Moreover, there was no significant relationship between the time spent in care with any of the CBCL and SDQ scale scores in the fostered group. However, a positive relationship emerged between the number of transitions experienced and the number of years spent in care ($r = 0.28$, $p < 0.005$). The total number of transitions experienced whilst in care was significantly related to some of the CBCL scale scores. Children who experienced a larger number of transitions were more likely to manifest Externalising behaviours *(r* = 0.33, *p*<0.005) and to score high on the Total Syndrome scale *(r*= 0.27, *p* < 0.05). SDQ scale scores were not significantly related to the number of transitions while in foster care.

The One-Way ANOVA test shows that the mean Total Externalising scores of fostered children differed significantly between the levels of the child's present legal status $F(2, 63) = 3.38$, $p< 0.05$. Post-hoc analysis reveals that the largest difference in mean Total Externalising scores was found between children who entered out-of-home care on a court order ($M = 8.79$, $SD = 8.31$), and those admitted on a care order ($M = 14.15$, $SD = 7.52$). Mean SDQ scale scores varied marginally between the levels of the child's legal status on admission.

5.6.2 The Impact of Reasons for Entry into Care on CBCL and SDQ scores

Further analyses explored whether there are any significant differences on the children's CBCL and SDQ scores according to the reasons for entry into care. Correlational analysis showed that scores on the aforementioned scales were not related in any way to the number of reasons for entry into care. Each reason for entry into care was then considered separately through Independent sample t-tests. There were no significant differences on the CBCL and SDQ scores according to the presence or absence of each of these variables: mental health, rejection of the child, marital breakdown, substance abuse, imprisonment, inadequate parenting skills, prostitution, emotional abuse, physical neglect, behaviour problems in the

child and substandard housing. There was only one child with a physical disability in foster care, so further analysis of this variable was not carried out.

Children of single parents scored lower on the Total Internalising scale of the CBCL (M = 7.19, SD = 5.13) compared to children coming from intact families (M = 10.53, SD = 8.22), t (76.53) = 2.22, p <0.05). Children of single parents (M = 21.09, SD = 4.42) also had better outcomes on the Total Competence scale, where they scored significantly higher (M= 21.09, SD = 4.42), than other peers (M = 18.84, SD = 5.01), t (73) = 2.03, $p < 0.05$. When looking at the Carer Informant version, mean Prosocial Behaviour scores of children coming from single-parent families (M = 8.86, SD = 2) were significantly higher compared to mean scores of children coming from intact families (M = 7.94, SD = 2.2) , t (85) = 2.01, $p < 0.05$). Other mean CBCL and SDQ scale scores did not differ significantly between children coming from a one-parent/two-parent family structure.

When looking at the disparities emerging in child-related reasons for entry into care, some significant differences also emerged. Children who had experienced physical abuse scored significantly higher (M = 22.64, SD = 2.44) than those who had not (M = 19.15, SD = 5.06) on the Total Competence scale of the CBCL t (73) = 2.51, $p < 0.05$. Mean SDQ scale scores differed marginally between these two groups. Children who experienced sexual abuse prior to admission into care, scored significantly higher than their peers on the Total Internalising, Total Externalising and Total Syndrome CBCL scales, as displayed in Table 71. Mean scores were not significantly different between the two groups in all SDQ scales.

Table 72: *Independent Samples t-test according to the presence of sexual abuse upon admission into care for the CBCL & SDQ subscales*

	Sexual abuse upon admission into care				t and p values
	Present		Not Present		
	M	SD	M	SD	
Total Internalising	18.5	10.79	8.68	6.80	t (77) = 2.73, $p < 0.01$
Total Externalising	20.5	9.04	10.96	7.34	t (77) = 2.51, $p < 0.05$
Total Syndrome	61.5	29.19	36.47	20.3	t (76) = 2.35, $p < 0.05$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Significant differences also emerged in the mean Total Difficulties scale of the Teacher Informant version between groups of children who experienced/had not experienced

emotional neglect, $t(73) = 2.27$, $p < 0.05$. Children who experienced emotional neglect (M = 14.95, SD = 6.27) scored higher than those who did not have such an experience (M = 11.23, SD = 7.16). Mean Total Difficulties scores did not differ significantly on other CBCL scales.

5.6.3 The Impact of Contact with Family of Origin on CBCL and SDQ scores

Further analyses were conducted to explore the manner in which children's scores on the CBCL and SDQ scales were related to the nature of children's contact with their family of origin.

No significant relationship was found between any of the SDQ scales and the number of siblings a child has, the number of siblings in care, and the number of siblings sharing the same placement. The number of siblings in care was positively related to Total Competence scores ($r = 0.29$, $p < 0.05$), indicating that children with a larger number of siblings in care are more likely to score higher than children with less siblings in care. The child's number of siblings and the number of siblings sharing the same placement were not significantly related to the CBCL scale scores.

The relationship between the frequency of contact with siblings and the CBCL and SDQ subscales was explored using Correlational analyses. The Prosocial Behaviour score on the children's Self SDQ reports was negatively related to the frequency of contact with siblings ($r = -0.45$, $p < 0.05$). However, no significant relationships emerged regarding the other SDQ and CBCL subscales. Interestingly, a significant positive relationship was noted between frequency of contact with siblings and frequency of contact with mother ($r = 0.48$, $p < 0.001$), suggesting that siblings are more likely to be kept in touch through contact with the biological mother.

Mean CBCL and SDQ scale scores were compared between groups of children having supervised/unsupervised contact with their siblings through the Independent samples t-test. No statistical significant differences emerged in the mean CBCL scale scores between the two groups. However, according to teachers, children having unsupervised contact scored significantly higher in Total Difficulties (M = 16.38, SD = 6.72), when compared to children having supervised contact (M = 11, SD = 7.47), t (33) = 2.22, $p < 0.05$.

The frequency of children's contact with their mother was not significantly related to any of the SDQ scales. However a significant relationship emerged on one of the CBCL scales, namely the Total Competence scale *(r* = 0.27, $p < 0.05$) indicating that children who had more frequent contact with their mother were also more likely to have higher scores on the Total Competence scale. Mean SDQ scale scores did not vary significantly between groups of children having supervised/unsupervised contact with mother; however,the mean Total Externalising score of children having supervised contact was significantly higher (*M* = 14.83, *SD* = 8.27) than the mean score of those children who did not require Supervised Adult Visits (SAV) (*M* = 9.13, *SD* = 5.37) , $t(39) = 2.67$, $p < 0.05$. A different pattern emerged when analysing contact with the biological father. The frequency of such contact was not significantly related to any of the CBCL subscales. However, a negative relationship *(r* = - 0.4, $p < 0.05$) emerged between frequency of contact with father and scores on the Prosocial Behaviour Self-Informant version of the SDQ, indicating that children with frequent contacts tend to score lower on the Prosocial Behaviour scale. Type of contact with the father was not related to any of the CBCL or SDQ subscales. One should however once more note that children whose father is listed as 'unknown' were not included in this analysis.

5.6.4 The Impact of the Services being utilised by the children on CBCL and SDQ scores

This section focuses on how CBCL and SDQ mean scores change in relation to the child's past and present use of services. The relationship of these subscales to children's use of the High Support service and an LSA within the school setting will also be analysed. The Independent Sample t-test was used to compare mean CBCL and SDQ scale scores between groups of children receiving/not receiving the service. Given the nature of foster care placements, the child-to-adult ratio within the setting was not analysed further for the group of fostered children.

No significant differences emerged in any of the CBCL and SDQ mean scale scores between children using/not using psychotherapy and speech therapy in the past. Children who attended physiotherapy in the past scored significantly higher (*M* = 19.14, *SD* = 7.73) on the Total Difficulties Carer version of the SDQ scale than those who did not (*M* = 12.17, *SD* = 6.11), $t(85) = 2.83$, $p < 0.01$. No significant differences were noted in the mean CBCL scale scores between these two groups. Children who had received psychiatric help in the past

scored significantly higher (M = 51, SD = 24.49) on the Total Syndrome scale of the CBCL than children who did not (M = 36.03, SD = 20.45), t (76) = 2.02, $p < 0.05$. No significant differences were observed in mean SDQ scale scores. Children who underwent occupational therapy in the past scored significantly higher (M = 17.71, SD = 8.44) on the Total Difficulties scale of the SDQ (Carer version) when compared to those who did not (M = 12.29, SD = 6.17), t (85) = 2.16, $p < 0.05$.

Several significant relationships emerged when analysing the children's current use of services and their scores on the CBCL and SDQ scales. Table 73 shows that those going to psychotherapy scored significantly higher on several CBCL and SDQ scales, indicating a greater degree of difficulties in these areas.

Table 73: *Independent Samples t-test according to current attendance of psychotherapy for the CBCL & SDQ subscales among fostered children*

	Currently attends psychotherapy		Does not currently attend psychotherapy		t and *p* values
	M	SD	M	SD	
Total Internalising	14.50	8.99	7.37	5.63	t (77) = 4.16 p = 0.005
Total Externalising	17.15	8.39	9.51	6.39	t (77) = 4.25, p = 0.001
Total Syndrome	54.47	21.66	32.4	18.36	t (76) = 4.36, $p <$ 0.001
Total Difficulties (Carer)	16.28	7.88	11.8	5.79	t (85) = 2.7, $p < 0.01$

* t-test results for CBCL and SDQ subscales not reaching statistical significance are excluded from this table

Children who are currently attending physiotherapy, on average, scored lower on the Total Competence (M = 13.17, SD = 8.98) than their peers who are not attending (M = 20.08, SD = 4.53), t (73) = 2.49, $p < 0.05$. The group of children currently attending physiotherapy also scored higher, (M = 17.33, SD = 9.87) than their peers (M = 8.86, SD = 7.06), t (77) = 2.02, $p < 0.05$ in the Total Internalising scale. One should be cautious when interpreting these findings, since the number of fostered children attending physiotherapy was very small. No significant differences emerged in the mean scores of other CBCL and SDQ scales between children who are currently attending/not attending occupational therapy.

Among children currently making use of psychiatric services, significant differences were recorded on two CBCL subscales. Children making use of this service scored significantly higher on the Total Externalising scale (M = 16.3, SD = 10.74), than those who were not making use of this service (M = 10.74, SD = 7.44), t (77) = 2.2, $p < 0.05$. The former group also scored higher on the Total Syndrome scale (M = 55.2, SD = 27.06) when compared to

the latter group (M = 35.19, SD = 19.29), t (76) = 2.9, p = 0.005. Furthermore, children who currently are making use of psychiatric services scored significantly higher in the Carer Informant version of the SDQ Total Difficulties scale (M = 17.11, SD = 7.64), when compared to those who were not using the service (M = 12.22, SD = 6.2), t (85) = 2.18, $p <$ 0.05. No significant differences emerged in the mean scores of CBCL and SDQ scale scores between groups of children currently attending/not attending speech therapy.

Variations in the mean CBCL and SDQ scale scores could not be explored between children using/not using HSS service, since only one fostered child made use of this service. One significant difference emerged in the mean scores on some of the CBCL scales when comparing children who made use of the services of a LSA with those who did not. The former group of children scored significantly lower on Total Competence (M=16.23, SD = 5.13) when compared to the latter (M = 20.66, SD = 4.47), t (71) = 3.32, p = 0.001. No significant differences emerged in the mean scores of other CBCL and SDQ scales.

5.6.4.1 Impact of extra-curricular activities and interpersonal relationships on the CBCL and SDQ scores

This section analyses the relationship between the CBCL and SDQ subscales and several other variables listed in the first part of the Child Behaviour Checklist, namely the child's participation in leisure, daily activities, and social relationships among the group of fostered children.

The Independent sample t-test was again used to compare mean CBCL and SDQ scale scores between children who engage/do not engage in sports. Children who are involved in sports scored significantly higher (M = 20.78, SD = 4.51) in the Total Competence scale of the CBCL, when compared to children not doing sports (M = 14.67, SD = 3.24), t (73) = 4.47, p<0.001. Teachers also reported a significantly higher mean Total Difficulties score (M = 17, SD = 7.07) for children who do not engage in sports when compared with those who do engage in sports (M = 12.45, SD = 6.52), t (62) = 2, p = 0.05. No significant differences emerged in the mean scores of the other scales.

Comparisons were also made between children who have/do not have a hobby. Children who had at least one pastime, scored significantly higher on the Total Competence scale (M = 20.23, SD = 4.37) compared to those who do not have hobbies (M = 9.5, SD = 5.63), t (73*)*

4.12, $p < 0.001$. Children who engage in hobbies scored significantly lower in Total Syndrome ($M = 36.49$, $SD = 20.42$) than their peers, who do not have any leisure activities ($M = 61.25$, $SD = 27.37$), t (76) = 2.33, $p < 0.05$. According to teachers, children who engage in at least one hobby demonstrate better Prosocial Behaviour ($M = 7.71$, $SD = 2.24$) than those who do not engage in any pastimes ($M = 3.75$, $SD = 2.63$), t *(62)* = 3.4,$p = 0.001$. Children who have at least one chore scored significantly higher on the Total Competence scale ($M = 20.97$, $SD = 4.31$), when compared to those who do not have any chores (M = 17.15, SD 5.1), t (73) = 3.34, $p = 0.001$. No significant differences emerged in the mean scores of other CBCL and SDQ scales between these two groups of children.

No significant differences emerged in mean scores of SDQ scales between groups of children belonging/not belonging to a particular organisation; however, children who belonged to at least one organisation scored significantly higher on the Total Competence scale of the CBCL ($M = 21.86$, $SD = 3.97$) than those who are not members of any organisation (M = 16.34, SD = 4.27), t (73) = 5.66, p < 0.001).

Tables 74 and 75 show that children in foster care scored significantly higher on the Total Competence scale of the CBCL in all the items (with the exception of number of friends and child's behaviour with parents) corresponding to more positive functioning in interpersonal relationships. On the other hand, the tables reveal that mean scores on the Total Externalising and Total Syndrome scales of the CBCL differed significantly only between the levels of the child's behaviour with parents. No significant differences emerged when considering the impact of interpersonal functioning on the Total Internalising scale among children in foster care.

Table 74: *Means and standard deviations for CBCL subscales analysed by child's friendships and parental relationships among the foster care sample*

		Total Competence		Total Internalising		Total Externalising		Total Syndrome	
		M	SD	M	SD	M	SD	M	SD
Number of close friends	None	14.80	8.16	14.57	8.18	15.00	9.87	51.86	31.47
	1 friend	18.68	4.73	9.00	6.83	9.57	6.45	36.14	14.78
	2-3 friends	20.21	4.39	9.54	6.77	11.12	6.64	37.76	17.76

	4 or more	20.90	4.36	7.61	7.50	11.77	8.59	35.00	23.74
Weekly meetings with friends	Rarely/Never	17.56	5.45	8.76	6.14	12.56	7.32	41.52	20.10
	1-2 times	20.76	3.94	9.63	6.75	11.07	8.06	35.58	17.90
	3 times or more	21.24	4.51	8.42	8.26	10.35	7.56	34.04	22.78
Rel. with siblings	Worse	15.40	6.50	11.40	10.36	12.90	10.07	47.00	30.90
	Average	20.23	4.08	9.74	6.84	12.98	7.59	40.59	19.40
	Better	21.50	5.02	7.50	6.09	8.25	4.20	31.75	18.42
Rel.with other kids	Worse	15.92	7.69	12.17	11.36	16.17	10.48	50.20	32.24
	Average	19.57	4.67	9.32	6.42	11.48	7.26	38.82	19.39
	Better	21.34	3.85	8.09	7.95	10.13	7.62	32.74	22.38
Beh. with Parents	Worse	17.29	6.51	9.00	6.56	14.38	8.67	46.54	24.12
	Average	19.87	4.80	9.88	7.81	13.14	7.79	40.56	21.70
	Better	21.05	3.50	8.04	6.81	6.88	4.46	28.21	15.72
Plays &works alone	Worse	15.19	6.66	12.63	10.06	13.50	8.64	48.71	30.20
	Average	20.38	4.34	8.61	5.90	12.07	8.08	37.87	18.32
	Better	20.29	4.48	9.12	8.55	9.64	6.43	34.48	23.57

Table 75: *ANOVA values for CBCL subscales analysed by child's friendships and parental relationships among the foster care sample*

	Total Competence	Total Internalising	Total Externalising	Total Syndrome
Number of close friends	F (3,73) = 2.7, p=0.052 n/s	F (3,77) = 1.82, p=0.151n/s	F (3,77) = 0.79, p=0.49 n/s	F (3,76) = 1.22, p=0.31 n/s
Weekly meetings with friends	F (2,73) = 4.45, p<0.05	F (2,77) = 0.2, p=0.82n/s	F (2,77) = 0.55, p=0.58 n/s	F (2,76) = 0.95, p=0.39 n/s
Rel. with siblings	F (2,63 = 5.22, p< 0.01	F (2,67) = 0.0.62, p=0.54 n/s	F (2,67) = 1.32, p=0.27 n/s	F (2,66) = 1.14, p=0.33 n/s
Rel. with other kids	F (2,74) = 3.25, p<0.05	F (2,78) = 0.77, p = 0.47 n/s	F (2,78) = 1.5, p=0.23 n/s	F (2,77) = 1.57, p=0.21 n/s
Beh. with Parents	F (2,74) = 2.4, p<0.098 n/s	F (2,78)= 0.48, p=0.62 n/s	F (2,78) = 7.26, p=0.001	F (2,77) = 4.18, p=0.019
Plays and works alone	F (2,74) = 4.39, p<0.05	F (2,78) = 1.04, p=0.36 n/s	F (2,78) = 1.13, p=0.33n/s	F (2,77) = 1.23, p=0.3 n/s

Tables 76 (below) and 77 (overleaf) show significant differences in the mean Total Difficulty scores as indicated by the various levels of how children behave with their parents and relate with other children. Children showing better interpersonal functioning in these areas demonstrate a lower level of difficulties. As expected, see tables 78 and 79, children's relationships with their peers also significantly impacted their Prosocial Behaviour scores,

with those having better relationships obtaining higher scores. The number of close friends also impacted significantly on the mean scores obtained on Prosocial Behaviour. The frequency of meeting friends, the child's relationship with siblings and the ability to work and play alone did not significantly predict any of the SDQ scales.

