

**The Mental Health and Well-Being of
Children and Adolescents in Home-Based
Foster Care in South Australia**

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Abstract

Despite attempts to keep families together and investment in family preservation and reunification services, the number of children in foster care has been increasing across Western jurisdictions during recent decades. Furthermore, use of home-based foster care as the preferred placement option, as opposed to residential or community group care, is now at record levels (Barber & Gilbertson, 2001). Although there is growing evidence that children in alternative care systems and state custody experience elevated rates of mental health problems, little is known about the mental health of children residing in *home-based care*, and almost nothing is known about their broader well-being and quality of life. Furthermore, most studies have been conducted overseas and have not been tested for their applicability to children in care in Australia.

This is the first study to provide comprehensive information about the mental health and broader well-being of a representative sample of children and adolescents living in *home-based foster care* in Australia. Participants were 326 children and adolescents (aged 6-17 years) residing in home-based foster care in metropolitan Adelaide, Australia, who were under a Guardianship of the Minister court order between August 2004 and January 2006. Information about children's mental health, health-related quality of life, and service use was obtained from foster carers and older children (13-17 years) during face-to-face interviews. Information about health-risk behaviours such as suicidal ideation and behaviour, and drug use was also obtained from older children (13-17 years). In addition, foster carers provided information about the extent to which the problems of children in their care impacted upon their personal lives. The study utilised the same measures as those employed in the Australian Child and Adolescent Survey of Mental Health and Well-Being (Sawyer et al., 2000; Sawyer et al., 2001). This enabled the mental health and well-being of children in home-based foster care to be compared with that reported for children of the same age and gender in the general community in Australia.

The results showed that, compared to their peers in the general community, children in home-based care experienced significantly more mental health problems that were of clinical significance, and much poorer health-related quality of life across a wide range of domains that impeded their ability to fulfil daily roles such as schooling and social events. A substantial proportion of children in foster care who were identified as needing help for physical or emotional and behavioural problems, had not received this help. Furthermore, rates of suicidal ideation and attempts were significantly higher amongst foster youth than youth in the general community. The results also showed that foster carers were experiencing high levels of emotional stress and limitations on their personal time, due to the psychosocial and/or physical health problems of children in their care.

The findings of this study have important implications for child protection policy and practice. Although home-based care is the preferred option in Australia and other Western jurisdictions because it is believed to avoid problems associated with institutionalisation and provide ‘normalcy’ by modelling the family environment in which most children live (Barber & Delfabbro, 2004), the results of this study raise questions about the extent to which the needs of children in home-based care are currently being met. The significant health problems and poor quality of life of children in home-based foster care identified in the present study challenge child welfare agencies, practitioners, and policy makers to identify ways of providing more effective care for this vulnerable population, so as to maximise their short and longer-term outcomes.

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Chapter One

Child Protection and Alternative Care

1.1 The History of Child Protection

Throughout time, there have been periods of high and low societal interest in child maltreatment (Scott, 1995). Although various attempts have been made across communities at different periods to protect children from maltreatment (Tomison, 2001b), there have been two large waves of the child protection movement that have contributed to our child protection systems today. The first, referred to as the ‘initial discovery’ of child maltreatment, was in the late nineteenth century and the second, referred to as the ‘rediscovery’ or ‘modern discovery’ of child maltreatment, was in the 1960s and 1970s (Scott, 1995; Tomison, 2001b).

1.1.1 The First Wave of the Child Protection Movement

Despite the fact that child maltreatment has existed throughout the ages, it was not until the late nineteenth century that ‘cruelty’ to children became of widespread concern and measures were put in place prevent it (Tomison, 2001b). There are various possible explanations as to why it was during this period that the need to protect children received increased recognition. These include the high child mortality rates at the time and changing conceptions of family and childhood (Tomison, 2001b). According to Scott (1995), increased awareness of social problems in the late nineteenth century and the associated social and political climate in societies undergoing industrialisation contributed to interest in the needs of children.

Many credit the beginning of the first wave of the child protection movement to what is commonly referred to as the 'Mary Ellen' case, believed to be the earliest case where authorities acted to protect a child from maltreatment (Chandler, 2006). Mary Ellen Wilson was a ten year old girl who lived in a tenement building in New York during the 1870s with her adoptive parents (Tomison, 2001b). Although details of Mary Ellen's 'rescue' vary according to the source, it seems that neighbours concerned about her maltreatment notified a humanitarian organisation. When Mary Ellen was visited, it was clear that she had been neglected, physically abused, cut with scissors, kept prisoner and was dressed in ragged and insufficient clothing (American Humane Society; Tomison, 2001b). As there were no laws at that time to protect children from abuse, it is believed that animal cruelty legislation was used successfully to argue to the courts that Mary Ellen belonged to the animal kingdom and required protection (Tomison, 2001b). Other sources (e.g., The American Humane Society) are doubtful about the use of the animal cruelty legislation in securing Mary Ellen's protection. However, it appears clear that the American Society for the Prevention of Cruelty to Animals (ASPCA) was instrumental in ensuring Mary Ellen's removal from an abusive home, and thus played an important role in early recognition of the need for child protection. Newspapers provided extensive coverage of this case resulting in increased public awareness and demands for action (American Humane Society). This inspired various organisations to advocate for the protection of children, leading to the creation of child protection societies in the United States and the United Kingdom (Tomison, 2001b).

1.1.2 The Second Wave of the Child Protection Movement

The second wave of the child protection movement, referred to as the 'modern discovery of child abuse' or the 'professional discovery of child abuse' is believed to be driven by research conducted in the United States by Dr Henry Kempe, a paediatrician, and his colleagues (Drs Silverman and Silver who were radiologists, Dr Steele who was a psychiatrist, and Dr. Droegemueller who was an obstetrician). In 1962, they published their

discovery, using newly developed radiological survey technology, of previously undiagnosed fractures and broken bones in children thought to be caused by physical abuse. They called this phenomenon the ‘battered-child syndrome’ (Kempe, Silverman, Steele, Droegmuller, & Silver, 1962). This publication was a significant contribution to the study of child maltreatment and it played a major role in heightening awareness of, and interest in, child abuse (Tomison, 2001b).

In Australia, research into the ‘battered-child syndrome’ followed soon after Kempe et al.’s (1962) article was published (Tomison, 2001b). In 1965, Wurfel and Maxwell published, “The ‘battered-child syndrome’ in South Australia”, in the *Australian Paediatric Journal*. This publication summarised findings from their investigation of children presenting at the Adelaide Children’s Hospital with injuries believed to be inflicted by abuse. Three years later (1968), Birrell and Birell published, “The Maltreatment Syndrome in Children”, in the *Medical Journal of Australia* which documented undiagnosed fractures and non-accidental injuries of 42 maltreated children admitted to the Royal Children’s Hospital in Melbourne, Victoria.

1.1.3 *Child Protection after Kempe*

Modern interest in child protection contributed to the development of professionally staffed and discrete child protection services within existing social and welfare services (Tomison, 2002b). It also encouraged legislation and policies to help protect children, and led to the United Nations Declaration of the Rights of the Child which codified the concept that children have distinct individual rights (James, 2000). Australia became a signatory to this declaration in 1981 (James, 2000).

In recent decades, the definition of child maltreatment has broadened (Tomison, 2001b). Legislation and policies developed in the aftermath of the discovery of the battered

child syndrome initially designed to identify cases of serious physical abuse, have been applied to a much broader group of acts of child maltreatment (Scott, 2006) including sexual abuse and emotional maltreatment.

The definition of child maltreatment has expanded not only due to increased public and professional desire to protect children from harm, but also because of two historical drivers of child protection over the past century (Scott, 2006). These are the notion of the child as a holder of human rights and the notion of the child as a psychological being (Scott, 2006). Whereas children were once viewed as the property of their parents, they are increasingly being viewed as individuals with full human rights (James, 2000; Scott, 2006). The definition of child maltreatment has broadened to include acts that violate these rights. Furthermore, since the recognition of children as psychological beings, an increasing range of behaviours which inflict psychological or emotional harm upon children have been added to conceptualisations of what constitutes child maltreatment (James, 2006; Scott, 2006).

1.2 The History of Child Protection in Australia

1.2.1 *The Very Beginnings in Australia*

In Australia, child welfare problems were evident from the early weeks of the first white settlements (Lidell, 1993). The earliest form of child protection began in response to the number of settlers' children who were identified as having been abandoned or neglected (Tomison, 2001b, 2002a, 2002b). These children, along with those whose parents were considered to provide socially inadequate environments, were sent to live with approved families, in effect, establishing an early form of family-based foster care (Lidell, 1993; Tomison, 2001b, 2002a, 2002b). However, due to the large number of children who were unable to live with their families of origin, institutional settings (i.e., orphanages) were established to house them. The first of these was built on Norfolk Island as early as 1795 (Lidell, 1993; Tomison, 2001b, 2002a, 2002b). During the nineteenth century, a voluntary child welfare system was developed with substantial support from the Christian churches (Lidell, 1993). Church organisations contributed to the establishment and running of orphanages, and have continued to play an important role in the non-government child welfare system to the present time (Tomison, 2001b, 2002a, 2002b).