Table 76: *Means and standard deviations for Total Difficulty using Teacher, Carer and Self report versions analysed by child's friendships and parental relationshipsamong the foster care sample*

		Total Difficulty (Self)		Total Difficulty (Teacher)		Total Difficulty (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	15.75	3.89	21.50	3.32	17.57	9.31
	1 friend	14.75	6.08	12.25	4.17	11.96	4.60
	2-3 friends	12.27	5.93	12.35	7.19	14.20	6.34
	4 or more	11.57	5.21	12.56	7.00	11.13	6.36
Weekly meetings with friends	Rarely/Never	14.33	6.68	13.83	7.50	12.77	6.07
	1-2 times	13.19	6.28	13.36	6.85	12.81	6.02
	3 times or more	11.39	3.95	11.39	5.72	12.56	6.71
Relationship with siblings	Worse	16.00	6.07	12.17	5.23	17.13	8.90
	Average	11.41	4.91	13.65	6.48	12.99	5.86
	Better	17.00	2.83	11.80	8.17	13.50	4.75
Relationship with other kids	Worse	15.00	1.41	12.60	5.73	20.40	7.40
	Average	13.78	5.68	14.51	6.19	13.66	6.07
	Better	10.69	5.07	9.89	7.37	9.82	5.96
Behaviour with Parents	Worse	15.50	5.01	15.00	4.33	18.30	6.33
	Average	11.22	5.11	12.82	6.81	13.37	6.72
	Better	13.56	5.92	12.53	7.59	10.10	4.93
Plays and works alone	Worse	18.33	5.13	12.29	4.61	18.14	6.15
	Average	12.16	5.32	13.36	6.82	12.88	5.67
	Better	11.81	5.18	12.67	7.51	11.67	7.73

Table 77: *ANOVA values for the Total Difficulties subscale of the SDQ analysed by child's friendships and parental relationships among the foster care sample*

	Total Difficulty (Self)	Total Difficulty (Teacher)	Total Difficulty (Carer)
Number of close friends	F (3,31) = 0.6, p=0.62 n/s	F (3,61) = 2.39, p=0.08 n/s	F (3,73) = 2.42 , p=0.07 n/s
Weekly meetings	F (2,32) = 0.71,	F (2,61) = 0.71, p=	F (2,73) =0.01,

with friends	p=0.5 n/s	0.5 n/s	p<0.98 n/s
Rel. with siblings	F (2,30) = 2.72, p=0.08 n/s	F (2,51) = 0.28, p=0.76 n/s	F (2,63) = 1.54, P=0.22 n/s
Rel. with other kids	F (2,32) =1.46, p=0.25 n/s	F (2,62) = 3.13, p=0.51 n/s	F (2,74) = 6.91 , p<0.005
Beh. with Parents	F (2,32) = 1.64, p=0.21 n/s	F (2,62) = 0.45, p=0.64 n/s	F (2,74) = 6.44, p<0.005
Plays and works alone	F (2,32) =1.94, p=0.16 n/s	F (2,62) = 0.11, p=0.89 n/s	F (2,74) = 2.76, p=0.07 n/s

Table 78: *Means and standard deviations for Prosocial Behaviour using Teacher, Carer and Self report versions analysed by child's friendships and parental relationshipsamong the foster care sample*

		Prosocial Behaviour (Self)		Prosocial Behaviour (Teacher)		Prosocial Behaviour (Carer)	
		M	SD	M	SD	M	SD
Number of close friends	None	5.50	0.71	4.50	3.11	6.00	1.53
	1 friend	7.50	3.70	7.40	2.50	8.33	1.61
	2-3 friends	8.36	1.50	7.91	2.04	8.28	2.26
	4 or more	9.00	1.36	7.80	2.40	9.13	1.46
Weekly meetings with friends	Rarely/Never	7.67	1.86	7.33	2.89	8.14	2.19
	1-2 times	8.00	2.35	7.24	2.45	8.08	2.28
	3 times or more	9.07	1.27	8.11	2.00	8.96	1.37
Relationship with siblings	Worse	8.00	3.16	7.33	3.88	7.63	2.45
	Average	8.70	1.40	6.98	2.37	8.29	2.09
	Better	7.00	1.41	9.80	0.45	8.63	1.51
Relationship with other kids	Worse	6.00	5.66	6.60	3.97	7.20	2.77
	Average	8.06	1.66	7.08	2.37	8.35	1.73
	Better	9.23	1.09	8.72	1.71	8.68	2.34
Behaviour with Parents	Worse	7.00	2.97	6.22	3.07	7.50	2.59
	Average	8.61	1.42	7.53	2.44	8.20	2.10
	Better	8.89	1.69	8.05	2.01	9.04	1.30
Plays and works alone	Worse	9.00	1.73	6.86	3.44	6.86	2.61
	Average	8.23	2.05	7.47	2.32	8.43	2.00
	Better	8.63	1.69	7.83	2.36	8.71	1.65

Table 79: *ANOVA values for the Prosocial Behaviour subscale of the SDQ analysed by child's friendships and parental relationships among the foster care sample*

	Prosocial Behaviour (Self)	Prosocial Behaviour (Teacher)	Prosocial Behaviour (Carer)
Number of close friends	F (3,31) = 2.64, p=0.07 n/s	F (3,61) =2.58, p=0.06 n/s	F (3,73) = 5.84, p=0.001

Weekly meetings with friends	F (2,32) = 1.67, *p*=0.21 n/s	F (2,61) = 0.75, *p*=0.48 n/s	F (2,73) = 1.59 , *p*=0.21 n/s
Rel. with siblings	F (2,30) =1, *p*=0.38 n/s	F (2,51) = 2.89, *P*=0.06 n/s	F (2,63) = 0.5, *P*=0.61 n/s
Rel. with other kids	F (2,32) = 3.64, *p*<0.05	F (2,62) = 3.45, *p*<0.05	F (2,74) = 1.13, *p*=0.33 n/s
Beh. with Parents	F (2,32) = 2.18, *p*=0.13 n/s	F (2,62) = 1.78, *p*=0.18 n/s	F (2,74) = 2.56, *p*=0.08 n/s
Plays and works alone	F (2,32) =0.28, *p*=0.76 n/s	F (2,62) = 0.4, *p*=0.67 n/s	F (2,74) = 2.46 , *p*=0.09 n/s

Some significant differences on the CBCL subscale scores emerged when the child's gender was considered using Independent Sample t-tests. Differences emerged on the Total Externalising scale (t (77) = 3.14, $p < 0.005$) and the Total Syndrome scale (t (76) = 2.37, $p < 0.05$). Boys performed worse than girls in both subscales, scoring an average of 13.79 (*SD* = 7.46) compared to 8.64 (SD = 7.02) on the Externalising scale and an average of 42.77 (*SD* = 21.38) compared to 31.6 (SD = 19.87) for girls on the Total Syndrome scale. One significant finding also emerged on the SDQ scales, among the variables that achieved statistical significance girls performed better (M = 8.29, SD = 2.1), as they scored higher than boys (M = 6.89, SD = 2.47) on Prosocial Behaviour according to Teachers (t (66) = 2.49, $p < 0.05$). No significant differences emerged on any of the other subscales.

Pearson's correlation was used to explore the relationship between the child's current age and the CBCL and SDQ subscales; however no significant relationships emerged on any of these scales within the group of children in foster care.

5.7 Regression Analysis of the Variables Predicting Scores on the CBCL and SDQ Subscales

Hypothesis testing is essential to make inferences about a population using a sample data set. Correlation analyses were used to assess the relationship between a dependent variable and a continuous predictor. The One-Way ANOVA or Independent Samples t- test were used to compare the mean scores of a dependent variable across the levels of a categorical variable. Through these tests one can determine whether a relationship is significant and hence generalise it. The major limitation of these two tests is that they investigate solely the

relationship between a dependent variable and a lone predictor. However, the goal of this research is to estimate collectively the quantitative effect of the predictors upon the dependent variable that they influence. It is well known that a lone predictor could be rendered a very important contributor to explain variations in the dependent variable, but would be rendered unimportant in the presence of other regressors (predictors). This implies that the appropriateness of an explanatory variable in a model fit often depends on what other predictors are included with it.

In this study, several regression models are fitted to relate several CBCL scales and SDQ scales to a number of explanatory variables that were found to be significant predictors through hypothesis testing in the preceding sections. The purpose of fitting these regression models is to rank the explanatory variables by their contribution to explain variations in the CBCL and SDQ scale scores. Moreover, the models will identify the true significant predictors when the regressors are analysed collectively. Parameter estimates (regression coefficients) are also provided to estimate the change in the mean CBCL and SDQ scale scores across the levels of a predictor, while all the other regressors are kept fixed.

The procedure is to firstly fit a regression model for each CBCL and SDQ scale by including all relevant explanatory variables as main effects. The parsimonious regression model is then identified using a backward/stepwise procedure. Detailed tables of these can be seen in Appendices S, T and U.

5.7.1 Analysis of the Variables Predicting Scores on the CBCL

There are four dependent variables for the CBCL scales, which include: Total Competence, Total Internalising, Total Externalising and Total Syndrome. Each dependent variable will be analysed separately through regression analyses. Each of these regression models will be first fitted for the whole sample and then fitted for the foster care and residential care samples separately.

5.7.1.1 Analysis of the variables predicting scores on the CBCL for the whole sample

5.7.1.1.a: Competence scale (combined sample)

The One-Way ANOVA test and Correlation analyses identified twenty-six predictors that were strongly related to the Competence scale for the combined sample which include: presence of a diagnosed mental health problem, presence of a diagnosed learning disability, gender, number of close friends, frequency of meeting with friends, relationship with siblings, relationship with other children, behaviour with parents, type of present placement, single parenthood, parental substance abuse, child's behaviour problems, current and past psychiatric assistance, current and past attendance to occupational therapy and speech therapy, past psychotherapy attendance, child's engagement in sports, child's age, whether child has hobbies, has at least one chore, plays/works alone, is a member of at least one organisation, receives assistance from a high support worker and whether child is statmented. The twenty-six predictor model shows that some of the explanatory variables are not significant when analysed collectively.

The parsimonious model includes thirteen predictors that are significantly related to total competence. Child's membership in organisations, frequency of meeting with friends, child's engagement in sports and whether child has at least one hobby or chore are the best predictors of total competence. These are followed by the number of close friends, relationship with other children, child's behaviour problems, child's age and gender, whether child currently attends speech therapy and plays/works alone and parental substance abuse. The parsimonious model explains 77.9% of the total variation in the responses.

Using the whole sample, the main findings about total competence scores are:

- Boys score, on average, 1.139 points less in competence than girls.
- Children with no close friends score, on average, 3.442 points less in competence than children with at least four friends. Children who do not interact with friends outside regular school hours, at least once weekly, score, on average, 3.224 points less in competence than children who meet frequently with friends.
- Children with a poor relationship with peers score, on average, 2.036 points less in competence than children who have a relatively good relationship with other kids.

- Children who do badly when involved in solitary play and work score, on average, 2.131 points less in competence than other children who do well when playing or working alone.
- Children whose parents do not engage in substance abuse score, on average, 1.913 points more in competence than children whose parents abuse of substances.
- Children who do not have behavioural problems score, on average, 2.388 points more in competence than children with behaviour difficulties.
- Children who are currently not attending occupational therapy score, on average, 1.904 points more in competence than children are presently attending occupational therapy.
- Children who do not participate in sports score, on average, 3.56 points less in competence than children who engage in sports.
- Children who do not have hobbies score, on average, 5.119 points less in competence than children who have at least one hobby.
- Children who do not belong to any organisation score, on average, 3.418 points less in competence than children who are members of at least one organisation.
- Children who do not have at least one chore score, on average, 2.309 points less in competence than children who have at least one chore.
- Total competence tends to decrease with age. For every additional year the total competence score decreases by 0.23.

5.7.1.1.b: Internalising scale (combined sample)

The One-Way ANOVA test and Correlation analyses identified fourteen predictors that were strongly related to the total Internalising scale for the combined sample. These include child's present legal status, number of close friends, frequency of meeting with friends, relationship with other children, type of present placement, current and past psychiatric assistance, current and past attendance to psychotherapy, sexual abuse and other abuse on child, total number of transitions while in care, whether child has at least one chore and whether child receives assistance from high support workers. The fourteen predictor model shows that some of the explanatory variables are not significant when analysed collectively.

The parsimonious model includes five predictors that are significantly related to the total Internalising score. Sexual abuse is the best predictor of the Internalising score. This is followed by relationship with other children, whether child is currently attending psychotherapy, whether child has at least one chore and number of close friends. The parsimonious model explains 24.4% of the total variation in the responses. Using the whole sample, the main findings about total Internalising scores are:

- Children with no close friends score, on average, 4.441 points more in the total Internalising scale than children with at least four friends.
- Children with a poor relationship with peers score, on average, 5.435 points more in the total Internalising scale than children who have good relationships with other kids.
- Children who were not sexually abused score, on average, 6.143 points less in the Total Internalising scale than children who were abused sexually.
- Children who are currently not attending psychotherapy score, on average, 2.714 points less in the total Internalising scale, than children presently attending psychotherapy.
- Children who do not have at least one chore score, on average, 2.473 points less in the total Internalising scale than children who have at least one chore.

5.7.1.1.c: Externalising scale (combined sample)

The One-Way ANOVA test and Correlation analyses identified twenty-five predictors that were strongly related to the Total Externalising scale for the combined sample. These include presence of diagnosed mental health problem, child's present legal status, child's gender, number of close friends, frequency of meeting with friends, relationship with siblings and other children, behaviour with parents, type of present placement, whether child plays/works alone, whether child receives help from a high support worker, child to adult ratio within setting, whether child has siblings in the same placement, emotional abuse, inadequate parental skills, physical abuse, physical and emotional neglect, substandard housing, child's behaviour problems, current and past psychiatric assistance, current attendance to psychotherapy, whether child has been through abuse, total number of

transitions while in care. The twenty-five predictor model shows that some of the explanatory variables are not significant when analysed collectively.

The parsimonious model includes seven predictors that are significantly related to the Total Externalising score. Relationships with other children are the best predictors of the Externalising score. This is followed by relationships with siblings, number of transitions while in care, whether child is currently attending psychotherapy, number of siblings in same placement as child, child's gender and frequency of weekly meeting with friends outside school. The parsimonious model explains 41.5% of the total variation in the responses. Using the whole sample, the main findings about Total Externalising scores are:

- Boys score, on average, 3.744 points more in the Total Externalising score than girls.
- Children who do not interact with friends outside regular school hours at least once weekly score, on average, 4.818 points more in the Total Externalising score than children who meet frequently with their friends at least three times weekly.
- Children with poor relationships with peers score, on average, 9.354 points more in the Total Externalising score than children who have good relationships with other kids.
- Children with poor relationships with siblings score, on average, 8.897 points more in the Total Externalising score than children who have relatively good relationships with their brothers and sisters.
- Children who do not have siblings in the same placement score, on average, 12.004 points less in the Total Externalising score than children who have at least three siblings in the same placement.
- Children who are currently not attending psychotherapy score, on average, 4.607 points less in the Total Externalising score than children who are presently attending psychotherapy.
- The Total Externalising score tends to increase with the number of transitions while in care. For every additional transition, the Total Externalising score increases by 1.365.

5.7.1.1.d: Total Syndrome scale (combined sample)

The One-Way ANOVA test and Correlation analyses identified twenty predictors that were strongly related to the Total Syndrome scale for the combined sample which include: presence of diagnosed mental health problem, child's gender, number of close friends, frequency of meeting with friends, relationshipswith siblings and other children, behaviour with parents, type of present placement, whether child plays/works alone, whether child receives help from a high support worker, inadequate parental skills, emotional neglect, child's behaviour problems, current and past psychiatric assistance, current and past use of psychotherapy, whether child has been abused, total number of transitions while in care. The twenty predictor model shows that some of the explanatory variables are not significant when analysed collectively.

The parsimonious model includes five predictors that are significantly related to the Total Syndrome score. Number of close friends is the best predictor of the Total Syndrome score. This is followed by relationship with siblings, relationshi*p* with other children, child's gender and whether child receives assistance from a high support worker. The parsimonious model explains 37.7% of the total variation in the responses. Using the whole sample, the main findings about Total Syndrome scores are:

- Boys score, on average, 10.561 points more in the Total Syndrome score than girls.
- Children with no close friends score, on average, 32.405 points more in the Total Syndrome score than children having at least four friends.
- Children with a poor relationship with siblings score, on average, 16.852 points more in the Total Syndrome score than children who have a relatively good relationship with siblings.
- Children with a poor relationship with peers score, on average, 22.53 points more in the Total Syndrome score than children who have a relatively good relationship with other kids.
- Children who receive assistance from a high support worker score, on average, 16.915 points more in the Total Syndrome score than children who get no assistance from a high support worker.

5.7.1.2 Analysis of the variables predicting scores on the cbcl for the residential sample

5.7.1.2.a Competence scale (residential care sample)

The One-Way ANOVA test and Correlation analyses identified twenty-two predictors that were strongly related to the Competence scale for the residential care sample. These include presence of diagnosed mental health problem, presence of diagnosed learning disability, legal status, substance abuse by parents, child's behaviour problems, past psychotherapy attendance, past and current psychiatric treatment, past occupational therapy attendance, current speech therapy treatment, whether child is statmented and receives help from a high support worker, child's gender, whether child has at least one hobby, engages in sports, belongs to at least one organisation and has at least one chore, number of close friends, weekly meetings with friends, relationship with other children, behaviour with parents and whether child engages in solitary work/play.

The twenty-two predictor model suggests that some of the explanatory variables are not contributing significantly in explaining the variation in the Competence scale scores. These predictors are removed successively from the model fit using a backward/stepwise procedure. The parsimonious model suggests eleven dominant predictors of the Total Competence scale. Child's engagement in hobbies is the best predictor of the Competence scale (smallest p-value). This is followed by child's membership in at least one organisation, child's gender, child's relationships with other children, whether child has at least one chore, presence of diagnosed mental health problem, whether child engages in solitary work/play; weekly meetings with friends, legal status and number of close friends and whether child engages in sports. This eleven-predictor model explains 80.0% of the total variability in the competence scale scores. Using the residential care sample, the main findings about total competence scores are:

- Participants who were not diagnosed with mental health problems scored, on average, 2.099 points more in the total competence scale than those with mental health problems.
- Participants who were provided voluntary placement scored, on average, 3.775 points more in the total competence scale than those whose legal status is regulated by a court order.
- Boys score, on average, 2.118 points less in total competence than girls.

- Children who do not engage in sports score, on average, 2.338 points less in total competence than kids who participate in sports.
- Participants in residential care who participate in at least one hobby score, on average, 5.391 points less in total competence than those who do not have any hobbies.
- Children who do not belong to any organisation score, on average 2.834 points less in the total competence score than those who are members of at least one association.
- Participants who do not have any chores score, on average, 2.478 points less in total competence than those who have at least one chore.
- The total competence score increases almost linearly with number of close friends. Children having no close friends score, on average, 3.606 points less in than competence than their counterparts having at least four close friends.
- Participants who rarely meet with peers outside school hours score, on average, 2.327 points less in total competence than those who meet at least three times weekly with friends.
- Participants in the residential care sample having poor to moderate relationship with other children tend to score, on average, 2.6 points less in the competence scale than their counterparts having good a relationship with other children.
- Participants who do badly when playing/working alone score, on average, 2.903 points less in competence than other children who do well when playing/working alone, provided that other predictors are kept fixed.

5.7.1.2.b: Total Internalising scale (residential care sample)

The One-Way ANOVA test and Correlation analyses identified eight predictors that were strongly related to the Internalising scale scores for the residential care sample. These include sexual abuse, child's behaviour problems, child-adult ratio, whether child attended psychotherapy in the past and is currently attending speech therapy, number of close friends, weekly meetings with friends outside school hours and relationships with other kids. The eight-predictor model suggests that some of the explanatory variables may not be significant when taken collectively.

The parsimonious model indicates two significant regressors of the Total Internalising scale score for the residential care group. Relationship with other children is the dominant predictor, followed by sexual abuse. This model explains 16.5% of the total variation in the responses. Using the residential care sample, the main findings about total Internalising scores are:

- Participants in residential care who were not sexually abused scored, on average, 7.826 points less in the total Internalising scale score than those who experienced sexual abuse.
- The Total Internalising score decreases when child's relationship with peers improves. Participants who had very poor relationship with other children scored, on average, 8.92 points more in the total Internalising scale than those who had good relationships.

5.7.1.2.c: Total externalising scale (residential care sample)

The One-Way ANOVA test and Correlation analyses identified ten predictors that were strongly related to the Total Externalising scale scores for the residential care sample which include: inadequate parental skills, child's behaviour problems; whether child receives help from a high support worker, number of close friends, weekly meeting with friends, child's relationship with siblings and other kids, child's behaviour with parents, number of parental issues and child's age. The ten-predictor model suggests that some of the explanatory variables may not be significant when taken collectively.

The parsimonious model indicates that relationship with other kids is the best predictor of the Total Externalising scale score for the residential care group. This is followed by child's behaviour problems; child's relationship with siblings, number of parental issues and child's age. This model explains 37.0% of the total variation in the responses. Using the residential care sample, the main findings about Total Externalising scores are:

- Participants in residential care with behaviour problems score, on average, 8.566 points less in the Total Externalising scale than children with no behaviour problems.
- The Total Externalising score decreases significantly as the child's relationships with siblings and other children improve. Children in the residential care group

having poor relationships with siblings score, on average, 7.735 points more in the Externalising scale compared to respondents having good relationships.

- Participants in the residential care group having poor relationships with other children score, on average, 13.27 points more in the Externalising scale compared to respondents having good relationships.
- The Total Externalising score is positively related to the number of parental issues and negatively related to the child's age. The Total Externalising score, on average, increases by 1.378 for every additional parental issue and decreases by 0.637 for every year increase of the child's age, assuming that other predictors are kept constant.

5.7.1.2.d: Total syndrome scale (residential care sample)

The One-Way ANOVA test and Correlation analyses identified ten predictors that were strongly related to the Total Syndrome scale scores for the residential care sample. These include inadequate parental skills, child's behaviour problems, child adult ratio, whether child receives help from a high support worker, child's gender, number of close friends, frequency of meeting with friends outside school hours, relationship with siblings and other children and whether child engages in solitary work/play. This ten-predictor model suggests that some of the explanatory variables are redundant when taken collectively.

The parsimonious model identifies four dominant regressors. Number of close friends is the best predictor of the Total Syndrome score because it explains the larger portion of the variation in this scale. This is followed by child's relationships with siblings, child's relationships with other children and whether child was influenced by inadequate parental skills. This model explains 39.4% of the total variation in the responses. Using the residential care sample, the main findings about Total Syndrome scores are:

- Children whose parents have adequate parental skills score, on average, 15.24 points less in the Total Syndrome scale compared to children whose parents have inadequate parental skills.
- Participants in the residential care group having no close friends score, on average, 36.678 points more in the Total Syndrome scale compared to respondents having at least four close friends.

- Participants having relationships with siblings score, on average, 11.892 points more in the Total Syndrome scale compared to children having good relationships.
- Children having a poor relationship with other children score, on average, 26.513 points more in the Total Syndrome scale compared to children having a good relationship and around 10.8 points more than children having a middling relationship with other kids.

5.7.1.3 Analysis of the variables predicting scores on the cbcl for the foster sample

5.7.1.3.a: Competence scale (foster care sample)

The One-Way ANOVA test and Correlation analyses identified fifteen predictors that were strongly related to the Competence scale scores for the foster care sample. These include presence of a mental health problem, presence of diagnosed learning disability, single parenthood, child's physical abuse, frequency of contact with mother, current psychotherapy attendance, number of close friends, frequency of meeting with friends, relationship with siblings, number of siblings in care and whether child is statmented, engages in sports, has a hobby, belongs to at least one organisation and has at least one chore. The fifteen-predictor model suggests that some of the explanatory variables are not contributing significantly in explaining the variation in the Competence scale scores (p-values exceed the 0.05 level of significance). These predictors are removed successively from the model fit using a backward/stepwise procedure.

The parsimonious model suggests eight dominant predictors of competence scale scores. Child's membership in at least one organisation is the best predictor of the Competence scale (smallest p-value). This is followed by whether child has at least one chore, child's engagement in sports, presence of diagnosed learning disability, presence of a diagnosed mental health problem, whether child has at least one hobby, relationships with siblings and frequency of meeting with friends. This eight-predictor model explains 78.4% of the total variability in the competence scale scores. Using the foster care sample, the main findings about total competence scores are:

- Children with no diagnosed mental health problem are expected to score 2.833 points more in the Competence scale compared to those having a mental health problem, given that other effects are kept fixed.
- Children with no diagnosed learning disability are expected to score 3.118 points more in the Competence scale compared to those having a learning disability.
- Children who do not engage in sports are expected to score 3.798 points less in the Competence scale compared to those who participate.
- Children who do not have any hobbies are expected to score 4.645 points less in the Competence scale compared to those who have at least one hobby.
- Children who do not belong to any organisations are expected to score 3.819 points less in the Competence scale compared to those who are member in at least one organisation.
- Children who do not have any chores are expected to score 3.242 points less in the Competence scale compared to those who have at least one chore.
- Children who have less than one weekly meeting with friends outside school hours are expected to score 2.442 points less in the Competence scale compared to those who have at least three weekly meetings with peers.
- Children who have a poor relationship with siblings are expected to score 3.889 points less in the Competence scale compared to those who have a good relationship, given that other effects are kept fixed.

5.7.1.3.b: Total Internalising scale (foster care sample)

The One-Way ANOVA test identified five predictors that were strongly related to the Internalising scale scores for the foster care sample. These include single parenthood, sexual abuse, current psychotherapy and physiotherapy attendance and number of close friends.

The parsimonious model suggests two dominant predictors of total Internalising scale scores. Current psychotherapy attendance is the best predictor of Total Internalising scale scores followed by sexual abuse. This parsimonious model explains 24.3% of the total variation in the responses. Using the foster care sample, the main findings about total Internalising scores are:

- Children who are not sexually abused are expected to score 8.106 points less in the Internalising scale score compared to those who are sexually abused.
- Children who do not currently attend psychotherapy sessions are expected to score 6.591 points less in the Internalising scale score compared to those who presently attend psychotherapy sessions, assuming that other predictors are kept fixed.

5.7.1.3.c: Total Externalising scale (foster care sample)

The One-Way ANOVA test identified nine predictors that were strongly related to the Externalising scale scores for the foster care sample. These include child's legal status at present, if childwas sexually abused, type of contact with mother, current psychotherapeutic and psychiatric assistance, weekly meetings with friends, and behaviour with parents, child's gender and total number of transitions while in care. The nine-predictor regression model suggests that some of the regressors are not significant since the p-values exceed the 0.05 level of significance.

The parsimonious model suggests three dominant predictors. Current psychotherapy attendance is the best predictor of Total Externalising scale scores followed by behaviour with parents and child's gender. This parsimonious model explains 36.6% of the total variation in the responses. Using the foster care sample, the main findings about Total Externalising scores are:

- Children who are presently not receiving any psychotherapy are expected to score 5.633 points less in the Externalising scale score, compared to those getting this treatment.
- Children whose behaviour with parents is poor are expected to score 5.848 points more in the Externalising scale score, compared to those with good behaviour.
- Boys are expected to score 4.195 points more in the Externalising scale score than girls assuming that other predictors are kept fixed.

5.7.1.3d: Total Syndrome scale (foster care sample)

The One-Way ANOVA test identified four predictors that were strongly related to the Total Syndrome scale scores for the foster care samplethat include: presence of a diagnosed mental health problem, presence of diagnosed learning disability, child's sexual abuse, past and present psychiatric treatment, current psychotherapy attendance, child's gender, behaviour with parents, total number of transitions while in care and whether child has at least one hobby. The ten-predictor regression model suggests that some of the regressors are not significant since the p-values exceed the 0.05 level of significance.

The parsimonious model suggests five dominant predictors. Current psychotherapy attendance is the best predictor of Total Syndrome scores followed by presence of diagnosed learning disability, whether child has at least one hobby, sexual abuse on child and behaviour with parents. This five-predictor parsimonious model explains 40.8% of the total variation in the responses. Using the foster care sample, the main findings about Total Syndrome scores are:

- Children having no learning disability are expected to score 12.84 points less in the Total Syndrome scale than those with learning difficulties.
- Children who are not sexually abused score 18.833 points less in the Total Syndrome scale than those who are sexually abused.
- Children who are presently not receiving any psychotherapy are expected to score 18.564 points less in the Total Syndrome scale compared to those receiving this treatment.
- Children who do not have any hobbies score 20.014 points more in the Total Syndrome scale compared to those having at least one hobby.
- Children whose behaviour with parents is poor are expected to score 13.734 points more in the Total Syndrome scale compared to those with good behaviour.
- Children with moderate behaviour score, on average, 9.224 points more in the Total Syndrome scale compared to well-behaved children, assuming that other predictors are kept fixed.

5.7.2 Analysis of the Variables Predicting Scores on the SDQ

There are 6 dependent variables considered for the SDQ - Total Difficulty using Carers' evaluations, Total Difficulty using Teachers' evaluations, Total Difficulty using Self evaluations, Prosocial Behaviour using Carers' evaluations, Prosocial Behaviour using Teachers' evaluations, Prosocial Behaviour using Self evaluations. Data for the whole sample will be reported first, followed by the data for the residential sample and subsequently data for those in foster care.

5.7.2.1 Analysis of the variables predicting scores on the sdq for the whole sample

5.7.2.1.a: Total Difficulty scale using Carers' evaluations (combined sample)

The One-Way ANOVA test identified thirty-one predictors that were strongly related to the Total Difficulty scale scores for the combined sample using Carers' evaluations. These include presence of a diagnosed mental health problem, presence of diagnosed learning disability/developmental disorder, number of close friends, relationship with siblings and other children, frequency of meeting with friends, behaviour with parents, whether child plays/works alone, type of present placement, child to adult ratio within setting, whether child is statmented and whether s/he receives help from a high support worker, number of siblings in same placement as child, inadequate parental skills, frequency of contact with biological father, child's emotional abuse, physical abuse, physical and emotional neglect, behaviour problems in the child, substandard housing, currently attending psychotherapy, received psychiatric assistance in the past, attended physiotherapy and occupational therapy in the past, child has been through abuse, total number of transitions while in care, child's age and duration in care.