For most of the nineteenth century, children who were unable to live with their families of origin were placed in institutional settings. However, in response to growing concerns about the adverse effects of institutionalisation on children, such as deprivation suffered as a consequence of living without a family, and further abuse and neglect, increasing preference was given to family foster care (Lidell, 1993; Tomison, 2001b). By the end of the nineteenth century, most children who were unable to live with their families of origin were placed in family foster care. As pointed out by Tomison (2001b, 2002b), this change is one of the earliest examples of what has become a continuing issue in child welfare – the changing preference for institutional care versus family based care.

1.2.2 Australian Developments During and After the First Wave of the Child

Protection Movement

During the first wave of the child protection movement in the late nineteenth century, most Australian States had developed legislation and founded children's courts to respond to the more obvious child maltreatment cases, such as physical abuse cases (Tomison, 2001b, 2002b). During this period, voluntary 'child rescue' organisations were also established, which greatly strengthened the ability of the non-government child welfare sector to undertake their work (Lidell, 1993; Tomison, 2001b, 2002b).

The twentieth century saw multiple shifts in the preference for family based versus institutional care. In the 1930s, there was a shift to using institutionalised care rather than family foster care for children who were unable to live with their families of origin. This change was influenced by the economic advantages of institutionalised care (Lidell, 1993; Tomison, 2001b). By the 1950s however, the pendulum had once again swung back to a preference for family foster care and institutions began to be closed. As was the case in the late nineteenth century, concerns about the effects of institutionalisation gave rise to a preference for smaller group care (Lidell, 1993; Tomison, 2001b), and especially family based care. Although Australian child protection systems have favoured family based care since that time, there is continuing debate about the role of institutional care (Stanley, Tomison & Pocock, 2003; Tomison, 2001b)

The first wave of the child protection movement also resulted in policies and practices which, unfortunately, increased state regulation of indigenous Australians (Tomison, 2001b). During the early twentieth century up until about the 1970s, up to 30% of indigenous children, mainly those of mixed descent, were forcibly removed from their parents and placed in institutions or foster care (Human Rights & Equal Opportunities Commission, 1997). The aim was to culturally assimilate these children into contemporary Australian society. The

group of children who experienced this interference with the Australian indigenous culture has become known as the 'stolen generation' (Human Rights & Equal Opportunity Commission, 1997; Tomison, 2001b).

1.2.3 Australian Developments During and After the Second Wave of the Child

Protection Movement

Commencing in the 1960s, Australian governments began to take increasing responsibility for human welfare issues (Lidell, 1993). Despite earlier developments, it was following the modern discovery of child maltreatment in 1962, that governments also began to take substantial responsibility for child protection (Tomison, 2002a). By the 1970s, state-level child protection or welfare systems for investigating and managing child maltreatment cases had been developed within most Australian states and territories (Lidell, 1993; Tomison, 2002a). During the decades that followed, these systems continued to develop and became increasingly refined and professionalised (Lidell, 1993; Tomison, 2001b, 2002a). A key development during this time was the adoption of 'risk assessment measures' which were designed to assist child welfare workers in ascertaining the risk of harm to children and whether intervention was required (Tomison, 2001b, 2002a).

Despite the introduction of 'risk assessment measures', the decision about whether to intervene and remove children at risk of maltreatment from their families or to keep families together despite such concerns, remains difficult (Tomison, 2001b). Australian child protection systems have repeatedly shifted their emphasis between exercising caution and removing at-risk children, to prioritising the preservation of families despite concerns about children's safety (Tomison, 2001b).

During the late twentieth century, Australian child protection work was increasingly driven by bureaucratic and legalistic frameworks (Tomison, 2001b, 2002a, 2002b). Greater

emphasis was placed on legal, administrative and procedural requirements, rather than the professional discretion of child welfare workers when making decisions about the needs of children (Tomison, 2002a). The requirement for a legal response in child protection cases has been criticised on the grounds that the therapeutic needs of children and families often become secondary, cases that are more difficult to prove legally may receive inadequate attention, and maltreated children may receive insufficient support and protection services until evidence can be presented to the judicial system (Tomison, 2001b, 2002a, 2002b).

1.3 Current Understandings of Child Maltreatment

Child maltreatment has been recognised throughout history and across many cultures (Tomison, 2001b). In her review of historical accounts of child maltreatment, Lynch (1995) found written evidence of the recognition of purposely inflicting harm on children dating back to the first three centuries AD.

A widely held belief is that parents are instinctively compelled to rear their children with the best of intentions and loving care (Korbin, 1980), and that a primary role of the family is to protect and look after their own (Barber & Delfabbro, 2004). Unfortunately, as pointed out by Korbin (1980), child maltreatment is part of the repertoire of parental behaviour as evidenced by the “alarming frequency with which parents harm or fail to adequately care for their offspring” (p. 3).

Child maltreatment is a complex concept with many factors affecting its definition and boundaries (James, 2000). Nevertheless, to understand, prevent and respond to child maltreatment effectively, there has to be a common understanding about the actions and omissions that constitute child maltreatment. Finkelhor and Korbin (1988) define child maltreatment as the “proportion of harm to children that results from human action that is proscribed, proximate, and preventable” (p. 4). According to this definition, human actions causing harm can only be considered child maltreatment if they meet three criteria. First, the action must be *proscribed* or negatively valued (i.e., it violates legal or social codes). When approved or neutral human actions result in harm or risk to children (e.g., medical treatment that does not result in the expected outcome and causes harm) this does not constitute child maltreatment (Finkelhor & Korbin, 1988). Second, the harm must be *proximate* to the human action. When children are harmed as a consequence of human action that was far removed in time or space (e.g., if human action caused damage to the environment that resulted in child

starvation generations later), then it does not constitute child maltreatment (Finkelhor & Korbin, 1988). Finally, the human action that resulted in harm must be *preventable*. If there was no alternative action available that may have avoided the harm, the behaviour is not considered to be child maltreatment (Finkelhor & Korbin, 1988).

Richardson (2004) defines child maltreatment as “an act by parents, caregivers, other adults or older adolescents that endangers a child or young person’s physical or emotional health or development. Child abuse can be a single incident, but usually takes place over time” (p. 1). For the purpose of collecting national data in Australia, the Australian Institute of Health and Welfare (1997) defines child abuse and neglect as occurring when

a child has been, is being, or is likely to be subjected to physical, emotional or sexual actions or inactions which have resulted in, or are likely to result in significant harm or injury to the child. In the main it refers to situations where there are protective issues for the child because the person believed to be responsible for the abuse or neglect is a parent, family member or some other person with responsibility for the care of the child; or where the person responsible for the child is unable or unwilling to protect the child from abuse or neglect (p. 190).

Legal definitions of child maltreatment in Australia are different for each state and territory, as child protection is primarily a state responsibility. In South Australia, section 6 of the Child Protection Act 1993 states that:

6 (1) “abuse or neglect” in relation to a child means-

(a) Sexual abuse of the child; or

(b) Physical or emotional abuse of the child, or neglect of the child, to the extent that-

- (i) the child has suffered, or is likely to suffer, physical or psychological injury detrimental to the child’s wellbeing; or
- (ii) the child’s physical or psychological development is in jeopardy.

Although these definitions assist in our understanding of the types of harm to children that qualify as child maltreatment, they do not provide a complete guide that can clearly distinguish between acts that do and do not constitute child maltreatment. Part of the difficulty is that definitions of child maltreatment are context-specific, that is they are dependent upon historical and cultural norms and standards about appropriate child rearing and parenting (Korbin, 1980; Richardson, 2004). They are also fluid and influenced by shifts in perceptions of what is normative and deviant in the treatment of children.

Disparities between perspectives on appropriate child rearing practices or a given act can occur between and within cultures (Korbin, 1980; Richardson, 2004), and across time. For example, while Western cultures would consider 'branding' to be child maltreatment, as pointed out by Finkelhor & Korbin (1988), in some tribal societies, facial and body scarification is an acceptable social practice that symbolises children's entry to adulthood, and parents would be considered maltreating if they did not have their sons branded. Within cultures, perceptions about what constitutes appropriate child rearing practices have also changed over time. As pointed out by Scott (2006), some acts which are now regarded as child maltreatment were considered to be acceptable or normative child-rearing practices only a generation or so ago. In Western cultures, for example, physical discipline that was once used as standard punishment in both homes and schools, is now viewed, at least by some, to be a form of child physical abuse (Scott, 2006). Similarly, while leaving younger children in the care of older children was once acceptable, it is now regarded by many as neglectful (Scott, 2006). In general, the more a behaviour or act violates cultural and historical norms, the more it is likely to be described as child maltreatment.

A challenge with defining child maltreatment is the lack of social consensus about which parenting practices or behaviours are unacceptable or harmful. It is unclear whether child maltreatment should be defined on the basis of adult characteristics, adult behaviour,

child outcome, environmental context, or a combination of these (James, 2000; United States National Research Council, 1993). There is also uncertainty about whether the degree of harm or risk to the child should be considered in definitions of child maltreatment, and whether it is appropriate to employ the same definitions for different purposes (i.e., research, clinical, legal, and political purposes) (James, 2000; United States National Research Council, 1993). Furthermore, the significance of an act towards children may vary depending on the children's age, gender, cultural background, relation to the perpetrator, and context (United States National Research Council, 1993).

Despite the difficulties defining child maltreatment, and despite the fact that different stakeholders, including researchers, clinicians, and child protection workers, often use different definitions of maltreatment for different purposes, there are commonalities across definitions. In its broadest sense, child maltreatment refers to any behaviour directed toward a child that involves risk of harm to the child (United States National Research Council, 1993).

1.3.1 Categories of Child Maltreatment

The difficulties in arriving at a concrete definition of child maltreatment are mirrored in attempts to define different types or categories of child maltreatment. Further contributing to definitional debates about these categories is recognition that all forms of child maltreatment are interrelated and there is overlap between categories of maltreatment (Higgins & McCabe, 2000). Despite this, it is important to define categories of child maltreatment as they provide i) a framework that enables the experiences of maltreated children to be conceptualised and ii) a common understanding of the actions and omissions that constitute different types of child maltreatment which in turn can help guide attempts to prevent and respond to specific types of maltreatment effectively.

In general, child maltreatment is divided into four main categories: i) physical abuse, ii) sexual abuse, iii) emotional maltreatment, and iv) neglect. Recently, ‘witnessing family violence’ has been described as a fifth category of child maltreatment (Higgins, 2004). Initially this was identified as a form of emotional maltreatment, however it is increasingly being defined as a separate category of maltreatment.

Physical Abuse

Physical abuse is characterised by purposely inflicting physical harm (Finkelhor & Korbin, 1988) by actions such as hitting with a hand or other object, punching, kicking, biting, shaking, throwing, stabbing, choking, or burning (Richardson, 2004). An uncommon form of physical abuse is Munchausen by proxy, where an adult deliberately causes or fabricates injury or illness in a child in order to obtain attention or sympathy, often from medical services (United States National Research Council, 1993).

Physical abuse can occur in a number of contexts, but one of the most common is in excessive corporal punishment (Finkelhor & Korbin, 1988). Over time, the boundary between appropriate and inappropriate physical punishment to discipline children has shifted. Until the middle of the twentieth century, physical punishment (including excessive physical punishment) was considered an acceptable form of punishment to discipline children, but in recent years it has become increasingly unacceptable.

In Australia, with the exception of the Northern Territory, corporal punishment is prohibited in government schools by legislation, regulation or policy (Richardson, 2004). However, parents or guardians are legally allowed to administer *reasonable* physical punishment to discipline a child in all Australian states and territories (Richardson, 2004). In recent years, New South Wales has become the only state to place specific limits on physical punishment to a child, by passing legislation that prohibits parents or guardians from hitting

their children above the neck, using sticks, straps or other objects, or inflicting pain to any part of the body that lasts for more than a short period of time (Cashmore, 2008; Richardson, 2004). The legislation was introduced to provide parents with a guide to what falls outside of acceptable, normal physical discipline.

Sexual Abuse

There are difficulties achieving a clear definition of child sexual abuse, and this is reflected in the large number of different definitions. According to Families SA (2006) (Families SA notifier guide), child sexual abuse occurs when

someone in a position of power to the child uses his or her power to involve the child in sexual activity. Behaviour can include sexual suggestion, exhibitionism, mutual masturbation, oral sex, showing pornographic material, using children in the production of pornographic material, penile or other penetration of the genital or anal region, and child prostitution (p. 10).

Sexual abuse includes both touching offences (e.g., fondling or sexual intercourse) and non-touching offences (e.g., exposing a child to pornographic materials). It can also involve varying degrees of violence and emotional trauma.

Emotional Maltreatment

Child emotional maltreatment, perhaps the most difficult category of child abuse to define, is also referred to as emotional abuse, psychological abuse, and mental cruelty (Doyle, 1987; Tomison & Tucci, 1997). Many studies of emotional maltreatment discuss its definition, reflecting the fact that there is no one agreed definition (Doyle, 1987). Hart, Germain and Brassard (1983, 1987) concluded, after a national conference in the United States to achieve a consensus among professionals on a working definition of psychological abuse, that:

Psychological maltreatment of children and youth consists of acts of omission and commission which are judged on the basis of a combination of community standards and professional expertise to be psychologically damaging. Such acts are committed by individuals, singly or collectively, who by their characteristics (e.g., age, status, knowledge, organisational form) are in a position of differential power that renders a child vulnerable. Such acts damage immediately or ultimately the behavioural, affective, or physical functioning of the child (p. 2)

More simply, child emotional abuse has been defined as a continual pattern of behaviour that causes the child's self esteem and/or sense of social competence to be damaged or diminished over time (Families SA, 2006, Richardson, 2004).

Garbarino and his associates (e.g., Garbarino, Guttman & Seely, 1986; Garbarino & Vondra, 1987) have written prolifically on the subject of child emotional abuse (Doyle, 1987). As summarised by Richardson (2004), they have classified behaviours associated with emotional abuse as i) rejecting: behaviours which constitute abandonment of the child, such as withholding affection or emotional warmth or praise, ii) isolating: preventing the child from participating in opportunities for social interaction, iii) terrorising: threatening the child with severe punishment or deliberately creating a climate of fear or threat, iv) ignoring: being psychologically unavailable to the child and failing to respond to the child, and v) corrupting: encouraging the child to develop false social values that reinforce antisocial or deviant behaviours (Richardson, 2004).

Although this classification of behaviours has been influential, it is not exhaustive and over time additional behaviours have been identified (Richardson, 2004). Families SA's (2006) definition of child emotional abuse includes a list of behaviours that may result in emotional abuse including Garbarino, Guttman and Seely's (1986) five classifications as well as 'devaluing' and 'chronic or extreme spousal abuse in the child's presence'.

In recent times, there has been debate about whether emotional maltreatment and psychological maltreatment are synonymous or whether they are distinct categories of maltreatment. O'Hagan (1995) argues that the terms are not synonymous as 'psychological' and 'emotional' mean different things. He argues that emotional abuse is the "sustained, repetitive, inappropriate emotional response to the child's experience of emotion and its accompanying expressive behaviour" (p. 456). According to this definition, emotional abuse repeatedly causes emotional pain to a child (e.g., fear, humiliation, distress etc.). Psychological abuse, on the other hand, refers to:

sustained, repetitive, and inappropriate behaviours which damage or substantially reduces the creative and developmental potential of crucially important mental faculties and mental processes of a child; these faculties and processes include intelligence, memory, recognition, perception, attention, imagination, and moral development (p. 458).

Although O'Hagan (1995) distinguishes between emotional and psychological abuse, he does not claim that they are entirely distinct categories of child maltreatment and concedes that the two frequently co-occur.

Emotional maltreatment can be a somewhat hidden and underestimated form of child maltreatment as it leaves no physical injuries (Tomison & Tucci, 1997). It is also difficult to prove that abstract forms of emotional abuse (e.g., withholding affection, threatening, yelling) do significant damage to children. The ongoing nature of emotional maltreatment means that there is unlikely to be a crisis which might aid its identification (Tomison & Tucci, 1997).

Neglect

According to the Australian Institute of Health and Welfare (1995), neglect can be defined as any act of omission or commission which results in a failure to provide conditions

required for the healthy physical and emotional development of a child. More simply, neglect can be defined as the failure to provide for a child's basic needs.

Categories of neglect include i) physical neglect (e.g., a failure to provide adequate nutrition, clothing, personal hygiene, acceptable housing, or supervision), ii) medical neglect (e.g., a failure to provide or allow needed health-care, or the failure to seek timely and appropriate health-care for a serious health problem), iii) educational neglect (e.g., failure to enrol a child of mandatory school age without legitimate reason, and iv) abandonment or desertion (Families SA, 2006; Richardson, 2004).

Witnessing Family Violence

Witnessing family violence has previously been identified as a form of emotional maltreatment. However, it is increasingly being recognised as a distinct type of maltreatment (Higgins & Bromfield, 2005). Witnessing family violence refers to a child observing a parent or other family member being abused (be it physical, sexual, or emotional abuse), or to a child witnessing harm or damage caused to persons or property by a family member (Higgins & Bromfield, 2005).

1.3.2 Multi-Type Maltreatment

There is a growing body of evidence that different forms of maltreatment rarely occur in isolation (Higgins & McCabe, 2000). Rather, a significant proportion of maltreated individuals experience repeated episodes of one type of maltreatment along with other forms of abuse or neglect (Higgins & McCabe, 2000; Ney, Fung & Wickett, 1994). For example, in a study by McMillen et al. (2005) of 373 17 year old adolescents in foster care in the United States, it was more common for adolescents to report two or more types of maltreatment than one type alone. Seventy-five percent of youths who had been physically neglected, and 77% who had been sexually or physically abused also reported other forms of maltreatment

(McMillen et al., 2005). Higgins and McCabe (2000) refer to this phenomenon as 'multi-type maltreatment'. Children from maltreating families commonly experience the deprivation of appropriate parental care and protection, or the infliction of harm, in numerous ways (Higgins, 2004).