The thirty-one predictor model suggests that some of the explanatory variables are not significant when taken collectively. The parsimonious model identifies six dominant explanatory variables. Child's relationships with other children are the best predictors of the Total Difficulty scores (smallest p-value). This is followed by total number of transitions while in care, child's age; whether child receives help from a high support worker, number of siblings in same placement as child and number of close friends. This parsimonious model explains 42% of the total variation in the responses. Using Carers' evaluations these are the main findings about the child's Total Difficulty score for the whole sample:

- Children who do not have close friends score, on average, 4.948 points more in the SDQ scale than children having at least four close friends.
- Children having a poor relationship with other children score, on average, 7.504 points more in the Total Difficulty scale compared to children having a good relationship.
- Children receiving assistance from a high support worker score, on average, 4.797 points more in the SDQ scale than children who do not receive any support.
- Difficulty increases with an increase in the number of siblings in same placement as child.
- Difficulty increases with an increase in the number of the child's transitions while in care. For every additional transition while in care, the Total Difficulty score is expected to increase by 0.947.
- Difficulty decreases as child's age increases. For every year increase in the child's age the Total Difficulty score is expected to decrease by 0.436, assuming that other predictors are kept fixed.
- From the Carers' evaluations, it transpires that children in foster or residential care score significantly higher in Total Difficulty if they have poor relationships with other children, have no close friends, receive assistance from high support worker, are young in age, have undergone several transitions while in care and have many siblings in the same placement.

5.7.2.1.b: Total difficulty scale using teachers' evaluations (combined sample)

The One-Way ANOVA test identified thirty-one predictors that were strongly related to the Total Difficulty scale scores for the combined sample using Teachers' evaluations. These include presence of a diagnosed mental health problem, presence of diagnosed learning disability/developmental disorder, number of close friends, relationships with siblings and other children, type of contact with mother, whether child is statemented, child's emotional abuse, behaviour problems in the child, currently attending speech therapy and occupational therapy, current and past psychiatric assistance, child has been abused, child belongs to at least one organisation and total number of transitions while in care.

The fifteen predictor model suggests that some of the explanatory variables are not significant when taken collectively. The parsimonious model identifies three dominant

explanatory variables. According to Teachers, number of close friends is the best predictor of the Total Difficulty scores (smallest p-value). This is followed by type of contact with mother and current psychiatric assistance. This parsimonious model explains 25.8% of the total variation in the responses. Using Teachers' evaluations these are the main findings about the child's Total Difficulty score for the whole sample:

- Children who do not have close friends score, on average, 5.628 points more in the SDQ scale than children having at least four close friends.
- Children who have supervised contact with their mother score, on average, 3.664 points less in the SDQ scale than children having unsupervised contact with mother.
- Children who are not receiving any psychiatric assistance score, on average, 4.571 points less in the SDQ scale than children receiving psychiatric help, given that other predictors are kept fixed.

5.7.2.1.c: Total difficulty scale using child's self evaluation (combined sample)

The One-Way ANOVA test identified thirty-one predictors that were strongly related to the Total Difficulty scale scores for the combined sample using Self evaluations. These include number of close friends, frequency of meeting with friends outside school hours, relationships with other children; whether child plays/works alone, type of present placement, whether child receives assistance from a high support worker, frequency of contact with mother, inadequate parental skills, child's behaviour problems, currently attending speech therapy, current and past psychiatric assistance, child engages in sports and has at least one hobby, child belongs to at least one organisation and total number of transitions while in care.

The sixteen predictor model suggests that some of the explanatory variables are not significant when taken collectively. The parsimonious model identifies four dominant explanatory variables. Child's relationships with other children are the best predictors of the Total Difficulty scores (smallest p-value). This is followed by child's behaviour problems, inadequate parental skills and child's engagement sport. Using child's Self evaluations these are the main findings about the child's Total Difficulty score for the whole sample:

- Children who have poor relationships with other kids score, on average, 7.532 points more in Total Difficulty than children having good relationships with others.
- Children whose parents had adequate parental skills score, on average, 3.114 points less in the SDQ scale than kids whose parents had inadequate parental skills.
- Children having no problematic behaviour score, on average, 4.983 points less in Total Difficulty than children having behaviour problems.
- Children who do not engage in sports score, on average, 3.29 points more in the SDQ scale than kids engaging in sports, given that other predictors are kept fixed.

5.7.1.2.d: Prosocial scale using carers' evaluations (combined sample)

The One-Way ANOVA test identified several variables that were strongly related to the Prosocial Behaviour scores for the combined sample using Carers' evaluations. These include child's gender, number of close friends, child's relationships with other children, frequency of meeting with friends outside school hours, whether child plays/works alone, type of present placement, whether child is statmented, raised by a single parent and had behaviour problems, currently attending psychotherapy and occupational therapy, attended psychotherapy in the past, currently receiving psychiatric help and total number of transitions while in care.

The fourteen-predictor model suggests that some of the regressors are not significant when taken collectively. The parsimonious model identifies five dominant explanatory variables. Number of close friends is the best predictor of prosocial scores (smallest p-value), followed by child's gender, single parenthood, total number of transitions while in care and whether child plays/works alone. This parsimonious model explains 24% of the total variation in the responses. Using Carers' evaluations these are the main findings about the child's prosocial score for the whole sample:

- Children in foster and residential care, boys score 0.835 points lower than girls on the SDQ prosocial scale.
- Children who had no close friends score, on average, around 2 points less in Prosocial Behaviour than those with at least 4 close friends.

- Children who tend to play and work alone score, on average, around 1 point less in the prosocial scale than children who are more likely to interact with others.
- Children living in a two-parent family structure scored, on average, 0.771 points less on the prosocial scale than children living in a one-parent family structure.
- For every additional transition while in care, the prosocial score is expected to decrease by 0.19 points, assuming that other predictors are kept fixed.

5.7.1.2.e: Prosocial scale using teachers' evalutions (combined sample)

The One-Way ANOVA test identified eight predictors that were strongly related to the Prosocial Behaviour scores for the combined sample using Teachers' evaluations. These include child's gender, whether child is statmented, inadequate parental skills, whether child has behaviour problems, currently attending occupational therapy, currently and in the past child received psychiatric help and whether child is a member of at least one organisation.

The eight-predictor model suggests that some of the regressors are not significant when taken collectively. The parsimonious model identifies three dominant predictors. Child's behaviour problems is the best predictor of prosocial scores (smallest p-value),followed by inadequate parental skills and child's membership in at least one organisation. This model explains 13% of the total variation in the responses. Using Teachers' evaluations these are the main findings about the child's prosocial score for the whole sample:

- Children whose parents had adequate parental skills scored, on average, 1.066 points higher on the SDQ prosocial scale than children whose parents had inadequate parental skills.
- Children who had no behaviour problems scored, on average, 1.965 points higher on the prosocial scale than children with behavioural difficulties.
- Children who were not members of at least one organisation scored, on average, 0.839 points lower in the Prosocial Behaviour than children who were members, assuming that other predictors are kept fixed.
- Using Teachers' evalutions of Prosocial Behaviour for children in foster and residential care: children who were brought up with adequate parental skills, did not have behaviour problems and were members of at least one organisation scored significantly higher on prosocial scale.

5.7.1.2.f: Prosocial scale using child self evaluation (combined sample)

The One-Way ANOVA test identified eight predictors that were strongly related to the Prosocial Behaviour scores for the combined sample using child's Self evaluations. These include number of close friends, relationship with other children, current speech therapy attendance, past psychotherapy attendance, child's behaviour with parents, child's age of admission into care and child's duration in care.

The seven-predictor model suggests that some of the regressors are not significant when taken collectively. The parsimonious model identifies three dominant predictors. Child's psychotherapy attendance in the past is the best predictor of prosocial scores (smallest p-value) followed by child's relationships with other children and current speech therapy attendance. This parsimonious model explains 16% of the total variation in the responses. Using child's Self evaluations these are the main findings about the child's prosocial score for the whole sample:

- Children who have poor relationships with other kids score, on average, 1.337 points less in the prosocial scale than children having good relationships.
- Children, who in the past, never required psychotherapy score, on average, 0.95 points more in the prosocial scale than children receiving the therapy.
- Children, who presently do not attend speech therapy, score on average, 1.695 points lower on the prosocial scale than children receiving the therapy.

5.7.2.2 Analysis of the variables predicting scores on the sdq for the residential sample

5.7.2.2.a: Total difficulty scale using carers' evaluations (residential care sample)

The One-Way ANOVA test identified fourteen predictors that were strongly related to the Total Difficulty scale scores for the residential care sample using Parents' evaluations. These include presence of a diagnosed mental health problem, inadequate parental skills, behaviour problems in the child, if child had received psychiatric assistance in the past, currently

attending psychotherapy, currently receives psychiatric assistance, receives help from a high support worker, number of close friends, frequency of meeting with friends, relationship with other children, total number of transitions while in care, number of reasons for entry into care, child's age and whether child is statemented. The fourteen-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model indicates that there are five dominant predictors of the total difficulties score for the residential care groupwhich include inadequate parental skills; number of close friends; relationships with other children, total number of transitions while in care and child's age. This model explains 39.2% of the total variation in the responses. Using Carers' evaluations these are the main findings about the child's Total Difficulty score for the residential care sample:

- Children in residential care where parental skills were inadequate score, on average, 2.696 points more in total difficulties compared to their counterparts where parental skills were adequate.
- Children with no close friends score, on average 5.898 points more in Total Difficulty compared to those having at least four close friends.
- Children in residential care having a poor relationships with other kids score, on average, 4.433 points more in total SEBD compared to their counterparts with good relationships.
- The Total Difficulty score increases with the number of transitions while in care. For every additional transition while in care the Total Difficulty score is expected to increase by 1.025.
- The Total Difficulty score decreases with an increase in child's age. For every one-year increase in the child's age the Total Difficulty score is expected to decrease by 0.082, assuming that other predictors are kept constant.

5.7.2.2.b: Total difficulty scale using teachers' evaluations (residential care sample)

The One-Way ANOVA test identified twelve predictors that were strongly related to the Total Difficulty scale scores for the residential care sample using Teachers' evaluations.

These include inadequate parental skills, behaviour problems in the child, type of contact with mother, received psychiatric assistance both currently and in the past, number of close friends, relationships with other children, child's membership in at least one organisation and whether child is statmented. The twelve-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model indicates that there are four dominant predictors of total SEBD score for the residential care group. These include inadequate parental skills; type of contact with mother; number of close friends and whether the child is statmented. This parsimonious model explains 35.1% of the total variation in the responses. Using Teachers' evaluations these are the main findings about the child's Total Difficulty score for the residential care sample:

- Children in residential care where parental skills were inadequate score, on average, 4.263 points more in total SEBD compared to their counterparts where parental skills were adequate.
- Children who have supervised contact with mother score, on average, 4.788 points less in Total Difficulty than children having unsupervised contacts with mothers.
- Children with no close friends score, on average 6.124 points more in Total Difficulty compared to those having at least four close friends.
- Children in residential care, who are statemented score, on average, 3.834 points more on the SEBD scale compared to non-statemented children, assuming that other predictors are kept fixed.

5.7.2.2.c: Total Difficulty scale using Self evaluations (residential care sample)

The One-Way ANOVA test identified eight predictors that were strongly related to the Total Difficulty scale scores for the residential care sample using Self evaluations. These include behaviour problems in the child, psychiatric assistance received both currently and in the past, child's engagement in sports, child has at least one hobby, number of close friends, relationships with other children and whether child plays/works alone. The eight-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model indicates that there are three dominant predictors of total SEBD score for the residential care group. These include behaviour problems in the child; child has at least one hobby and relationship with other children. This parsimonious model explains 31.8% of the total variation in the responses. Using child's Self evaluations these are the main findings about the child's Total Difficulty score for the residential care sample:

- Children with behaviour problems score, on average, 5.5 points more in the total SEBD scale compared to children with no behavioural difficulties.
- Children with no hobbies score, on average in Total Difficulty 3.83 points more than kids having at least one hobby.
- Children in residential care having a poor relationship with other children score, on average, 7.876 points more in total SEBD compared to their counterparts with good relationship, assuming that other predictors are kept fixed.

5.7.2.2.d: Prosocial scale using Carers' evaluations (residential care sample)

The One-Way ANOVA test and Correlation analyses identified four predictors that were strongly related to the prosocial scale scores for the residential care sample using Carers' evaluations. These include child to adult ratio within setting, number of close friends, age of first admission into care in years, relationships with other children. The four-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model indicates that there are two dominant predictors of the prosocial score for the residential care group. These include number of close friends followed by relationships with other children. This parsimonious model explains 21.3% of the total variation in the responses. Using Carers' evaluations these are the main findings about the child's prosocial score for the residential care sample:

- Children with no close friends score, on average 2.851 points less on the prosocial scale compared to those having at least four close friends.
- Children in residential care having a poor to average relationships with other kids score, on average, 0.9 points less in the prosocial scale compared to their counterparts with good relationships, assuming that other predictors are kept fixed.

5.7.2.2.e: Prosocial scale using Teachers' evaluations (residential care sample)

The One-Way ANOVA test identified four predictors that were strongly related to the prosocial scale scores for the residential care sample using Teachers' evaluations. These include inadequate parental skills; behaviour problems in the child; current psychiatric assistance and child's membership in at least one organisation. The four-predictor model suggests that some of the regressors are not significant when taken collectively.

The parsimonious model suggests that there are three dominant predictors of the prosocial score for the residential care group. The child's behaviour problems are the best predictor of Prosocial Behaviour according to Teachers' evaluations. This is followed by inadequate parental skills and child's membership in organisations. The parsimonious model explains 13% of the total variation in the responses. Using Teachers' evaluations, these are the main findings about the child's prosocial score for the residential care sample:

- Children that are not members of any organisation score, on average 0.839 points less on the prosocial scale compared to those who are actively involved in at least one organisation.
- Children with no behavioural problems score, on average, 1.965 points more in Prosocial Behaviour compared to their counterparts with severe behavioural difficulties.
- Children in residential care where parental skills were inadequate score, on average, 1.066 points less in the Prosocial Behaviour compared to those where parental skills were adequate assuming that other predictors are kept fixed.

5.7.2.2.f: Prosocial scale using Self evaluations (residential care sample)

The One-Way ANOVA test and Correlation analyses identified seven predictors that were strongly related to the prosocial scale scores for the residential care sample using Self evaluations. These include frequency of contact with at least one sibling, past psychiatric assistance, attended psychotherapy in the past, age of first admission into care, total number of transitions while in care, duration in care and number of reasons for entry into care. The seven-predictor model suggests that some of the regressors are not significant when taken collectively.

The parsimonious model suggests that the total length of time in care is a sole dominant predictor of the prosocial score for the residential care group. The parsimonious model explains 5.2% of the total variation in the responses. Using child's Self evaluations these are the main findings about the child's prosocial score for the residential care sample:

- The prosocial score decreases with child's duration in care. For every one-year increase in the duration of child care the prosocial score is expected to decrease by 0.098, assuming that other predictors are kept fixed.

5.7.2.3 Analysis of the variable predicting SDQ scores for the sample in foster care

5.7.2.3.a: Total difficulty scale using carers' evaluations (foster care sample)

The One-Way ANOVA test identified ten predictors that were strongly related to the Total Difficulty scale scores for the foster care sample using Parents' evaluations that include presence of a diagnosed mental health problem, presence of diagnosed learning disability/developmental disorder, attended physiotherapy and occupational therapy in the past, currently attending psychotherapy, currently receiving psychiatric assistance, child's relationships with other kids, child's behaviour with parents, whether the child is statmented and whether s/he plays/works alone. The ten-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model identifies four dominant explanatory variables. Child's relationship with other kids is the best predictor of the Total Difficulty scores (smallest p-value). This is followed by current psychotherapy attendance, presence of diagnosed learning disability and past physiotherapy attendance. This parsimonious model explains 33.1% of the total variation in the responses. Using Carers' evaluations these are the main findings about the child's Total Difficulty score for the foster care sample:

- Children who do not have learning difficulties, who never attended physiotherapy in the past and who are not currently receiving psychotherapy respectively score, on average, 3.904, 4.349 and 3.549 points less than their counterparts who have learning disabilities, attended physiotherapy and presently receive psychotherapy.

- Children having poor relationships with other children score, on average, 9.085 points more in the Total Difficulty scale compared to children having a good relationships and around 3.51 points more than children having adequate relationships with other kids, assuming that other predictors are kept fixed.
- Children in the foster group score significantly higher in Total Difficulty if they have learning disability; attended physiotherapy in the past, currently attend psychotherapy and have poor relationships with other children.

5.7.2.3.b: Total difficulty scale using teachers' evaluations (foster care sample)

The One-Way ANOVA test identified four predictors that were strongly related to the Total Difficulty scale scores for the foster care sample using Teachers' evaluations. These include presence of a diagnosed medical condition, emotional neglect; type of contact with siblings and whether child engages in sports. The four-predictor model suggests that some of the explanatory variables are not significant when taken collectively.