1.4 Child Protection and the Function of Alternative Care in Australia

1.4.1 Responsibility for Child Protection

In Australia, state governments have responsibility for child protection, children's courts and child welfare legislation (Barber and Delfabbro, 2004; Tomison, 2001b). Each state/territory has its own child protection service based in departments of human services, community development/services, or family services. The only exception is Queensland and Western Australia where the child protection departments are separate specialist departments. Given that child protection is the responsibility of state/territory governments, it is not surprising that there are variations in child welfare legislation, the provision of child protection services, and the structure and practice of the child protection system across Australia (Tomison, 2001b). Despite these differences, child protection systems in Australia each serve the same role and utilise similar models of intervention (Bromfield & Higgins, 2005).

1.4.2 The Function of Alternative Care

Alternative care, also referred to as 'out-of-home' care, is one of the many services funded by state and/or federal governments and managed by relevant child welfare agencies. Out-of-home care is employed to help children who are unable to live with their families of origin. While there are many reasons children may be unable to live with their families of origin (e.g., parents need assistance, are deceased or incarcerated), in most instances it is because they have experienced significant maltreatment (physical abuse, sexual abuse, emotional maltreatment, neglect, and/or witnessing family violence) and their welfare requires removal from a harmful situation.

In most states, child welfare legislation requires alternative care to be used as a temporary arrangement while efforts are made to address welfare and safety concerns so that

children can be reunified with their families of origin (Barber & Delfabbro, 2004). Children are separated from their families of origin for as long as the situation at home remains unsafe. In circumstances where family reunification is not possible, children remain in alternative care until they reach independence at 16-18 years of age or rarely, until an adoptive placement becomes available. Nevertheless, the existing policy preference across most of Australia is for 'family reunification' (Barber & Delfabbro, 2004).

In recent years, legislation passed in New South Wales (particularly the Children and Young Persons (Care and Protection) Amendment (Permanency Planning) Act 2001), provided a landmark in Australian foster care policy, and represented a move towards preference for 'permanency planning' (Barber & Delfabbro, 2004). Under policies supporting permanency planning, as exist in the United States and more recently in the United Kingdom, placement stability for children in care is paramount to avoid harm that is thought to be caused by unstable or impermanent living arrangements, to protect children's rights to a stable and permanent home, and to ensure children have the opportunity to form lasting relationships (Brydon, 2004; Cashmore, 2000). At intake, case workers must concurrently plan for family reunification and the termination of parental rights should the former prove impossible within a predetermined time frame (Barber & Delfabbro, 2004). If family reunification fails, the preferred option is for children to be placed in an adoptive placement. Alternative options are long-term foster care or as the last resort, a residential care placement (Barber & Delfabbro, 2004).

Given that permanency planning has been the policy preference in the United States for the longest period of time, its effects on the child welfare system are best illustrated by describing the situation there. Permanency planning was legally sanctioned in the United States in 1980 (Barber & Delfabbro, 2004) and received further support from the Adoption and Safe Families Act of 1997 (Glisson, Bailey & Post, 2000; Mitchell et al., 2005). Under

the latter Act, permanency planning hearings must be conducted for all children in alternative care within 12 months of placement and annually thereafter. In cases where children have been in care for 15 of the most recent 22 months, states are required to initiate termination of parental rights proceedings (Barber & Delfabbro, 2004). In certain cases (e.g., where parents have caused serious bodily injury to a child or where parents have committed murder or involuntary manslaughter of a child), states are required to initiate such proceedings immediately (Barber & Delfabbro, 2004). The Adoption and Safe Families Act of 1997 also introduced financial incentives for jurisdictions to increase their rates of adoptions (Barber & Delfabbro, 2004). A total of \$US20 million was awarded each year from 1997 to 2003 to states that had the highest rates of adoptions (Barber & Delfabbro, 2004). Consequently, large numbers of children were moved out of alternative care into adoptive placements (about a 30% increase was seen in the first year) (Barber & Delfabbro, 2004). There are however, no comparable incentives for working towards family preservation or reunification. Rather, focus has been directed towards the termination of parental rights and adoption as a way to move children out of the alternative care system, thereby reducing the length of time they spend in state care (Glisson et al., 2000). The “goal seems to be to facilitate termination of the parental rights of biological parents rather than to support them in improved parenting” (Hollingsworth, 2000, p. 184).

It is unclear whether the shift towards permanency planning will have similar effects on the alternative care population in New South Wales as occurred in the United States (Barber & Delfabbro, 2004). It is also unclear to what degree the shift towards permanency planning in New South Wales will extend to other states in Australia.

1.5 How it Works: The Child Protection Process Before Alternative Care

1.5.1 Notifications, Investigations, and Substantiations

Any person who has concerns about a child's welfare and safety may make a notification to the child protection service in their state or territory (Bromfield & Higgins, 2005). However, state legislation stipulates that certain groups of people or professionals in each jurisdiction have a legal obligation to notify possible child maltreatment cases to the relevant statutory child protection service (Bromfield & Higgins, 2005). Across Australia, the groups of people who are legally required to notify their concerns about child safety range from a small number of professionals in particular contexts (e.g., Queensland, where only doctors and nurses who are aware of or reasonably suspect a child has, is, or is likely to suffer harm are legally required to make a notification) through to every adult (e.g., Northern Territory, where anyone who has reasonable grounds to believe that a child has suffered or is suffering maltreatment is legally required to make a notification) (Bromfield & Higgins, 2005).

In all jurisdictions, notifications are received most commonly by phone (Bromfield & Higgins, 2005). Intake workers conduct a preliminary investigation (i.e., record notification details, check prior history with child protection, make any follow-up calls), make a risk assessment about whether the child is in immediate or future danger and determine whether the report warrants further investigation (Bromfield & Higgins, 2005). Cases assessed as not requiring further investigation may receive family support services or be referred to appropriate services in the community. Cases assessed as requiring further investigation are referred for 'investigation' and intake workers assign a priority rating which determines the maximum period of time that may pass before the commencement of the investigation (Bromfield & Higgins, 2005). For example, in most Australian jurisdictions, investigations must commence within 24 hours for 'Priority 1' notifications (Bromfield & Higgins, 2005).

Investigation teams are responsible for planning and undertaking child protection investigations. Based on the evidence, they decide whether to substantiate allegations (i.e., confirm reports of child maltreatment) and determine children's risk of further harm (Bromfield & Higgins, 2005). Cases that are not substantiated may be referred to appropriate community family support services. For substantiated cases, services and interventions necessary to protect children are identified and court action is initiated if required (e.g., for removal of children by apprehension) (Bromfield & Higgins, 2005). The case is then referred to an intervention team for case management (Bromfield & Higgins, 2005).

Over the last six years, the number of child protection notifications in Australia has more than doubled, from 137,938 in 2001-02 to 317,526 in 2007-08. The number of substantiations has also increased significantly, from 30,473 in 2001-02 to 55,120 in 2007-08 (Australian Institute of Health & Welfare, 2007, 2009). Latest figures show that in 2007-2008, rates of children aged 0-16 years who were the subject of a child protection substantiation varied considerably across jurisdictions, reflecting differences in policy and practice. Substantiation rates ranged from 2.9 per 1,000 in Western Australia to 11.9 per 1,000 in the Northern Territory, with the national rate being 7.2 per 1,000 (AIHW, 2009). Of the substantiations across the country (55, 120), 39% were due to emotional abuse, 29% were due to neglect, 23% were due to physical abuse, and 10% were due to sexual abuse (AIHW, 2009).

There are several possible reasons for the increase in notifications and substantiations. The change may reflect an increase in the incidence of child maltreatment. Alternatively, and possibly more likely, it reflects greater community awareness about child protection and greater willingness to report concerns (AIHW, 2007). The media has always played an important role in heightening awareness of child protection, and its reporting of inquiries into

child protection services in the past few years (e.g., the 2003 Layton report in South Australia) may have contributed to the increased number of notifications (AIHW, 2007, 2009). In some jurisdictions, the numbers of notifications and substantiations are also impacted upon because of changes in child protection policies and practices (AIHW, 2007). For example, Tasmania's rise in notifications from 2003-04 to 2004-05 is partly attributable to legislation passed in 2004 which broadened the definition of child maltreatment to include a child affected by family violence (AIHW, 2007).

1.5.2 Care and Protection Orders

If a case has been substantiated and further intervention is required, the child welfare department may apply to the relevant court to place the child on a care and protection order (AIHW, 2007). Court-ordered interventions are used as a last resort, for example, where family support services are unsuccessful or resisted by families, or where removal of children to alternative care requires legal authorisation (AIHW, 2007). It should be noted, that children may be admitted to a care and protection order not only when they are the subject of a child protection substantiation, but also in cases where there is an irreparable or severe parent-child relationship breakdown, or where parents are incapable or unwilling to care for their children (AIHW, 2007).

Although there are many different types of care and protection orders used across Australia, they can be broadly categorised as guardianship and non-guardianship orders.

Guardianship Orders

Guardianship orders involve the transfer of legal guardianship of children from their parents to the state child welfare department (or rarely, to another individual) (AIHW, 2007). In some jurisdictions, legal guardianship is transferred to the Minister responsible for the state child welfare department. These are called 'Guardianship of the Minister' (GOM) orders.