The parsimonious model indicates that type of contact with siblings is the sole dominant predictor of the Total Difficulty scale score for the foster care group. This model explains 13% of the total variation in the responses. Using Teachers' evaluations these are the main findings about the child's Total Difficulty score for the foster care sample:

- Children who have supervised contact with siblings score, on average, 5.381 points less in Total Difficulty than children having unsupervised contacts with siblings, assuming that other predictors are kept constant.

5.7.2.3.c: Prosocial scale using carers' evaluations (foster care sample)

The One-Way ANOVA test identified three predictors that were strongly related to the Prosocial Behaviour scores for the foster care sample using Carers' evaluations which include single parenthood, number of close friends and child's behaviour with parents. The three-predictor model is also the parsimonious model since all three regressors were found to contribute significantly in explaining variations in the responses. Using Carers' evaluations these are the main findings about the child's prosocial score for the foster care sample:

- Scores in the prosocial scale for children in foster care tend to increase significantly with an increase in the number of close friends and with an improved behaviour with parents.
- Children who had no close friends scored, on average, 2.838 points less in Prosocial Behaviour than those with at least 4 close friends.
- Children having an appalling behaviour with Parents score, on average, 1.309 points less on the prosocial scale than their counterparts have satisfactory behaviour.
- Children in foster care where single parenthood was present scored 1.057 points higher on the prosocial scale than children where single parenthood was absent, assuming that other predictors are kept fixed.

5.7.2.3.d: Prosocial scale using Teachers' evaluations (foster care sample)

The One-Way ANOVA test identified three explanatory variables that were strongly related to the Prosocial Behaviour scores for the foster care sample using Teachers' evaluations. These include child's gender, relationships with other children and whether child has at least one hobby. The three-predictor model suggests that some regressors are not significant when taken collectively.

The parsimonious model indicates that relationships with other children and whether child has hobbies are the dominant predictors of Prosocial Behaviour for the foster care group. This model explains 21.9% of the total variation in the responses. Using Teachers' evaluations these are the main findings about the child's prosocial score for the foster care sample:

- Children in foster care score who do not have any hobbies score, on average, 3.981 points less on the prosocial scale compared to their counterparts who have at least one hobby.
- Children in foster care with poor to adequate relationships with other children score, on average, 1.3 to 1.5 points less on the prosocial scale than children having good relationships, assuming that other explanatory variables are kept fixed.

5.7.2.3.e: Prosocial scale using Self evaluation (foster care sample)

The One-Way ANOVA test identified four explanatory variables that were strongly related to the Prosocial Behaviour scores for the foster care sample using Self evaluations. These include child's gender, relationships with other children; number of close friends; frequency of contact with siblings and biological father. This four-predictor model suggests that some regressors are not significant when taken collectively.

The parsimonious model indicates two dominant predictors of Prosocial Behaviour for the foster care group which include relationships with other children and number of close friends. This model explains 37.2% of the total variation in the responses. Using child's Self evaluations these are the main findings about the child's prosocial score for the foster care sample:

- Children with no close friends score, on average, 3.116 points less on the prosocial scale compared to those having at least four close friends.
- Children in foster care having poor relationships with other kids' scores, on average, 2.755 points less in the prosocial scale compared to their counterparts with good relationships, assuming that other predictors are kept fixed.

Table 80 (overleaf) indicates the significant predictors for each CBCL scale of the three group combinations, namely the whole sample, the residential sample and the foster sample. The number of significant predictors in Total Competence scale exceeds the number of significant predictors in other CBCL scales. This indicates that the CBCL predictors explain a larger portion of the variance of the Total Competence scale than other CBCL scales. Table 81 indicates the significant predictors for each SDQ scale of the three group combinations.

Table 80: *List of the significant predictors for each CBCL scale for the combined sample, the residential sample and the foster care sample*

CBCL Predictors	Combined Sample	Residential Care	Foster Care

Total Competence	77.9%	80%	78.4%
Belonging to an organisation	*	*	*
Frequency of meeting friends	*	*	*
Engagement in sports	*	*	*
Having 1 hobby	*	*	*
Participating in chores	*	*	*
Number of close friends	*	*	
Relationship with other children	*	*	
Child's behaviourbehaviour problems	*		
Age	*		
Gender	*	*	
Currently attending speech therapy	*		
Child plays/works alone	*	*	
Parental substance abuse	*		
Presence of a diagnosed mental health problem		*	*
Legal Status		*	
Presence of diagnosed learning disability			*
Frequency of meeting with friends			*
Total Internalising	24.4%	16.5%	24.3%
Child sexual abuse	*	*	*
Relationship with children	*	*	
Currently attending psychotherapy	*		*
Participates in chores	*		
Number of friends	*		
Total Externalising	41.5%	37%	36.6%
Relationships with other children	*	*	
Relationships with siblings	*	*	
Number of transitions	*		
Currently attending psychotherapy	*		*
Number of siblings in same placement	*		
Gender	*		*
Freq. of meeting with friends	*		

Child behaviour problems		*	
Age		*	
Number of Parental reasons for admission		*	
Behaviour with Parents			*
Total Syndrome	37.7%	39.4%	40.8%
Number of friends	*	*	
Relationships with siblings	*	*	
Relationships with children	*	*	
Gender	*		
Has HSS assistant	*		
Inadequate Parental skills		*	
Currently attends psychotherapy			*
Presence of a diagnosed learning disability			*
Behaviour with Parents			*
Has one hobby			*
Child Sexual Abuse			*

Table 81: *List of predictors for each SDQ scale for the combined sample, the residential sample and the foster care sample*

SDQ Predictors	**Combined Sample**			**Residential Care**			**Foster Care**		
	Carer	**Teacher**	**Self**	**Carer**	**Teacher**	**Self**	**Carer**	**Teacher**	**Self**
Total Difficulties	42.0%	25.8%	42.0%	39.2%	35.1%	31.8%	33.1%	13.0%	
Relationship with other children	*		*	*		*	*		
Number of transitions	*			*					
Age	*			*					
Has HSS assistance	*								

No. of siblings in the same placement as child	*								
Number of close friends	*	*		*	*				
Type of contact with mother		*			*				
Current Psychiatric assistance		*							
Child behaviourbehaviour problems			*			*			
Inadequate Parenting skills			*	*	*				
Participation in sports			*						
Child is statemented					*				
Child has 1 hobby						*			
Current psychotherapy							*		
Presence of a diagnosed learning disability							*		
Past physiotherapy							*		
Type of contact with siblings								*	

Table 81 (continued)

Prosocial Behaviour	**Carer** 24.0%	**Teacher** 13.0%	**Self** 16.0%	**Carer** 21.3%	**Teacher** 13.0%	**Self** 5.2.%	**Carer** 32.1%	**Teacher** 21.9%	**Self** 37.2%
Number of close friends	*			*			*		*
Gender	*								
Single Parenthood	*						*		
Number of transitions	*								
Child plays/works alone	*								
Child behaviour problems		*			*				
Inadequate Parenting skills		*			*				
Belonging to one organisation		*			*				
Psychotherapy in the past			*						
Relationship with other children			*	*				*	*
Current speech therapy			*						
Total length of time in care						*			
Child's behaviour with Parents							*		
Engages in hobbies								*	

5.8 Conclusion

This chapter has provided us with sets of findings pertaining to children in residential care and foster care. The series of findings emerging from the study will now be discussed in detail in the coming chapter.

Study 2 Chapter 6: Discussion of Findings

6.0 Introduction

This chapter will provide a discussion of the findings emerging from this study. In order to organise further the vast amount of data reported into a coherent overview, the specific research questions and hypotheses posed for this study will be focused on in turn. First, this chapter will focus on the prevalence of mental health problems among children in out-of-home care, and then, the issue of whether such difficulties are being adequately identified and addressed will be discussed. Subsequently, we will present an overview of the factors that have been significantly related to the psycho-social functioning of this population, specifically focusing on what aspects are predictive of the strengths, difficulties, externalising and internalising behaviours among children in out-of-home care. Lastly, further attention will be dedicated to comparing the profiles and outcomes observed among children who are currently in foster care and those who are in residential care.

6.1 Children living in Out-Of-Home Care have a Higher Rate of Mental Health Problems that fall in the Clinical Range, when compared with the Normal Population.

The research findings support our hypotheses that children living in out-of-home care have a higher rate of mental health problems that fall in the clinical range when compared with the general population. This is similar to other research findings on children in out-of-home care (Stanley, 2007; Baker et al., 2007; Armsden et al., 2000; Kelly et al., 2003; McCann et al., 1996; Meltzer et al., 2003; Goodman et al., 2002). Indeed, the children in our study manifested an overall higher prevalence of mental health difficulties than children in normative populations, both when compared to a sample of American children, as in the case of the CBCL, as well as when compared to a sample of Maltese children, as in the case of the SDQ.

In addition, when CBCL scores for the children in this study were compared to both a clinical sample and a non-clinical sample of American children, the children in our study resembled more closely children from the clinical sample. This was particularly so on the Total

Competence scale with regards to boys of all ages, and girls aged between 12 and 18, and on the Total Internalising and Total Syndrome scales for boys aged between 12 and 18 years.

Almost half of the sample fell in the clinical range on the Total Competence scale while 40.95% fell in the clinical range on the Total Syndrome scale. Moreover, it transpired that when compared with children in the general Maltese population, children in our sample exhibited more emotional difficulties, conduct problems, hyperactive behaviour, and problems relating with peers. This is similar to the findings by Meltzer et al. (2003) who found that most common mental health disorders presented by children in care were conduct disorders, followed by emotional disorders, and hyperactivity.

Glaser (2000) suggests possible reasons for such findings when he argues that these children are subjected to particular life circumstances directly related to their primary care-giving relationship which often occurs during their formative years, and which is likely to have an important impact on their neurobiological development. As will be discussed in further detail below, such adversities are likely to leave their blueprint on the child's social, emotional, behavioural, and academic development. Indeed, as noted by Golding (2010), due to their experiences within their family-of-origin, experiences of loss and separation related to their admission into care, and difficulties related to adjusting to a different care environment, children placed in out-of-home care have an increased risk, over the general population, of developing mental health difficulties.

Nonetheless, it is interesting to note that according to teachers' and youth's reports, males and females in out-of-home care demonstrated similar levels of prosocial behaviour to the general population. Carers however perceived children in care as having less prosocial skills than peers in the general population. This leads us to wonder whether children's foster carers and residential workers expect better behaviour among the children than parents of children in the general population.

6.2 Are Mental Health Problems among Children in Out-Of-Home Care being Adequately Identified and Addressed?

The second aim of this study was to explore the hypothesis that children in out-of-home care have mental health problems that are not adequately identified nor addressed. The use of children's formal diagnosis, their CBCL scores, and mental health service use, allowed such a comparison. The data shows a big discrepancy between the number of children having a formal diagnosis (17.8% of the sample) and the number of children who scored on the clinical range in any of the CBCL subscales (49%), indicating an overall trend of formal under-diagnosis. Although the rates of presenting problems according to the children's formal diagnosis are very different from those presented in the international literature, rates obtained on the CBCL scales are comparable to other studies. For example, the presence of mental health problems among out-of-home care children in Australia was 40% (Chambers, Saunders, New, Williams, & Stachurska, 2010), in Scotland it was 53% (Millward et al., 2006), and in Britain it was 45% (Meltzer et al., 2003). These figures indicate a similar degree of presenting problems among Maltese children that is also considerably higher than the general 10% prevalence of mental health problems among the general population, and the 20-25% prevalence among children form separated families (Greene, Anderson, Hetherington, Forgatch & Degaino, 2003). This practice of under-diagnosis merits further exploration as it would yield important insights for mental health professionals working in this area by providing an understanding of whether such a practice is helpful or unhelpful and in which circumstances.

Interesting information also stems from further exploration of the prevalence of particular presenting problems. Some studies (e.g. Armsden et al., 2000) have observed a greater prevalence of externalising rather than internalising problems in the out-of-home care population. This is also the case in the current sample (with 43% scoring in the clinical range on Externalising Behaviours and 36% scoring in the clinical range on the Internalising scale). Compounding this, is the finding that nearly half the sample obtained scores within the clinical range for conduct problems, and this was, in fact, the most prevalent difficulty reported among all the CBCL and SDQ subscales, which indicates that this is clearly a problematic area among children in care. The literature on developmental psychopathology (e.g. Carr, 2006) helps us to shed light on several contributing factors present in the life of children in care that may pre-dispose or maintain conduct problems. Children who are

separated from their primary caretakers very early in their life, fail to develop secure attachments and an internal working model of relationships that guides moral social interaction. Thus, these children may attribute hostile intent to others' behaviour and respond in an aggressive pattern. Abela et al., (2005) found that children in care often have difficulties with trusting each other. Living in a place with many other children who present with such difficulties not only creates a more complex system to contend with, but also allows the development of a process of mutual modelling where children learn the deviant behaviour displayed by other children.

The data also provides another interesting perspective regarding internalising problems, which are definitely less prevalent than externalising behaviours, but also possibly greatly under-diagnosed. Scores obtained on the CBCL scales indicate that after conduct problems, anxiety and affective problems were the most prevalent difficulties within this sample. Notwithstanding, none of the children were formally diagnosed with affective disorder, and only 2 children were diagnosed as having an anxiety disorder. This leads one to wonder whether such behaviours are less reported to mental health professionals because they do not cause as much disruption within the school and home environment than other acting out behaviours, for example ADHD. Within this sample, this latter diagnosis predominated as the most common formally diagnosed difficulty, as it was present in one-tenth of the children in care. This exceeds by far the prevalence rates found in the general population which range between 3-5% in school aged children (American Psychiatric Association, 2000). It is possible that this difficulty was brought to the attention of professionals more often because, as shown by the data, it was demonstrated consistently within different spheres of functioning (both within the school and home/care environments) as shown by the high inter-correlations between different informants on the SDQ.

When looking at the overall picture, findings show that there was an association between the children's formal diagnosis and the scores obtained on the CBCL in only 2 out of the 6 subscales considered. Thus, the data shows that it is not the presenting difficulties in one particular area that are related to the child's formal diagnosis, but it is the overall level of difficulties the child presents globally. Ultimately those who had a higher overall level of problems reported on the Total Syndrome scale of the CBCL and the Total Difficulties scale of the SDQ were more likely to have a formal diagnosis.

Looking at this data, and the low rate of formal diagnosis compared to scores obtained on the CBCL scales, the reader may be tempted to conclude that children's needs are not being adequately identified and consequently dealt with. However, looking at the data emerging in relation to service use, one might be more cautious in making such a statement, given that a considerable number of children made use of the mental health services. Specifically the majority of children in care, (114 children), attended either one of the mental health services, whereas 94 children did not attend either psychotherapy or the psychiatric services. The data in fact shows an association between one's formal diagnosis and the use of mental health services. Nevertheless, although children who are formally diagnosed are more likely to attend psychotherapy or have psychiatric follow-up than those who are not, a considerable number of children without a formal diagnosis also benefit from these services.

In all likelihood, this is because they presented a sufficient degree of difficulties to warrant a referral for professional help even without a formal diagnosis. In fact, the data shows a significant association between mental health service usage and children's presenting problems, as defined by their scores within the clinical range of the CBCL. The percentage of children obtaining 1 score within the clinical range (49%) is directly comparable to the percentage of children currently making use of psychotherapy (48.1%). On the other hand, there was no significant association between scores obtained on the CBCL scales and the use of psychiatric services, indicating that presenting problems are primarily addressed through psychotherapy and, in a lesser percentage of cases, through the use of the psychiatric services. Some studies show a high degree of attachment related problems among children in out-of-home care. For example, Chambers et al. (2010) report such difficulties among three quarters of their sample of children in care. This aspect was not explored directly within the current study and, as such, this limits the possibility of quantifying directly the presence of such difficulties within the Maltese population of children in care. However, this might serve to explain further the possible presence of a particular range of problems that are not adequately captured by the DSM-oriented CBCL scales, which could clearly be the focus of therapeutic intervention.

The prevalence of mental health service use among children in care can be directly compared to data from other countries. For example, considering the number of children who obtained at least 1 score in the clinical range of the CBCL scales, Tarren-Sweeney (2010) found that in Australia, 60% of these children were making use of mental health services. This is directly

comparable to the 67% found locally, using the same criteria. This data begs consideration for the reasons why, professionals, working with the children, would not seek services for all those who obtained such high scores. Once again, consideration of the child's overall level of difficulties helps to shed light on this issue, since children making use of the mental health services obtain higher global ratings of overall symptoms on the syndrome scale of the CBCL. Thus, once again, it is clear that the children having a higher rate of difficulties are being referred to the mental health services.