Generally, guardianship orders involve the transfer of both guardianship (i.e., responsibility for the child's welfare) and custody (i.e., responsibility for the daily care and control of the child) (AIHW, 2007). Guardianship orders involve significant intervention in the lives of children and their parents, and are generally sought only as a last resort after other avenues have been pursued (AIHW, 2007) (e.g., when the family unit has irrevocably broken down, or where breach of a non-guardianship order has occurred).

Non-Guardianship Orders

Non-guardianship orders are less interventionist in nature, but give the child welfare department some level of responsibility for children's welfare (AIHW, 2007). Non-guardianship orders can be grouped into custody orders, supervisory orders, and interim and temporary orders. Custody orders involve the transfer of custody from parents to the state child welfare department. Under these orders, parents retain legal guardianship of their children, but the child welfare department has responsibility for the children's daily care (AIHW, 2007). Supervisory orders do not affect legal guardianship or custody of children, but give the child welfare department responsibility for supervising the level of care provided to children by their parents (AIHW, 2007). Interim and temporary orders are generally used to provide for a limited period of supervision and/or placement of a child by the child welfare department (AIHW, 2007).

The number of children on care and protection orders across Australia has increased by more than 100% over the past decade, from 16,449 in 1998 to 34,279 in 2008 (AIHW, 2009). This increase is thought to be due to increased recognition of the need to protect children, and to the increasing numbers of children who enter the alternative care system at a younger age and remain on orders until they reach independence at 18 years of age (AIHW, 2007). In all jurisdictions, the majority of children on care and protection orders at 30 June

2008 were on guardianship or custody orders, ranging from 61% in Victoria to 89% in South Australia and the Northern Territory (AIHW, 2009).

Most children on care and protection orders, the majority of whom were the subject of a child protection substantiation, are placed in alternative care. It must be noted however that, with the exception of the Northern Territory, care and protection orders are not a requirement for entry to alternative care. Children may be placed in alternative care voluntarily to assist families, or because they are on another court order. Currently, there are no national data describing the reasons children come into alternative care (AIHW, 2007). At June 30 2006, the proportion of children in alternative care who were on a care and protection order ranged from 76% in Victoria to 100% in Tasmania (and of course 100% in the Northern Territory) (AIHW, 2007).

1.5.3 Case Management

Generally, children in alternative care are assigned to a social worker or caseworker from the relevant child welfare department. Caseworkers provide overall case management for children and have delegated responsibility to act as legal guardian for those children whose guardianship rests with the state. The caseworkers have a wide range of responsibilities including securing placements for the children, supervising the children's care, ensuring access to appropriate physical and mental healthcare, acting as a counsellor and confidante to children, working co-operatively with foster caregivers or residential staff, arranging access visits with the children's family of origin, working closely with the children's parents of origin, working towards family reunification or when this is not possible, making plans for appropriate long-term care (Terpstra, 1987).

1.6 Alternative Care in Australia

1.6.1 Numbers in Alternative Care

Despite attempts to keep families together and investment in family preservation and reunification services, the number of children in alternative care has been increasing greatly since the 1990s (Barber & Gilbertson, 2001). Over the past decade (1998 to 2008), the number of children in alternative care has increased by 115% from 14,470 to 31,166. Nationally, this equates to a current rate (at June 30 2008) of 6.2 per 1,000 children in alternative care. Across jurisdictions, the rates of children in alternative care range from 4.2 per 1,000 in Victoria to 8.4 per 1,000 in New South Wales (AIHW, 2009).

1.6.2 Demographic Characteristics of Children in Alternative Care

Age and Gender

Of the 31,166 children in alternative care in Australia in 2008, almost one third (31%) were aged 10-14 years. A further 30% were aged 5-9 years, 21% were aged 1-4 years, 14% were aged 15-17 years, and 4% were under the age of 1 year. Fifty one percent of children in alternative care were male (AIHW, 2009).

Overrepresentation of Indigenous Children

Although accurate data are not available, the rate of child maltreatment in indigenous communities is considered to be higher than the rate of child maltreatment in the non-indigenous Australian population (Stanley et al., 2003). Australian indigenous children are also significantly over-represented in child protection systems and alternative care. For example, at June 30 2008, the number of indigenous children in alternative care was almost 9 times the number of non-indigenous children in alternative care (41.3 per 1,000 indigenous children) (AIHW, 2009).

The over-representation of Australian indigenous children in alternative care is largely due to indigenous children being more likely than non-indigenous children to be the subject of a child maltreatment substantiated (i.e., a confirmed reported case of child abuse or neglect) (Stanley et al., 2003). Current figures show that indigenous children are more than 6 times likely than other children to be the subjects of child maltreatment substantiations. Substantiation rates are 35.3 per 1,000 for indigenous children and 5.5 per 1,000 for non-indigenous children (AIHW, 2009). Given concerns that indigenous communities are less likely to report maltreatment than non-indigenous communities, these figures may be an under-estimate of the true rate of child maltreatment in Aboriginal and Torres Strait Islander communities (Stanley et al., 2003).

1.6.3 The Provision of Alternative Care Placements: Australia's Restructured System

Traditionally, state governments in Australia provided some alternative care placements, and also licensed and funded alternative care providers within the non-government sector (Barber & Delfabbro, 2004; Tomison 2002b). As discussed earlier, non-government and voluntary welfare agencies have played an important role in contributing to the provision of alternative care placements since white settlement in Australia (Barber & Delfabbro, 2004). Until recently, budgets for foster care agencies were 'grants-based', as was the case for most Australian non-government welfare programs which were supported by government funds (Barber, 2001). Reflecting a view that the grants-based approach creates "inefficiency and duplication" (p. 2) in welfare services, there has been a move away from grants-based funding towards contestability or competitive tender (Barber, 2001). This has led to a number of services being contracted out to non-government agencies (Barber, 2001).

These changes have resulted in the alternative care system being restructured along 'purchaser-provider' lines, where child welfare departments are 'purchasers' rather than 'providers' of public services (i.e., alternative care placements), and the non-government

foster care agencies have become the sole ‘providers’ of alternative care placements (Barber & Delfabbro, 2004). In effect, governments have reduced its role in the provision of foster care services (including alternative care placements) and increasingly outsourced to the non-government sector (Barber & Delfabbro, 2004). Rather than being collaborators working towards a common goal, a division of labour between government and non-government agencies involved in child protection has been created (Barber & Delfabbro, 2004). While the statutory child welfare departments are responsible for all decisions relating to the welfare of children and ensuring that they have a suitable placement in which to live, foster care agencies (e.g., Anglicare, Barnardos) are responsible for recruiting, training, and supporting caregivers, and providing placements for children in need.

1.6.4 Alternative Care Placement Options

In Australia, alternative care can take a variety of forms including i) home based care, ii) community residential care, iii) family group homes, and iv) community-based housing. In practice however, the last two placement options are very rarely used.

Home-Based Care

Home-based care refers to family based care, where caregivers voluntarily provide full time care in their family home, and are compensated for the financial costs of caring for a child by the state (Barber & Delfabbro, 2004). Home-based care includes ‘relative’ or ‘kinship’ care, where the caregiver is a family member or less commonly a person with a pre-existing relationship to the child (AIHW, 2007).

In all jurisdictions, kinship care is favoured over non-kinship care. Children’s removal from their parents (whether those parents provided adequate care or not) is a traumatic experience which is thought to be exacerbated by being placed in unfamiliar homes comprised of unknown caregivers and families (Shlonsky & Berrick, 2001). Kinship care is

thought to minimise some of this trauma as children are placed in a familiar environment with relatives to whom they have a biological and social connection, thus contributing to their sense of belonging and family (Shlonsky & Berrick, 2001). Furthermore, kin caregivers are more likely to accept siblings into their homes (Shlonsky & Berrick, 2001). While the benefits of maintaining sibling groups in alternative care are unclear, there is evidence of the benefit of positive sibling relationships among nonfoster children (Brody, 1998) and there is general consensus in the field that placing siblings together rather than separating them, is preferable (Barber & Delfabbro, 2004). Lastly, kin placements increase the likelihood that children will be placed in a foster family who share their cultural background and beliefs, thus enhancing cultural continuity (Shlonsky & Berrick, 2001).

For indigenous children, home-based care placements with Aboriginal or Torres Strait Islander caregivers are a priority. All jurisdictions have adopted the ‘Aboriginal Child Placement Principle’ either in legislation or policy which specifies a hierarchy of preferred placement options for indigenous children as follows: placement with a member of the child’s family, placement within the child’s indigenous community, and placement with other indigenous people (AIHW, 2007).

Community Residential Care

Community residential care refers to residential buildings owned by the jurisdiction where small groups of children reside under the care and supervision of paid and rostered staff employed by the child welfare department (AIHW, 2007). Generally, community residential care is used for older children with more complex needs (AIHW, 2007).

Family Group Homes

Family group homes refer to residential buildings which are generally owned by the jurisdiction and typically run as group homes in that they house limited numbers of children who receive 24 hour care by resident substitute parents (AIHW, 2007).