The discussion so far has focused on the children who are currently making use of the mental health services. However, an interesting observation emerges when looking further in depth at the children who are not receiving such services. The data shows us that 19% of those who have a formal diagnosis are not receiving any of these services, and that a number of children still have a formal diagnosis, notwithstanding the fact that they obtained scores within the normal range of the CBCL scales. Have these children been treated effectively, and so are demonstrating a decrease in symptoms? Could this possibly be an indication of an outdated diagnosis that 'stuck' to the child, notwithstanding the fact that s/he is not manifesting significant symptoms? Data from this study does not provide conclusive answers to these questions, however it does imply that more research is warranted into the diagnostic process, specifically into the manner with which diagnoses are formally reviewed and recorded in the children's files.

The aim of diagnosis is to enable professionals to formulate treatment and enable clients to adequately access services (De Jong, 2010). The findings in this study show us that among the out-of-home-care population, looking at diagnosis to see whether problems are being identified and addressed, may not be the most efficient manner of doing so, because it seems that the children's needs for mental health services are being met not according to a formal diagnosis, but according to the child's overall presenting problems. Thus, children will benefit from having a system that addresses needs without possibly labelling them, including in their personal files, for the rest of their lives. In essence it seems that a needs-perspective has been adopted among children in out-of-home care rather than a system based on diagnostic labels.

6.3 What are the Variables having an Impact On and Predicting the Psychosocial Functioning of Children in Out-Of-Home Care?

This study also aims to present a picture of children in out-of-home care and to establish which factors have the greatest impact in predicting their overall psychosocial well-being. In order to achieve this aim, in this section we will be looking further at the emerging results; specifically focusing on what predicts problematic behaviours or difficulties among this population. We will discuss the findings, also, in terms of what is more predictive of internalising problems and externalising behaviours in the children. Children in out-of-home care often report that they feel that the experience of being looked after by the state demeans them in the eyes of others (Stanley, 2007). The very experience of being in care makes them feel inferior and stigmatised when having to disclose their identity to others. For this reason, this study sought to present a picture not only of the aspects predicting difficulties within this population, but also a picture of what aspects are most predictive of their strengths, by using the strength-based scales on the CBCL and SDQ.

6.3.1 What Factors Predict Strengths among Children in Out-Of- Home Care?

In order to achieve this aim we will explore which variables have been found to predict children's strengths as operationalised through the scores they obtained on the Total Competence scale of the CBCL and the Prosocial scale of the SDQ. Essentially, what factors predict a good level of functioning socially at school and in extracurricular activities? Moreover, what promotes considerate, helpful, kind and caring behaviour towards others? An overall look at the data highlights several factors occurring before the children's admission into care, several factors occurring during the years in care, and other children's characteristics that impact their overall sense of competence and prosocial behaviour. Regression analyses showed moderate to large effect sizes, indicating that the mentioned variables identified to a very good degree what predicts children's strengths in these areas. It is, however, interesting to note that there was no overlap between the factors considered important in predicting prosocial behaviour scores, according to carers, teachers or the adolescents themselves.

Three pre-care parental behaviours featured as predictive of the children's overall competence and prosocial behaviour. Parental substance abuse prior to the child's admission into care predicted worse outcomes for the children's present overall functioning on a school, social and extra-curricular level. On a similar note, having parents who lacked parental skills predicted worse prosocial behaviour in the children. Interestingly, pre-care factors contributed significantly to predicting the children's overall strengths, although they did not feature much in predicting the extent of children's overall difficulties and symptoms (as noted in section 6.3.2), possibly indicating that such pre-care experiences have a much more general impact on the children's functioning than in contributing to specific syndromes of difficulty. Another pre-care variable related to the family experiences refers to having single parents. Coming from a single-parent family where one's parents are not married predicted better scores on the prosocial scale. This finding stands in contrast with the research by Cefai, Cooper & Camilleri (2008) among Maltese children, in which they found that one-parent families have more children with social, emotional and behavioural difficulties than two-parent households. This finding highlights the need for further research exploring the specific dynamics involved among single-parent families in which this was a reason for the child's admission into care.

Behavioural problems present in the child prior to admission into care or contributing to his/her admission into care, predicted and negatively impacted both the child's level of adaptive functioning in different spheres, and also his/her prosocial behaviour. This might indicate that being admitted into out-of-home care did not ameliorate the child's behaviour to a sufficient degree so as to remove the impact of experiences prior to admission, although one cannot obviously comment on potential outcomes had the child stayed in his/her family environment. Further research exploring the degree to which out-of-home care provides a reparative experience might help to shed greater light on this matter. However, until then, possibly placing a greater emphasis on the factors occurring during care that are predictive of strengths might be important to ameliorate the child's functioning. Involvement in several extracurricular activities was demonstrated to significantly predict better outcomes in terms of overall competence and prosocial behaviour. Children who engaged in sports, hobbies, were involved in some chores, and belonged to 1 organisation, fared much better in this regard. Involvement in such activities can help to promote the learning of competencies and emotional maturity, allows youth to make a difference, and also expose them to challenging situations that provide opportunities to develop both problem-solving abilities and emotional-

coping skills, thereby also increasing their sense of self-efficacy and personal control. All these factors have been linked to the development of resilience in children in care (Newman & Blackburn, 2002; Stein, 2005).

It is interesting to note that the use of several services predicted the children's overall competence levels. For example, attending occupational therapy predicted worse competence scores. Furthermore, attendance to psychotherapy was the best predictor of youth's self-reported prosocial behaviour. Children who made use of this service also obtained lower scores. Having psychiatric assistance, receiving assistance from a high support worker, and having a learning support assistant at school were all related to worse overall functioning, though their consideration did not add further predictive power when all other factors were included. On the other hand, using the speech therapy services predicted higher overall prosocial scores according to the youth's self-reports. As can be seen from section 6.3.2, use of several of these services was predictive of the child's social, academic and extra-curricular functioning, though it did not feature much when trying to predict the children's overall level of difficulties or symptoms. This might potentially indicate that these services are being used to address a wider range of problematic functioning than what can be described as classically symptomatic.

The last during-care variable that predicted children's prosocial behaviours was the number of transitions experienced by the child. Although, the majority of children went through one transition, or less, a number of children experienced more. Children who had experienced many transitions had lower levels of prosocial behaviour. Placement breakdowns and transitions exacerbate pre-existing problems, and only serve to increase the child's vulnerability rather than strengthening his/her psychological resilience (Stanley, 2007). Lack of stability may create a lack of continuity in terms of friendships, neighbourhoods, schooling, carers and the 'cultures' present in different homes, disrupting also the child's sense of 'felt security' (Jackson, as reported in Stein, 2005). At worst they might be interpreted by the child as further rejections; a disruption or broken attachment. However, in any case they do not help to build a picture of a safe and stable world in the child's mind. Such an internal working model impacts on the child's ability to be considerate and care for others.

The frequency or type of contact with one's family of origin was not predictive of children's overall competence and prosocial behaviour. However, children's friendships emerged as an important predictor, both of the children's overall levels of competence, and their prosocial behaviour. The importance of peer relationships has been noted in the literature on child development, sometimes as a 'key index' of competence in childhood and adolescence (Fox & Berrick, 2007; Masten & Coatsworth, as reported in Mavrovelli, Petrides, Sangareau & Furnham, 2009). Quoting Parker, Rubin, Price, and DeRosier (1995, p. 96), "children who are successful with peers are on track for adaptive and psychologically healthy outcomes, whereas those who fail to adapt to the peer milieu are at risk for maladaptive outcomes". In essence, getting along well with others may be seen as a sign of resilience (Vance & Sanchez, 1998).

Two other child characteristics were predictive of children's competence and prosocial behaviour, namely gender and age. Among children in care, being female predicted more prosocial behaviour. This finding is also true for the general population of Maltese children according to Cefai et al. (2008) who also found that girls scored better than boys on SDQ scores of prosocial behaviour. Age was also predictive of competence scores; the older the child the lower the level of social, school, and extra-curricular competence demonstrated. Children in this study above the age of 12, in fact, demonstrated comparable scores to American children from a clinical sample. In their paper, comparing 13 studies ranging from 1986 to 1997, where the Child Behaviour Checklist (CBCL) was used, Armsden et al. (2000) report conflicting findings as regards the effect of age on the impact of out-of-home care, although this seems to be an important variable locally. Combining these two findings demonstrates that being male and being older increases one's risk of poor functioning in the above-mentioned areas. Adding to these vulnerability factors, is the finding that experiencing a greater number of transitions in one's care placements also increases one's risk for lower competence scores. The care system in Malta thus places an additional risk factor on these older boys, as they are often required to move into new, same-sex residential placements before puberty. The data in fact shows that the greater number of transitions experienced was found among older boys. Considering these variables conjointly demonstrates that there is a greater risk of denting this cohort's potential sources of strength, thereby potentially making them more susceptible to the stresses they encounter during their experiences in out-of-home care.

6.3.2 What Factors Predict Children's Overall Difficulties among Children in Out-of-Home Care?

The children's overall level of difficulties was assessed through the use of the Total Difficulties scale of the SDQ and the Total Syndrome scale of the CBCL. Both these scales capture children's overall difficulties in several areas of functioning including emotional difficulties, conduct and behaviour problems, hyperactivity and inattention problems, somatic complaints, and social and thought problems. Separate consideration will be given to the clusters of internalising and externalising problems respectively, in section 6.3.3. It is worth noting that once again the variables identified in this study have managed to capture a large amount of the variance in the difficulty scores obtained in this population. Listed variables predicted a quarter of total difficulties identified by teachers, and close to a half of the difficulties reported by carers and youth.

Although results showed significant differences in terms of overall difficulties between children who had experienced some form of abuse or neglect prior to their admission into care and those who had not, the experiences of abuse or neglect were not in themselves predictors of the children's overall difficulties. This contrasts with some studies (e.g. Katz et al., 2006) which show that children who were placed in care due to child protection issues fared worse than their peers in terms of their overall mental health. Within this sample, the only reason for admission into care that predicted children's overall difficulties is the presence of inadequate parenting skills. Nearly three quarters of the children in care were reported to have experienced inadequate parenting. The quality of the parent-child attachment, the degree to which parents offer their children age-appropriate stimulation, and the balance provided between control and warmth in forming a particular parenting style have all been shown to significantly influence children's outcomes and psychological adjustment (Carr, 2006).

The only other variable existing prior to the child's admission into care that impacted later overall functioning was the presence of child behaviour problems as a reason for admission. Presenting with this type of difficulty starts the child on a negative trajectory which highlights the continued existence of mental health problems throughout the course of the duration in care. Children who are admitted into care because of this reason are more likely to have experienced a rejection by their family of origin, experience difficulties with their

peers in care, and also have a higher risk of placement breakdown (McDonald, Allen, Westerfelt, & Piliavin, 1996; Wertheimer, 2002). Without breaking this cycle there is little hope of creating a reparative experience that will allow the child to work through his/her difficulties.

During the child's years in care the number of transitions experienced has once again emerged as a significant factor predicting the child's overall difficulties. Children's lack of participation in sports also predicts a higher level of symptomatic behaviour. Greater participation in such activities is not a magical antidote to resolving the children's difficulties, however the results from this study indicate the overall positive effect of such activities, both in terms of decreasing the levels of difficulties presented and in increasing the children's strengths.

Contact with the psychiatric services was predictive of the children's overall level of difficulties, confirming once again that it is only children who present with a considerable number of difficulties that are referred to this service. Similarly, having a High Support worker predicted higher syndrome scores and total difficulties, indicating once again that this service is being provided to children who present with the highest number of difficulties according to their carers.

The findings concerning the predictive factors relating to contact with one's family of origin provided some unexpected results. Having more siblings in the same placement predicted a higher level of difficulties among the children. This finding stands out in contrast with several good practice guidelines (e.g. Clough et al., 2006) recommending that siblings in care be placed together. In considering the implications of this finding, it is important to note that children in residential care had significantly more siblings in the same placement than children in foster care, and that those in residential care were reported to have a significantly higher level of difficulties, both by the youth themselves and by their carers. Further research is warranted in this regard to explore the impact of sibling and family dynamics among siblings living together in care.

In addition, having unsupervised contact with one's mother was predictive of more difficulties among the children. This is similar to the findings that emerged in the study by

Galea-Seychell (2007) with a cohort of Maltese residing in foster care. She found that contact with the mother was related to an increase in emotional and behavioural concerns.

Most children in care desire contact with their family, even if they do not want to live with them (Sinclair & Gibbs, 1998, as cited in Clough et al., 2006). The general trend in care, which is supported by research findings (e.g. Millham, as cited in Clough et al., 2006), is to enable children to maintain and develop contact with their parents and family members, as this is related to better outcomes when compared to those whose contact is much less. Data from this study suggests that while this model may work well for the majority of children in care it should not be assumed to work equally well for all. Rather it is important to work with the child and the family's best interests in mind. This may mean very different things for different children. Caution needs to be exerted in following these findings into increasing supervised visitation with mothers. However, these results do suggest the need for further reflection and exploration into the decision-making process concerning such visitation. The circumstances in which children are sent home over the weekend needs to be explored further, and professionals also need to consider whether enough follow-up is being done with the family.

Gender and age were also predictive of children's overall difficulties; being male predicted more difficulties. Although the international literature presents different findings in relation to gender and mental health among out-of-home care children, results in this study consistently point towards more problematic outcomes for boys. This finding is consistent with a local study among primary and secondary school students, which found that boys present with more social, emotional and behavioural difficulties than girls across all ages (Cefai et al., 2008).

Younger children demonstrated higher levels of problematic and symptomatic behaviour than older children. In fact, age predicted one's scores on the difficulties scales. On average, Maltese children in foster care are admitted before the age of 3 and those in residential care below the age of 5. This means that this is often a distressful period for the child which involves considerable uprooting and resettling. Are higher scores among the younger children a reaction to this transition period? It is interesting to look at these finds in conjunction with the findings presented above in section 6.3.1, regarding older children having lower levels of competence but also lower levels of overall difficulties. Is it possible

that as they grow, children start to function at a lower level in extra-curricular activities, socially and school? Could this be an indication of institutionalisation? Interestingly, age was predictive of total difficulties within the confines of an institution (residential care), not among children in foster care.

Once again interpersonal relationships featured as a significant predictor of the child's overall level of difficulties, consistently, on both the CBCL and SDQ scales and among all the different informants, that is, carers, teachers and youth. The number of close friends children have and the quality of their relationships with peers were important predictive factors, with those having no friends and poorer relationships having the worst outcomes. Poor relationships with siblings also predicted a greater degree of difficulties. Important to note is that 35% of Maltese children in care either did not have any close friend or only had 1. This seems to be a greater percentage than that reported by Blower et al. (2004) who reported that 20% of their sample had only one confidant or didn't talk to anyone. In this study they explored the reasons children gave for not confiding in others, which included: feeling that nobody was available to them, that they prefer to rely on themselves and that they did not trust anyone else. This wariness and lack of trust was also observed by Abela et al. (2005) among Maltese children in care, especially those in residential care. De Jong (2010) also points out that relationships among children in care are also impaired by various deficits in social cognition stemming from their possible histories of abuse, poor parenting, or attachment-related problems. This makes it evident that there are a multitude of factors that impinge negatively on children's abilities to form adequate relationships with their peers. Social support has been identified as an important source of resilience (Vance & Sanchez, 1998). Thus children who are unable to connect socially, are at risk of greater overall social, behavioural and emotional difficulties. Compounding this problem is the fact that children's emotional functioning also impacts on their competencies in social settings (Mavrovelli et al., 2009). For example, the ability to perceive, express, and regulate emotions, and to sympathise and empathise, feature as important aspects of social competence (Crick & Dodge, 1994). Thus, it seems that children with a high level of emotional difficulties and inadequate peer relationships are doubly disadvantaged.

6.3.3 What Factors Predict Internalising and Externalising Problems among Children in Out-Of-Home Care?

Internalising problems comprise the cluster of problems that are mainly within the self and include anxiety, withdrawal, depression and somatic complaints. On the other hand externalising problems refer to a cluster of difficulties that occur in relation to other people or to people's expectations for a child. These include aggressive and rule-breaking behaviour. The ability to predict internalising and externalising problems through the variables captured through this study was considerable, with variables predicting a quarter of the variance in internalising scores and two-fifths of the variance in externalising behaviour. The data shows clearly that different experiences are involved in the pathways that lead to the development of these 2 very different categories of difficulties. However one consistent predictor of both internalising and externalising behaviour is children's relationships with their peers, including the number of friends they have, how often they meet them, and the overall quality of the peer relationships. Having a strained relationship with one's siblings is also predictive of externalising problems. It seems that this area is not sufficiently looked into when providing help for children in the care system. More attention needs to be given to the building of social networks among children in care. Using a systemic framework this can be attempted on several levels, within the care setting itself, with the child's family, at school, and also through sports or leisure activities.

Another consistent predictor of both internalising and externalising behaviour was children's use of psychotherapy. As has been suggested in section 6.2, this confirms that children with the highest levels of difficulties in these respective aspects are being referred to therapy to address these issues. Having a high support worker and making use of the psychiatric services were also significantly related to both internalising and externalising behaviour problems though they were not found to be directly predictive of such problems.

When one looks at the pre-care histories of children who present with externalising and internalising problems, considerable differences can be observed. Several variables were found to be significantly related to externalising behaviour problems, among which is having experienced physical or emotional abuse and neglect, having lived in substandard housing, having parents with inadequate parenting skills, entering the care system with prior

behavioural problems, and having a compulsory admission into out-of-home care following the issuing of a care order. Parenting problems, lack of adequate stimulation, social disadvantage and experiences of abuse have been noted in the literature as precursors of such difficulties too (Carr, 2006; Werner, 1994). However it is interesting to note that the regression analysis shows that neither of these factors directly predicted the externalising problems manifested by children in out-of-home care. As has been noted above, the child's relationship with peers has been found to be the most significant predictor of externalising problems in this population, possibly indicating that these early adverse life experiences have impacted severely on the child's ability to function in the interpersonal domain. Attachment theory (Bowlby, 1994) proposes one possible pathway in this direction, as children who have been through such a pre-care history may fail to develop internal working models for secure trusting relationships. Research has shown for example that children with conduct disorder have a hostile attributional bias in ambiguous social situations (Crick & Dodge, 1994) and consequently tend to react in retaliatory ways to such ambiguous situations. This obviously further severs their relationships with peers who might view such a reaction as excessive, leading the child to engage into a vicious cycle of aggression and rejection within his social environment. In line with this argument is the finding that children, who experience the greatest number of transitions whilst in care, possibly also as a result of placement breakdowns, manifest the highest number of externalising behaviour problems. Children have thus become engaged into a cycle of 'double deprivation' where given their behaviour they are also more likely to feel rejected by their new care-givers (Briggs, 2004). It is interesting to note also that children who had a higher number of carers also demonstrated significantly more externalising problems. Frequent changes in caregivers decrease the possibility of the child forming a stable attachment relationship with a caregiver that is constantly available. This in turns limits the chance of re-editing one's internal working models.

The data emerging regarding children in out-of-home care who show internalising problems presents a different picture. Firstly, most of these children do not seem to have been through such a vast amount of adverse life experiences prior to care, as none of the variables mentioned above were significantly related to the manifestation of internalising behaviour problems. Children who have experienced sexual abuse may present with a range of differing behaviour problems including sexualised behaviour, internalising or externalising behaviour problems or school based attainment problems. However, no specific syndrome or

cluster of behavioural difficulties has been identified that is unique to such individuals (Carr, 2006). Nonetheless, sexual abuse was found to be the best predictor of internalising problems among all the variables considered in this study. Sexual abuse is a very intimate form of abuse, not only by the nature of the physical transgression involved but also specifically because a conspiracy of secrecy usually surrounds such abuse. Contrary to other forms of abuse, which are comparatively more 'public', the sexual abuser usually coerces the child into not disclosing such happenings through a variety of methods. It is possible that this dynamic starts to isolate the child from others and contributes to the manifestation of later internalising problems. Being denigrated in such a manner the child often internalises self-blame and develops several negative beliefs about the self. Both these aspects have been identified as contributory mechanism in the development of mood disorders (Carr, 2006). One must not jump to the conclusion that internalising behaviours are solely the result of such a history of abuse because as can be seen by our findings, the identified predictors only account for one-quarter of the variance in internalising behaviours. Although this is a high figure in the field of social science, it nonetheless reminds us that other pictures contribute to the development of internalising difficulties among children in care.

Factors related to contact with one's family of origin have been found to predict externalising though not internalising behaviour problems. Similar to what predicted children's overall difficulties, having a larger number of siblings in the same placement predicted more externalising problems. However, children showing externalising behaviour problems were also more likely to have difficulties in their relationships with their siblings. Such poor relationships in fact predicted externalising problems. As discussed above, this finding warrants further exploration into the underlying dynamics of siblings living together in care.

Gender has also emerged as a significant predictor of externalising behaviours. Being male predicted more problems in this aspect of functioning. This is consistent with the prevailing gender trends reported by the Diagnostic and Statistical Manual of Mental Disorders – TR (American Psychiatric Association, 2000) which reports that conduct and oppositional defiant disorder are more common among male children.

On the other hand the last factor predictive of internalising behaviour problems is the child's participation in chores. Children who participated less in chores demonstrated lower scores on the Total Internalising scale than those who participated more. We also know that the vast

majority (75%) of children in care participate in at least 1 chore, and that children in residential care are more likely to do so than those in foster care. Children in residential care showed a greater level of internalising problems than those in foster care. However, the pathways linking chores performed to internalising behaviour problems are unclear and need further exploration.

In summary, children with a history of sexual abuse, having inadequate peer relations, and engaging in more than 1chore are likely to present with internalising problems. On the other hand males, with a history of multiple transitions in care, having poor relationships with peers, a larger number of siblings in the same placement with them but having poor relationships with their siblings are likely to exhibit externalising behaviour problems. In both cases their use of psychotherapy predicts a greater number of difficulties in these areas.

6.3.4 Which Clusters of Factors Most Commonly Impacted Children's Overall Outcomes?

Adverse life experiences occurring prior to the child's entry into care were found to significantly contribute to predicting children's overall strengths, difficulties and also specific internalising problems. However, it was not specifically 1 particular pre-care experience that negatively impacted functioning in all these areas but rather different experiences played a role in the development of different problems.

Children's experiences within the care system also contributed significantly to their current overall well-being. Participation in extra-curricular activities was predictive of the child's strengths and, as mentioned above, has an important role as a resilience building factor (Newman & Blackburn, 2002; Stein, 2005). However among the experiences during the child's time in care, the number of transitions children have been through has emerged as the most prominent factor. The number of transitions experienced, in fact, predicted children's strengths and the overall difficulties. These problems included complications with externalising behaviours and were significantly related to internalising difficulties. Placement stability is clearly a very important factor in improving young people's overall psychosocial well-being (Callaghan et al., 2004). This has serious consequences not only on children's current well-being but also on long-terms outcomes. Del Valle, Bravo, Alvarez,

and Fernanz's (2008) have identified it as the single most important predictor of long-term outcomes after leaving care.

The data shows clearly that several services are being put in place to address children's psycho-social difficulties. Making use of a high support service, and the psychiatric services were both predictive factors indicative of worse functioning. However, the use of psychotherapy emerged as a predictor of children's competencies, and also their internalising and externalising behaviours. These findings support the idea that these services, especially psychotherapy, are being used to address difficulties in these domains. Helping children build a coherent story around the reasons for their admission into care, why their parents had abused or neglected them or were unable to care for them, and working through their feelings of rejection and resentment and possibly anger toward the care system itself, have been identified as important for their well-being. Having trained staff, in a care-culture that gives individualised attention whilst also providing specialised psychological, mental health services or group work targeted at addressing such issues, has been recommended as the way forward (Stein, 2005). The current study did not provide the opportunity to assess the effectiveness of such services because it could not draw upon pre- and post-intervention comparisons, however it has set a baseline by providing a comprehensive survey of all children in out-of-home care through which such an analysis could be built through further research.

Although there appear to be no clearly consistent results within the international literature (Armsden, 2000; Schiff, 2006) regarding the influence of gender on children's mental health among children in out-of-home care, this has clearly emerged as an important factor locally. Gender predicted functioning in 3 out of the 4 areas assessed. Boys are more at risk for having more overall difficulties, more externalising behaviour difficulties, being less socially versed and having a lower overall level of competence based strengths. What makes boys more vulnerable? The current study did not directly asses this matter. Nonetheless, considering the findings emerging with regards to the other important factors predicting children's overall well-being, one can say that boys are also more vulnerable to negative outcomes because of the larger number of transitions they experience during their care histories. Boys also demonstrate lower levels of prosocial competence, which might have a significant impact on their ability to build strong friendships; a factor which emerged as a very significant predictor across all areas of functioning.

Interpersonal competence and having adequate peer relationships was an important predictive factor across the strength-based scales, the difficulty-based scales, and the internalising and externalising scales. In other words it predicted positive functioning in all the areas assessed. Why did friendships emerge as such an important factor among children in care? In exploring children's strategies for coping with adversity among children in care, Blower et al. (2004) found a tendency to look to peers for nurturance, rather than adults who might be viewed as less reliable or available. Other studies also emphasise that young people are most likely to seek help from friends when parental support is unavailable (Hoffman, as cited in Blower et al., 2004). Thus, peer relations are likely to be particularly important for looked-after children.

6.4 Comparing the Profiles and Outcomes of Children in Residential Care and Children in Foster Care

In this section we will discuss the research findings in relation to the question of whether there is a significant difference between children in residential care and children in foster care in terms of their profile and outcomes. It is important to appreciate that the findings have to be seen in light of the youngsters' complex realities, the potential extraneous variables and confounding factors that have an impact on their lives. Hence, while we intend to discuss the main research findings pertaining to this research question, this is not intended to be an exhaustive and conclusive discussion.

6.4.1 Demographics

Irrespective of their present placement, the majority of the children in our study spent well beyond 4 years in out-of-home care. Hence, children in either of the care placements fit easily in the category of 'long-term care' as described by Schofield, Thoburn, Howell, and Dickens (2007).

Nonetheless, a marked difference exists between the two groups with regards to the age of entry into care, whereby children in foster care have the youngest age of entry into care (average age of 2 years 2 months) compared to a higher age of entry for children in residential care (average age of 4 years 10 months). In addition, another important difference

between the two groups was found with regards to the length of time in care, whereby children in residential care spend an average of 3 years 5 months less in care than children in foster care. This is of particular interest given that despite the widely held view that long-term care may be detrimental to children's well-being, our study has found that despite their longer stay in care, children in foster care actually exhibit more positive outcomes.

Indeed, several studies (e.g. Zimmerman 1982; Stein 2005) postulate that it is not the time spent in institutions, but rather the instability and the lack of responses to problem behaviour that lead to negative results. Conversely, McDonald et al., (1996) remark that a significant factor in the child's well-being is the quality of care received.

6.4.2 The Care Setting System

Without doubt the care setting system is an important aspect that merits consideration. This is especially so in light of the findings that emerged in this study, which showed that children in foster care obtained significantly better scores on all the 4 main CBCL scales, namely higher scores on Total Competence, and lower scores on Total Internalising, Total Externalising, and Total Syndrome scales. In addition, on all the scales where a significant difference was observed, children in foster care obtained better scores than children in residential care on the self-report, teacher, and carer versions of the SDQ.

The marked difference in outcomes between children in foster care and children in residential care also emerged when the two groups were matched on important variables, namely, age of first admission into care, and time spent in the care system. Not only, but type of care received was the dominant predictor of the scores obtained in the eight main CBCL and SDQ scales. Indeed, children in foster care obtained significantly higher scores on Total Competence and Prosocial Behaviour, and significantly lower scores in Total Internalising, Total Externalising, Total Syndrome, and Total Difficulty in both the carers' and teachers' evaluations. Such findings are comparable to other research findings carried out abroad (e.g. McCann et al., 1996; Meltzer et al., 2003; Stanley, 2007).

Undoubtedly, these findings support our hypotheses that children living in residential homes have more mental health problems which fall in the clinical range than children living in

foster care. Moreover, they compel us to look at the factors that are likely to contribute to such outcomes.

To begin with, we have to acknowledge that it is not easy to adequately 'mother' a child who, at a very young age, had undergone some form of trauma. Undeniably, this gets even more difficult when, with a low child-to-staff ratio a carer in a residential care setting has to 'mother' a *number* of similarly aged children, all with their own history of adverse life experiences, who compete on a daily basis for the love, care, and attention of a 'significant other'. In addition, in such settings not all the staff members are trained in the field of child psychology, making it somewhat more difficult to deal with the unique psychological and emotional needs that each child presents. Moreover, the low child-to-carer ratio, as well as the presence of different carers that might drop in to volunteer or help out with the day-to-day running of the residential unit, might also leave an impact on how particular underlying dynamics, such as projective identification and splitting (Ebeling, 1994; Adler, as cited in Halperin et al., 1981), are addressed.

Furthermore, as Stanley (2007) has argued, by its nature, group-care exposes children to the distress and disturbance of other youngsters, thereby increasing vulnerability rather than strengthening psychological resilience (Richardson and Joughin, as cited in Kelly et al., 2003). This is intriguing when one considers that in their training, professionals in the caring field are cautioned on the effects of vicarious traumatisation as a result of their extended or intense exposure to the trauma of others (Greenall & Marselle, 2007). Hence, it follows that even these children should be protected against vicarious traumatisation. In addition, by being in the presence of other 'wounded' children, children in residential care are also being predisposed to unconsciously identify with other 'wounded' children, with the possibility of forming a world-view that is catastrophic and helpless. It is important to see these issues in light of the findings that compared to foster care, a higher proportion of children in residential care have experienced sexual abuse, physical abuse, or emotional neglect prior to their entry into care.

The phenomenon that children in residential care tend to exhibit more difficulties in the social domain and in the academic sphere could also be explained through object relations theories (Winnicott, as cited in Briggs, 2004; Bott Spillus, 1992). Object relations theorists stress the importance that the child experiences an object that can contain his anxiety and frustrations

(Bott Spillus, 1992). However, different care experiences, including different carers and care placements, might make it difficult for the children in residential care to look at their carers as being able to comprehend their anxieties and frustrations. Numerous scholars have discussed the deleterious effect that discontinuity of emotional care in the early years can have on the "child's capacity to establish trusting and secure relationships, as well as on the ability to think and to learn" (Boston, 1983, pg. 1; Schore, 2001b). In such situations, the "cycle of deprivation" (Briggs, 2004) is likely to be activated. Indeed, Boston (1983) elaborates on how the behaviour used by children to defend against the painfulness of a dependent relationship makes it difficult for their carers to offer the necessary substitute mothering.

Hence, while both children in residential care and children in foster care are likely to have been deprived of 'good enough' mothering experiences in their family-of-origin, children in foster care are more likely to manage to find a substitute 'mother' in their foster parent, than are children in residential care who have to adjust to different 'mothers'.

6.4.3 Services utilised by Children

Through this study, it transpired that children in residential care made considerably more use of psychotherapy and psychiatric services than children in foster care. We did not come across any literature on this aspect.

One possible way of looking at this finding is that, as emerged in this study, children in residential care have more mental health problems than children in foster care. Thus, they merit more professional input to address their difficulties.

Research from the neurobiology field can also provide other interesting views on this phenomenon, especially when seen in light of the findings that children in residential care are more likely to experience sexual and physical abuse, and emotional neglect. In addition, they are also more likely to be admitted under a care order, signifying that there were several reasons for concern over the way they were being raised by their family-of-origin. Glaser (2000) remarks that "[t]here is considerable evidence for changes in brain function in association with child abuse and neglect" (p. 110), whereas Nelson and Bosquet (2000) state

that “it is clear that early deleterious experiences can have significant negative effects on the developing brain that may be long-term” (p. 46). Hence, while a containing and nurturing environment, like that provided in therapy, can help to bring about brain change, this is a gradual and lengthy process which can involve quite a number of sessions (Balbernie, 2001).

In addition, research suggests that the earlier, more extreme, and long lasting the influence of negative early experience on the infant’s maturing brain, the harder it becomes to change the neural circuits that developed to mirror the infant’s experience (Balbernie, 2001). Hence, the fact that children in residential care are likely to enter the care system at an older age than children in foster care, somewhat explains the fact that while children in both categories receive therapeutic services, children in residential care make additional and lengthier use of these services.