Community-Based Housing

Community-based housing includes subsidised housing, supervised placements with friends or neighbours, or mediated placements with extended family members (Barber & Delfabbro, 2004).

1.6.5 The Increased Reliance on Home-Based Care

Since the early 1990s, the proportion of children who are placed in home-based foster care as opposed to community residential care has been steadily increasing (Barber & Gilbertson, 2001). For example, while home-based care accounted for approximately 58% of the alternative care placements made in Australia in 1983 (Barber & Gilbertson, 2001) this figure had risen to 94% by 2006 (AIHW, 2007). Currently, 48% of children live in home-based foster care, 45% in home-based kinship care, and 1% in some other type of home-based care (AIHW, 2009). Australia's reliance on home-based care "as the option of choice for children who are unable to live with their families is now at historically unprecedented levels" (Barber & Gilbertson, 2001, p.3).

There are a range of reasons why home-based care has become the placement option of choice. First, home-based care is thought to avoid the problems associated with institutional care. The decline in use of residential care has been due to recognition of child maltreatment in such settings, and research describing the potentially detrimental effects of institutionalisation on children's development and wellbeing (Smyth & Eardley, 2008). Second, home-based care is considered to best model the family environment in which most

children live, and thus offer foster children some sense of normalcy (Barber & Delfabbro, 2004). Third, research has shown that children who experience home-based care are more likely than children who experience group or institutional care to have positive long-term outcomes (Barber & Delfabbro, 2004). However, as home-based care and group or residential care are usually used for very different populations of foster children (i.e., group or residential care usually caters for more challenging and disruptive children), research demonstrating relationships between home-based care and positive outcomes must be interpreted with caution (Barber and Delfabbro, 2004). Finally, heavy reliance on home-based care, currently the most affordable alternative care placement option available, is likely to be influenced, at least in part, by government desires to reduce expenditure on welfare services (Barber & Gilbertson, 2001).

1.6.6 The Shortage of Placements

The shift away from residential care towards home-based care has had serious consequences for alternative care. First, it has created a severe shortage of appropriate placements for children with special needs (e.g., those with disabilities or severe emotional or behavioural problems), for whom residential care may be more appropriate (Barber & Delfabbro, 2004). Second, the shift away from residential care, coupled with the increased number of children requiring alternative care, has resulted in a greater need for foster caregivers. There is now a large gap between demand for and supply of foster caregivers (Barber & Delfabbro, 2004). Across Australia, the number of available caregivers has been decreasing and people are increasingly less willing to volunteer (Barber & Delfabbro, 2004). Reasons for the lack of caregivers include the personal burden of having to care for increasingly difficult children with challenging behaviours, and the expense associated with caring for children. It has been suggested that many foster caregivers are themselves having to contribute financially to alternative care services (Falconer, 1998), as the financial allowances

they receive from the state are not covering the full costs of looking after foster children (Barber & Gilbertson, 2001).

The social and demographic forces operating in Western societies today have also reduced the capacity of individuals to participate in voluntary work (Barber and Delfabbro, 2004). These include the increasing number of women, who traditionally filled the role of carer, moving into the paid workforce, the dramatic increase in the number of single-parent families, the increased burden of work placed on most families as a consequence of the deregulation of the labour market, and the increasing number of people who are being called upon to care for elderly relatives as a result of our ageing population (Barber & Delfabbro, 2004).

The supply of volunteer caregivers is likely to decrease further with time not only because of these demographic and social trends which are likely to continue, but also because of the loss of the current generation of caregivers who will retire as they enter old age (Barber & Delfabbro, 2004). This is problematic because the current shortage of placements for children in need of alternative care is already placing enormous pressure on child welfare staff, foster carer agencies, and foster caregivers. There are not enough placements available and child welfare workers are being forced to place children in temporary accommodation (including transitional accommodation and motels) until placements become available, or in less than optimal placements (Schubert, 2006). These include placing children with caregivers of different cultural backgrounds, placing children far from their own community, moving children between short term placements, or placing young children with elderly caregivers (Schubert, 2006). Foster care agencies are trying to recruit new foster caregivers while retaining those they already have, while foster caregivers are being asked to care for more children than they are willing or able to manage. Many are also being asked to care for children with needs they may not be equipped to meet.

1.7 South Australia's Alternative Care System

1.7.1 The Restructured System

The restructure of alternative care to a purchaser-provider model, as discussed earlier, occurred in South Australia in December, 1997. As with other Australian States, this resulted in the outsourcing of nearly all alternative care services to the non-government sector through competitive tenders, and consequently created a division of responsibility between the child protection department that requests placements for children in the system, and the non-government foster care agencies that provide these placements (Barber & Delfabbro, 2004).

Although the child protection department, Families SA, has remained the primary case manager for children in alternative care and their families of origin, the non-government foster carer agencies, or Alternative Care Service Providers (ACSP) as they are now called, are responsible for the recruitment and support of foster caregivers. All children requiring a placement are referred by Families SA to the Central Alternative Care Unit (CACU), whose function is to liaise with the ACSPs in order to obtain an appropriate placement (Barber & Delfabbro, 2004).

1.7.2 Families SA

In South Australia, the child welfare department, Families SA, is located within the Department for Families and Communities. Families SA has 19 office locations known as 'district offices'; 10 are located in metropolitan areas and 9 are located in rural areas. Each district office is accountable to one of three regional offices. The Adelaide, Aberfoyle Park, Marion, Noarlunga and Woodville District Offices belong to the Southern Metropolitan Regional Office, while the Elizabeth, Enfield, Gawler, Modbury and Salisbury District Offices belong to the Northern Metropolitan Regional Office. The rural district offices –

Ceduna, Coober Pedy, Mount Gambier, Murray Bridge, Port Augusta, Port Lincoln, Port Pirie, Riverland, and Whyalla – belong to the Country Metropolitan Regional Office.

In South Australia, children in alternative care are managed by one of these district offices and are assigned to a social worker or caseworker from that office. The caseworker provides overall case management for the children they are assigned and act as delegated legal guardians of those children under a Guardianship of the Minister (GOM) order.

1.7.3 Alternative Care Service Providers

The ACSPs are responsible for providing placements for children in the alternative care system, for recruiting, and training carers, and for providing carers with ongoing support. These services are provided by Anglicare SA in metropolitan Adelaide, and Uniting Care Wesley, Centacare, and Anglicare Community Care in the country areas (Families SA, 2007).

In addition, there are ACSPs that provide placements for specific populations of children, and therefore recruit caregivers who are able to provide care for these populations. Life Without Barriers provides alternative care placements for children with a disability or special needs, Baptist Community Services provides placements for adolescents, and Aboriginal Family Support Services (AFSS), Port Lincoln Aboriginal Health Services, and the Southern Country Aboriginal Partnership provide placements for Aboriginal or Torres Strait Islander children with indigenous caregivers (Families SA, 2007).

1.7.4 Central Alternative Care Unit

The CACU is located within the Department for Families and Communities. In addition to liaising with ACSPs to obtain placements for children in need of alternative care, the CACU is responsible for completing the assessment of foster caregivers and plays a role

in managing funds used to support the development and maintenance of placements and family preservation services.

Although CACU's role is to obtain appropriate placements for children in need, staff responsible for undertaking this work do so without ever actually meeting the children and in many instances, the foster parents (Barber & Delfabbro, 2004). This is yet another consequence of the 1997 restructure of alternative care.

1.7.5 Screening Process for Caregivers

All caregivers must undergo a rigorous two-part screening process before they are allowed to foster children (Families SA, 2007). The initial screening is undertaken by an Alternative Care Service Provider and involves a general background inspection including a criminal history record check and a medical assessment. In addition, an ACSP representative conducts an initial home visit to ensure that the home environment is safe. Volunteers who are deemed potentially suitable caregivers are referred to the second screening process which is undertaken by the Central Alternative Care Unit (CACU) (Families SA, 2007).

A staff member from the CACU works with potential caregivers and their families to undertake the screening and assessment requirements for registration as a Foster Carer in South Australia, over several weeks (Families SA, 2007). During this period, the CACU worker conducts home-visits and may ask the potential caregiver and his or her family to attend training courses. The purpose of these is to gain an understanding of the potential caregivers' circumstances, to identify the level of experience they have in caring for children, and to determine whether their parenting skills are appropriate. Upon successful completion of this screening process, the CACU worker submits an assessment report to the Foster Carer Registration and Licensing Agency recommending the potential caregiver's registration. The Registration and Licensing Agency may require further information or may decline the application (Families SA, 2007).

Chapter Two

Literature Review

2.1 Adversities Experienced by Children in Alternative Care

Children in alternative care are a vulnerable population, particularly for psychosocial problems, due to the combination of biological, social, and environmental adversities they experience (Garwood & Close, 2001; Pilowsky, 1995; Rutter, 2000; Vig, Chinitz & Shulman, 2005). These adversities can be grouped into four broad categories: i) genetic vulnerability, ii) pre-care experiences, iii) experiences while transitioning to care, and iv) experiences in care.