Moreover, rather than benefitting from psychological sessions, children in foster care might be benefitting from their foster parents’ day-to-day interventions that a high child-to-adult ratio permits. An example of this would be the application of the *Life Space Interview* (LSI) (DeMagistris & Imber, 1980); a verbal strategy that uses a child’s reactions to an emotional crisis to expand their understanding of their behaviour and the responses of others. The adult or emotional coach assists in decoding the feelings behind actions and in identifying issues central to the conflict.

Despite the plausibility of the views, various questions about the discrepancy in the use of psychological and psychiatric services between the two groups need to be answered through other research studies. These include the underlying discourse whereby children in residential care are assumed to be in more need of such services than children in foster care. Children in foster care are assumed to have their needs better met since their placement affords more individualised care than that of children in residential care. Hence, therapy may be seen as an alternative to the one-to-one attention that children in out-of-home care require to address their difficulties. Therapists themselves might be getting into a bind with children in residential care, whereby they feel compelled to renew therapeutic interventions with these children out of fear that otherwise they will not have anyone else in whom to confide.

6.4.4 Relationship Building

Children in foster care scored significantly better than children in residential care on a number of variables related to building and sustaining relationships with others. These included the fact that they had at least 4 close friends, met their friends outside of regular school hours at least 3 times a week, and got along with other children. These findings are similar to those that emerged in the study by Meltzer et al., (2003).

In addition, the relationship between the children's ability to establish and sustain relationship and the scores on some of the CBCL and SDQ scales supports the findings of other studies (e.g. Golding, 2010; Fox & Berrick, 2007) which highlight the role of friends in children's well-being and socio-emotional development. Interestingly, Street and Davis (as cited in Golding, 2002) and White (as cited in Golding, 2002) took this idea a step further by remarking that relationship skills are so important that encouraging resilience through relationship building is as important as mental illness prevention strategies.

Essentially, the finding that children in residential care tend to have more difficulties relating with peers is of concern, when considering research findings (see Goodyer, Wright, & Altham et al., 1990) which suggest that good peer relationships are essential for healthy mental development, whereas the absence of such relationships may increase the risk of psychiatric disorders. Indeed, it transpired that children in our study who had a higher number of close friends were also more likely to meet them more often outside of school hours, get along better with their siblings and with other children, behave more with their parents, and play and work alone than those who had a lesser number of friends.

The discrepancy between the two groups can also be explained through attachment theories. In fact, the literature is increasingly showing us how childhood deprivation and maltreatment contribute towards difficulties in social cognition which in turn influence the child's ability to develop and maintain healthy social relationships (DeJong, 2010).

Available findings on attachment behaviour highlight that critical factors in the sphere of social development include the opportunity for the child to have a consistent, responsive, and

nurturing caregiver (or small number of caregivers) and the opportunity for the child to form selective attachments (O'Conner et al., 1999). In the absence of these essential factors, the child is likely to experience difficulties with emotional regulation and with the development of secure attachment relationships, which in turn predispose the child to develop or maintain mental health difficulties (Juffer, Bakermans-Kranenberg, & Van Ijzendoorn, as cited in Vostanis, 2010).

It seems that by enabling the development of positive attachment relationships, foster care is more likely to act as a buffer against the development of attachment or trauma-related difficulties. Therefore, from this point of view, children in residential care are at a disadvantaged position as they lack the provision of a consistent caregiver, which makes it difficult for the child to build trusting relationships.

6.4.5 School Performance

All children in care, irrespective of the type of placement, performed poorly in the three main subjects, namely Maltese, English, and Maths. This is in line with existing literature which shows that the level of education of children in out-of-home care is below average and that poor academic achievement is characteristic of this group (Schiff et al., 2006; Pecora et al, 2003; McDonald et al., 1996).

This finding raises concern about the long-term impact of such academic under-performance, especially in light of numerous studies (e.g. Kufeldt, 2003; Martin, 1996) which link poor educational attainment with adverse life-outcomes. Indeed, for instance, findings from the British Cohort Studies showed that the quality of adult life was closely related to educational qualifications, whereby each educational advancement was associated "with improvements in health, both mental and physical, employment, income, housing, family life, absence of addiction problems and lower risk of involvement with the criminal justice system" (Jackson & Simon, as cited in Jackson & McParlin, 2006, pg. 90).

One possible way of looking at children's low grades is by taking into account that children experiencing psychological and emotional difficulties in their 'home' life might experience difficulty in adjusting to the school environment. McCarthy et al. (2006), remark that

problems in adapting successfully to the school environment are known to be associated with the development of behavioural disorders. Some scholars have also shown how school can play a role in the social construction of deviant student identities through the process of labelling (Hargreaves et al., as cited in Cefai, 2006).

Moreover, Armsden et al. (2000) talk about a two-way causal relationship between behaviour and academic problems. To a certain extent this relationship also emerged in our study whereby high grades on the three main academic subjects were positively correlated to scores on the Total Competence scale, whereas low grades on each of the academic subjects were related to higher scores on the Total Difficulties scales of the carers' version.

Notwithstanding that adverse life experiences prior to entry into care certainly play a role in lowering attainment, other factors might also be at play. This includes teacher's understanding of the care system and training in addressing the behaviour of looked-after children (Comfort, as cited in Jackson & McParlin, 2006). Moreover, other factors, highlighted in the literature, include low priority given by professionals and carers to educational matters, disrupted schooling due to frequent placement changes, low expectations of teachers and social workers, lack of encouragement, literacy problems, unhelpful conditions for study especially in residential care, poor educational level of carers, and experiences of stigma and bullying by teachers and students (Kendrick, 1998). Indeed, research findings suggest that given the right environment youngsters are able to display exceptional resilience and determination to overcome early-life adversities and move up the educational ladder (Jackson, Ajayi, & Quigley, 2005).

A remarkable finding that emerged from this study was that children in foster care did significantly better on literacy skills than children in residential care. This is similar to other research findings which note that children raised in residential care tend to have delays in language development (Johnson et al., 2006), poorer vocabulary and less spontaneous language (Tizard & Joseph, as cited in Johnson et al., 2006). Tizard and Joseph (as cited in Johnson et al., 2006) note that this outcome depends to a certain extent on the type of child-care environment in which the child is raised; namely institution-oriented versus child-oriented settings.

Thus, it could be argued, that due to several factors, such as: low child-to-adult ratio, need to adhere to strict routines, lack of personal possessions, and lack of 'everyday' experience, the residential care environment is indirectly contributing to delays in children's language development. The positive news is that children in residential care can still thrive academically if they are provided with a child-oriented environment.

In addition, one might argue that as children in foster care tend to enter care at a younger age than children in residential care, they are in a position to benefit from a child-oriented environment at an earlier age. Looking at this from a neurobiological stance, we now know that early developmental experiences also influence which neural circuits are retained. Deacon (as cited in Balbernie, 2001) notes that the speed at which phonetics and grammar of language are acquired is aided by the way the structure of language developed to match the learning abilities of the infant's brain.

6.4.6 Contact with Family-Of-Origin

Compared to children in foster care, children in residential care not only have more siblings in care and in the same placement, but they also have more frequent contact with their biological parents and with their siblings. In her study on fostered children, Galea-Seychell (2007) also found that same-sibling placement was not common. Findings demonstrate that the impact of the child's contact with their family of origin was different for children in foster care than those in residential care. For example, whereas in residential care more frequent contact with siblings was related to better prosocial behaviour, the opposite emerged for children in foster care, that is, those with more contact had lower prosocial scores. On a similar note, in residential care unsupervised contact with one's mother was related to a higher degree of difficulties, whereas in foster care those who had supervised contact demonstrated more externalising behaviours than those who did not require supervision. These findings bring forth the possibility that different dynamics are at play in considering the impact of contact with one's family of origin among the different care placements. A preliminary understanding of the implication of contact with family-of-origin for children in out-of-home care in the Maltese context has been discussed above (in section 6.3.2) however further research into the differential impact of foster and residential care on contact with one's family of origin is warranted. .

6.4.7 Quality of Care: Extra-Curricular Activities

A key factor linked to quality of care is the opportunity to engage in extra-curricular activities. Interestingly, belonging to an organisation, meeting with friends at least 3 times a week, engaging in sports, having at least one hobby, and participating in chores were all predictors of scores on the Total Competence scale for both groups of children. Indeed, such activities have been linked to the development of resilience in looked-after children as they expose them to situations where they have to master new skills, as well as apply problem-solving and emotional-solving skills to deal with challenging situations (Newman & Blackburn, 2002; Stein, 2005).

6.5 Conclusion

In conclusion, one can state that these research findings support the hypotheses put forward with regards to the mental health of children in out-of-home care. As expected a greater degree of difficulties was apparent among this population when compared to their peers. However, it seems that children in foster care fared better than those in residential care in terms of their overall psycho-social functioning. This was not due to different background experiences between these two groups, but rather the results showed that children with similar experiences overall fare better when they are placed in foster rather than residential care. Notwithstanding the difficulties reported within this population, it is also evident that children's mental health problems are being addressed through the use of several services through a system that aims to address such difficulties not on the basis of a formal diagnostic label but rather on the basis of the children's presenting needs.

Having presented an overall discussion of these findings, the last chapter will present a number of policy recommendations stemming from this research together with proposals for further research.

Study 2 Chapter 7: Recommendations and Further Research

7.1 Introduction

In this final chapter policy proposals emerging from this research will be highlighted. Ideas for further research will also be put forward.

7.2 Recommendations for Policy

1. ***The current tendency to place an increasing number of children in foster care is a step in the right direction and should be encouraged given that the environment in foster homes seems to be more conducive towards the well-being of these children.*** One of the strong findings that emerged from this study is that children in foster care are doing much better than children in residential care in terms of their psychosocial functioning and in their ability to build and sustain relationships. These findings persisted when children in foster care and children in residential care were matched on a number of important variables including age of first admission into care, and time spent in the care system.

2. ***It is highly recommended that younger children below the age of 5 are placed in foster care. In situations where long term foster placements are not available, temporary foster family placements which can cater for crisis intervention and short term foster placements are the next best alternative.*** Babies thrive better when they are in placed in family settings and kept within the same families until necessary (Minnis, Bryce, Phin, & Wilson, 2010). It transpired that children exhibited higher levels of overall difficulties when they were placed in residential care during their infancy. This finding substantiates our previous study on the effects of institutional placement for children under 5 years (Abela et al., 2008).

3. ***The perinatal mental health outpatient service could be one of the first ports of call for pregnant mothers living in such difficult conditions. Well-baby clinics are also ideal settings where families with young babies could be assisted in the community. In these clinics special attention should be given to vulnerable families who may not turn up for appointments. Reaching out to these families at such an early age may prove to be of critical importance.*** Pre-disposing factors which featured as predictive variables for children's entry into care, including substance abuse and inadequate parental skills, highlight the need for better support services to those families with very young babies who are living in adversity. As noted by Balbernie (2001), care-giving relationships that do not meet the needs of the baby have the potential to alter the structure of the infant's brain. Family support can, in the long-run, prevent unnecessary attachment trauma for these children and avoid care admissions.

4. ***Specialised programmes catering for such difficulties could be offered to these parents and families as a first resort*** (see Hutchings et al., 2007 for similar intervention in the UK). Children's behavioural problems prior to their admission into care also featured as a predictive element in their overall functioning during the later years.

5. ***Resources are to be mobilised in such a way as to enable several practices to be put in place so that foster parents and carers of children in residential homes have the ability to support and promote children's educational achievements and emotional wellbeing.*** These resources include:

    a. ***Detailed educational and psychological assessment, as soon as a child enters into care, to ensure that service provisions tailored to the child's needs are implemented.*** Whilst the findings show that those children with the highest problems are receiving support, we do not know at what point such provisions are being offered. Rather than wait until problems arise, we recommend a more proactive approach where difficulties are identified, monitored and addressed. In addition, such preparation ensures that referrals to mental health professionals are

done on the basis of needs rather than by the level of difficulties manifested or the needs of a system to contain these difficulties.

b. ***Recognising and valuing the importance of interagency work between educational authorities, social care and mental health agencies is of utmost importance.*** With regards to the support of children in their school progress, there is a need to foster an atmosphere amongst all the stakeholders involved in the care of children in out-of-home care, which strongly encourages the children to strive for the highest possible level of education. Within schools, teachers' understanding of the challenges children in care have to contend with would be most helpful. Educators also need skills to connect with these children in a meaningful way and to invest more intensively in their academic progress. The education division needs to give top priority to education for children-in-out of home care. Every effort should be made to bring forth the educational potential of every child by engaging in early intervention which includes, addressing reading difficulties at the earliest age as possible, fostering high expectations and encouraging high achievement, and focusing on social and emotional literacy learning.

7. ***The number of transitions for children in care needs to be minimal.*** One way of doing this is to lessen placements in mental health institutions for children, who can be catered for in their care setting. For this to happen, residential homes in particular need to have the necessary set up to cater for children exhibiting challenging behaviour. Findings coming out of the study have pointed out that children in care who experienced a higher number of transitions manifest a higher prevalence of externalising problems and other difficulties. Moreover, the prosocial behaviour of those experiencing fewer transitions was significantly better. A concerted effort needs to be made to minimise the possibility of placement breakdown, even for children showing challenging behaviours. Early identification of potential risk of such breakdown is necessary and residential staff and foster carers need to be

supported with more input from mental health professionals, additional resources and further training to deal with these challenges.

8. ***Every effort is to be made to increase sports activities for children in care.*** Children not taking part in sports exhibited a higher prevalence of symptomatic behaviour in the study. In this study, hobbies have been found to have a positive effect on children both in residential care and in foster care. Children who are reluctant to take part in sports are to be encouraged to take up other extracurricular activities that help them to relax mentally.

9. ***Last but not least this study has highlighted the need for all those working with children in out-of-home care settings to engage in a concerted effort to sustain, enhance, and develop the children's important formal and informal relationships.*** More awareness about the benefits of such relationships by the different carers, including educators, will certainly drive them to be more curious about the children's social networks and to intervene in such a way that these relationships are enhanced. Such interventions may have an extremely beneficial impact on these children given the vital role social relationships, including friendships, play in the children's socio emotional, development.

7.3 Suggestions for Further Research

As has already been pointed out in the preceding chapter, some of the findings that have come out of the study are inconclusive and merit further investigation.

1. More research is warranted to help us understand why siblings in the same placement exhibited more externalising problems than other children who either had no siblings in care, or whose siblings were placed elsewhere. What are the factors that contribute to such behaviour?

2. Whilst we know that almost 48% of children in out-of-home care were attending therapy during the data collection period, we do not know which therapeutic approaches are adopted by therapists and psychologists when

helping these children. We also do not have any idea about the effectiveness of therapy for these children. The current study has provided a snapshot view of the services received by children. However there is an urgent need to monitor the effectiveness of the therapeutic interventions on a long term basis for children in out-of-home care. This auditing exercise needs to be carried taking into account the current trend, whereby large numbers of children in out of home care remain undiagnosed.

3. We also need to understand why children coming from single parent families fare better in out of home care than those coming from a two parent family. The above finding is contrary to what is reported regarding children in the general population (Cefai et al., 2008). How is the situation of two parent families different in the different contexts?

4. A qualitative research study delving into how friendships are formed and sustained and including the meaning of friendship for these children will also shed important insights about how friendship contributes to the well being of this population of children.

Some of the areas for further research are quite important and should form part of a research agenda in the area of out-of-home care in Malta.

7.4 Conclusion

In line with international research, this study has confirmed that Maltese children in out-of-home care have complex mental health needs brought about by pre-care experiences and experiences in the care system itself, often including trauma and disruptions in attachment formation. To be addressed effectively, these needs call for a concerted approach involving educational authorities, social care and mental health agencies.

This study also provides us with empirical evidence which informs the direction we need to take when caring for children in out-of-home settings. These children flourish more, function better, and form life-sustaining relationships when brought up in a family setting. In this sense more investment needs to be put into foster family care. The study has also alerted us

to the fact that babies and infants do not thrive in an institution and as such should not be placed in one at a very tender age. Other residential homes however have an invaluable role to play as they transform themselves into therapeutic communities for children, who may need more intensive care that cannot always be provided within the home.

As a research team working on this project, we have very much felt the responsibility that we were shouldering when exploring the needs of children in out-of-home care which spurred on our commitment in carrying out this project first and foremost on their behalf. Taking over parental responsibilities from children's parents is indeed a big responsibility, which as Tarren-Sweeney (2010) points out involves "the transfer of moral as well as legal responsibility" (p. 623). We believe that this responsibility needs to be borne by each and every one of us as members of a society that strives to be inclusive and caring towards all its members. These children are also our children and deserve to be loved and cared for in the best ways possible.

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