2.1.1 *Genetic Vulnerability: Parental Mental Health Problems*

Many of the psychosocial difficulties prevalent among children in care may be associated with genetic factors (Rutter, 2000; Rutter, Silberg, O'Connor, & Simonoff, 1999; Tarren-Sweeney, 2005). A substantial proportion of children in alternative care have previously lived in families with histories of mental ill-health and/or substance abuse (Barber & Delfabbro, 2004). For example, in a study of 182 foster children in Scotland conducted by Minnis, Everett, Pelosi, Dunn & Knapp (2006), 52% of birth mothers were known to have had mental illness or learning disability, and 57% were known to have abused drugs or alcohol or had been involved in criminal activity (Minnis et al., 2006). The high rate of these problems in biological families place many foster children at genetic risk for the development of psychological problems (Rutter, 2000). However, while genetic vulnerability is a risk factor, as pointed out by Rutter (2000), evidence suggests that it is uncommon for genetic factors alone to result in psychopathology. Usually numerous genetic factors and

environmental or social experiences are involved, and it is their 'complex interplay' that results in psychopathology (Rutter, 2000, p.686).

2.1.2 Pre-Care Experiences

The majority of children who come into alternative care have experienced a number of pre-care adversities that render them at risk for mental health problems. For example, many children come from dysfunctional family backgrounds with intergenerational histories of abuse and financial and social disadvantage (Barber & Delfabbro, 2004; Hansen, Mawjee, Barton, Metcalf, & Joye, 2004). Among the most serious adversities are pre-natal exposure to drugs and alcohol and post-natal exposure to child maltreatment.

Pre-Natal Exposure to Drugs and Alcohol

A large proportion of children in alternative care have been exposed to prenatal maternal drug and/or alcohol abuse. Outcome studies of neonates who have been prenatally exposed to marijuana, cocaine, and/or opiates have an increased incidence of prematurity, lower birth-weight, a smaller head circumference, and shorter stature (Mathias, 1998). Assessing the long-term consequences of prenatal drug exposure as these children grow older is more complex, but there is evidence that children who have been prenatally exposed to drugs may be at risk for later behavioural difficulties (Mathias, 1998). For example, Chasnoff et al.'s (1998) longitudinal prospective study of 95 6 year old children prenatally exposed to maternal cocaine and other drug use versus 75 matched (on race and socioeconomic status) non-exposed children, showed that the children's mental health at 4, 5, and 6 years of age was significantly poorer for exposed children than for non-exposed children. The authors found that prenatal exposure to cocaine and other drugs had a significant direct effect on children's behaviour at 4, 5, and 6 years of age, after controlling for home environment (Chasnoff et al., 1998). More recently, Linares et al. (2006) compared rates of mental health problems among 169 children prenatally exposed to cocaine versus 153 children not prenatally exposed to

cocaine, of similar race and socioeconomic status, at 6 years of age. Results showed that exposed children were significantly more likely than non-exposed children to self-report symptoms of oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD). There were however, no significant differences in rates of problems for exposed versus non-exposed children as reported by caregivers.

Excessive use of alcohol can also harm the developing foetus, and result in foetal alcohol syndrome or foetal alcohol spectrum disorder (Vig et al., 2005). It is believed that these conditions are “under-recognised, under-diagnosed, and under-treated” in the alternative care population (Vig et al., 2005, p. 149). Foetal alcohol syndrome is characterized by specific facial characteristics, growth restriction, cognitive abnormalities and behavioural problems (Bailey et al., 2004). Cognitive abnormalities vary but typically children have mild retardation and experience problems with language, abstract reasoning, and memory. Behavioural problems can include social and attentional difficulties, hyperactivity, and poor impulse control (Vig et al., 2005). Foetal alcohol spectrum disorder is the term used to “encompass all levels of and outcomes associated with prenatal alcohol exposure” that do not meet criteria for foetal alcohol syndrome (Bailey et al., 2004, p. 1037)

Child Maltreatment

Child maltreatment (whether through physical abuse, sexual abuse, emotional maltreatment, or neglect) violates children’s rights (Cicchetti & Toth, 1995) and causes them significant trauma. Children who suffer maltreatment experience various problems including poor self-esteem, depression, aggression, cognitive deficits, poor communication skills, conduct disorders, delinquent behaviours (Halfon, Berkowitz & Klee, 1992), poor coping skills, regressed behaviours, lower social maturity, and difficulties in forming meaningful relationships (McIntosh & Phillips, 2002; Tomison, 2001a). Some of the more serious consequences of child maltreatment are those that are irreversible (abusive head injuries or

maldevelopment of the brain) or resistant to change (e.g., disorganised attachments), as discussed below.

Abusive Head Trauma: Abusive head trauma is one of the most severe forms of child physical abuse, and has been the leading cause of child maltreatment related deaths (D'Lugoff & Baker, 1998). There are two major types of abusive head trauma. The first is trauma caused by an impact injury to the head (e.g., a direct blow to the head). The second is described as the Shaken Baby Syndrome (SBS), which refers to situations where children are shaken in a way that causes their brain to rapidly accelerate and decelerate against the inside of the skull (D'Lugoff & Baker, 1998; King, McKay & Sirnick, 2003). Both forms of abusive head trauma can result in death, or permanent brain injuries. In fact, SBS has a particularly high mortality rate (15-27%) (King et al., 2003) and of those who survive, over half have brain damage (Vig et al., 2005). The difference between an impact injury and SBS is that the latter is more likely to go undetected. SBS leaves no visible wounds and is difficult to recognize, particularly among victims with less severe forms of brain injuries (King et al., 2003). As a result, many children who have been the victim of SBS go undetected despite subsequent neurological and developmental consequences (King et al., 2003). It is likely that many of these children are eventually placed in alternative care due to other concerns about their safety.

Effect of Child Maltreatment on Brain Development: The early years of children's lives are crucial for healthy brain growth and development (US Department of Health & Human Services, 2001). The human brain is a complex organ which enables organisms to "sense, process, store, perceive, and act on information" from external (e.g., visual, auditory) and internal (e.g., hormonal signals of hunger) sources (Perry, Pollard, Blakely, Baker, & Vigilante, 1995, p. 273). Neurons are key working units of the brain and they are interconnected into networks, which in turn are interconnected to form systems. Different

systems in the brain are associated with different functions (Perry et al., 1995). At birth, the human brain is still actively developing (US Department of Health & Human Services, 2001). Development occurs during early childhood in a sequential and hierarchical manner, with less complex areas (e.g., the brainstem) developing first and the most complex areas (e.g., the limbic and cortical areas) developing last (Perry et al., 1995; US Department of Health & Human Services, 2001). During active development, neural systems are strongly influenced by children's experiences (US Department of Health & Human Services, 2001). Different areas of the brain develop and become fully functional at different stages during childhood, and for each area, there is a window (or critical period) during which specific environmental experiences are important for optimal development. For example, during the first 3 to 4 years of life, it is believed that the neural structures responsible for personality, emotions, learning, and coping with stress are established, reinforced, and achieve permanency (Committee on Early Childhood, Adoption & Dependent Care, 2000). With appropriate early childhood experiences, these brain areas can develop to their full potential. However, disruptions during development periods may lead to abnormalities which are considered to be difficult to reverse (Perry et al., 1995). Such disruptions can result from either a lack of sensory experience (e.g., severe child neglect) or from atypical patterns of neuronal activation due to extreme or traumatic experiences (e.g., child physical abuse) during critical periods of development (Perry et al., 1995).

According to Perry et al. (1995), two major neuronal response patterns that may be relevant to the maltreated child are the hyperarousal and dissociative responses. When children are presented with a threat, they typically respond with a hyperarousal response, commonly described as a defensive, fearful or 'fight or flight' response. This response leads to adaptive changes in emotional, behavioural, and cognitive functioning to promote survival (Perry et al., 1995). However, when this adaptive fear response is continually activated as a result of repeated trauma or even reminders of the initial trauma, it can result in a maladaptive

persistence of the fear response (Perry et al., 1995). The regions of the brain involved in the hyperarousal response are always 'on', and because of this, children often experience exaggerated reactions to every day stressors which result in hyperactivity, anxiety, impulsivity, and a focus on cues that may be threatening (Perry et al., 1995; US Department of Health & Human Services, 2001).

Young children are not able to fight or flee when they are in the hyperarousal state, but instead use vocalisation (usually crying) to alert others that they are under threat and require help (i.e., to fight for them, or flee with them) (Perry et al., 1995). According to Perry et al. (1995), in the absence of an appropriate parental or caregiver response, the child may eventually abandon this behaviour, and move from a hyperarousal response to a dissociative state. The dissociative response has been referred to as the 'surrender' response (Perry et al., 1995). One of the first reactions of the dissociative response is to freeze. The adaptive advantage of this is it may allow better sound and visual localisation of the potential threat, act as a form of camouflage, and allow one to prepare a survival response (Perry et al., 1995). Traumatized children who have developed a dissociative pattern may use this freezing mechanism, both cognitively and/or physically, when they feel anxious or threatened. For example, in an anxious situation (e.g., a family visit), children may act as if they have not heard or refused to comply with an adult's request (Perry et al., 1995).

Perry et al. (1995) suggested that children who have experienced trauma may move along the dissociative continuum from freezing to complete dissociation. Dissociation is defined as the disengaging from external stimuli and attending to an 'internal world' (Perry et al., 1995, p. 280). Examples of dissociation include daydreaming, fantasising, depersonalisation, and derealisation (Perry et al., 1995). Children who dissociate have been described as having a restricted affect, being numb, non-reactive, staring off into space with a

glazed look, and ‘acting like they are not there’ (Perry et al., 1995; US Department of Health & Human Services, 2001).

According to Perry et al., (1995), deprivation of critical experiences during brain development may be the most injurious effect of child maltreatment. Unlike broken bones, maldevelopment of the brain is not readily identifiable but may be permanent (Perry et al., 1995). Consequently, these children, many of whom may be placed in alternative care at some stage in their life, are at increased risk for neuropsychiatric problems (Perry et al., 1995).

Attachment: Attachment theory is concerned with how a child’s early relationship with their parent or carer impacts upon their emotional and social development, and their future ability to develop relationships (Department of Children’s services, 2006). According to this theory, attachments are developed by “mutually reinforcing patterns of behaviour between a caregiver and a child” (DOCS, 2006, p.2). Infants possess a range of preadapted behaviours (e.g., crying, clinging, signaling) that they can use to seek proximity to an attachment figure, particularly during moments of need (e.g., hunger, fatigue, illness) (Biringen, 1994; Carlson, 1998). The parental interpretation and response (e.g., providing comfort or food) to the child’s attachment behaviour forms the basis of the interactive relationship and defines the quality of the attachment between child and parent. Parents who respond appropriately, with consistent, responsive care, foster secure attachments in their children (DOCS, 2006).

According to attachment theory, children with secure attachments are more likely to have a sense of belonging, trust, and safety (DOCS, 2006). They are thought to have greater confidence that they will be looked after and protected by a reliable parent or carer, and are able to use this as a base for social exploration and play (DOCS, 2006). Children with secure

attachments generally have a positive sense of self, skills to regulate emotion, and positive expectations of social experiences and the behaviour of others (Vig et al., 2005).

Children with maltreating parents often miss out on sensitive and appropriate emotional care (Tarren-Sweeney, 2005). According to attachment theory, many of these children develop insecure attachments, and lack confidence that their attachment figure will meet their emotional needs (DOCS, 2006). Three types of insecure attachments have been identified; avoidant, ambivalent, and disorganised (Biringen, 1994; Gauthier, Fortin, & Jeliu, 2004). Infants with avoidant attachment tend to minimize or suppress negative emotions in the presence of parents who have previously dismissed or ignored such emotions (van Ijzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Infants with ambivalent attachment tend to intensify their expression of negative emotions to increase the likelihood that their behaviour will draw the attention of their inconsistently responsive parents (van Ijzendoorn et al., 1999).

Disorganised attachment is believed to be particularly relevant to maltreated children (Gauthier et al., 2004). Maltreating parents can behave in highly confusing and contradictory ways towards their children (van Ijzendoorn et al., 1999). On the one hand they may frighten their children through unpredictable maltreating behaviours (e.g., sexual and physical abuse), yet on the other, they can be the only source of comfort (e.g., when they respond to cries of hunger by providing food) (van Ijzendoorn et al., 1999). Thus, maltreating parents are both a source of fear and the only resources available to respond to moments of need (van Ijzendoorn et al., 1999). The complex mix of secure and insecure parental behaviours and responses is thought to lead to disorganised attachment (van Ijzendoorn et al., 1999). Infants with disorganised attachments may display bizarre, incoherent, and contradictory behaviour (e.g., indifference upon the parent's return after excessive distress during separation or

seeking proximity to a stranger instead of the parent after separation) (van Ijzendoorn et al., 1999).

Attachment disorders have been linked to later emotional and behavioural problems in children (van Ijzendoorn et al., 1999; Vig et al., 2005). For example, in a study of 157 children tracked from birth to 19 years of age, Carlson (1998) found that attachment disorganization was associated with later behaviour problems in preschool, elementary school, and high school, as well as with psychopathology and dissociation in adolescence. Results from the study suggest that disorganised attachment may increase children's risk for psychopathology even when other variables (i.e., ambivalent/avoidant attachment quality, early behaviour problems, and family relationship quality) are taken into account (Carlson, 1998).

2.1.3 Transitioning to Care Experiences

The process of being placed in care may pose risk to healthy functioning because of the disruption children experience during this time (Halfon et al., 1992). During transition to care, children are removed from their homes and separated from their family of origin. Although children are removed from harmful or neglectful families, their loss is unlikely to be a completely positive experience (Halfon et al., 1992). In fact, it has been suggested that children suffer as much from being separated from maltreating parents as they do when separated from nurturing parents (Vig et al., 2005). In addition to the loss of family and familiar environments, children must cope with being placed in new homes and having to integrate into new families (often comprised of complete strangers), or non-family settings (e.g., community residential care) (Halfon et al., 1992; Pilowsky, 1995; Tarren-Sweeney, 2005). This can be particularly anxiety provoking for maltreated children who are likely to have negative expectations of future relationships and may be fearful of subsequent maltreatment by a stranger due to their past experiences (Vig et al., 2005).

Furthermore, in many cases, children's alternative care placements are located in different, and often geographically distant, neighbourhoods. This may necessitate a change in school (Cashmore, 2000) which represents another major challenge with which children have to cope. Separation from families and communities means that children lose most, if not all, of their existing relationships and friendships at a time when they are having to cope with many major life changes.

2.1.4 Experiences While In Care

Even the circumstances associated with being in care may impede children's healthy development (McIntyre & Keesler, 1986). Despite the protective purpose of alternative care, children may be exposed to considerable risk factors (Tarren-Sweeney, 2005).

Relationship to the New Caregiver

Most children in alternative care have had negative prior experiences with adults previously responsible for their care. As discussed, these children often have insecure attachments due to inappropriate caregiving experiences and sub-standard care. They may also have been the victims of severe abuse and/or neglect, and have experienced prior separation from their parents of origin. As a result, children in care may have negative expectations of future relationships and may be fearful of subsequent maltreatment by caregivers (Vig et al., 2005), or separation from caregivers. Psychological defences and behaviours (e.g., avoidance, anger) that helped children survive maltreating caregiving may be maladaptive in a normal home environment. A vicious cycle may develop whereby these defences and behaviours discourage caregivers from offering nurturance and forming close relationships with the children in their care, thus contributing further to children's insecure attachments (Vig et al., 2005) and associated emotional and behavioural problems.

Quality of Care Provided

In order to develop into well-adjusted adults, children require an appropriate level of physical and emotional care (Shlonsky & Berrick, 2001). Given their prior experiences, maltreated children generally require additional support beyond that provided to other children in the community (Shlonsky & Berrick, 2001). While the physical safety of foster homes is easily measured, the less tangible characteristics such as whether homes are warm and loving, and whether caregivers provide an appropriate standard of emotional and developmental care, are much more difficult to assess and monitor (Shlonsky & Berrick, 2001).

Most caregivers have limited financial resources and income (Shlonsky & Berrick, 2001). While there is considerable evidence to show that poverty impacts negatively on child outcomes in non-foster families, less is known about the impact of caregivers' poverty on foster children (Shlonsky & Berrick, 2001). A study conducted by Fein, Maluccio, Hamilton, and Ward (1983) suggests however, that the effects of parental income on children extend to caregiver income on children. They found that high caregiver income was associated with more favourable child outcomes such as better family adjustment, emotional and developmental functioning, behaviour, and school functioning (Fein et al., 1983). The homes of low-income earners are less likely to have valuable resources - such as age appropriate books, toys, computers, and computing programs - that assist children's development (Shlonsky & Berrick, 2001). Furthermore, given the association between poverty and lower levels of parental education and literacy, impoverished caregivers may be less capable of providing appropriate language and cognitive stimulation for children, and less able to provide assistance with children's education (e.g., homework) (Shlonsky & Berrick, 2001). Data on the effect of foster parents' level of education and economic circumstances are scarce, however a study by Simms and Horwitz (1996) found that foster parents of lower-

income in their sample provided inadequate stimulation to support normal development, let alone help repair the effects of past maltreatment.

Disadvantaged Neighbourhoods

Another risk factor that may contribute to poorer well-being for children in alternative care is the disadvantaged neighbourhoods in which many live. As many caregivers have limited income, their homes are located in suburbs with a greater proportion of low income families (Shlonksy & Berrick, 2001). Suburbs of lower economic wealth have poorer quality housing, increased crime rates, poorer schools, less social mobility, and greater unemployment than suburbs of higher economic wealth (Korbin & Coulton, 1996; Shlonksy & Berrick, 2001). As such, they are not ideal settings in which to raise vulnerable children (Shlonksy & Berrick, 2001). Leventhal and Brooks-Gunn (2000) found evidence, in their literature review on the effects of neighbourhood residence on child and adolescent well-being, that low socioeconomic status neighbours have adverse effects on children's and adolescents' mental health after controlling for family-level characteristics. Results from a recent study by Schneiders et al. (2003) support this conclusion. They found that even after controlling for parental socioeconomic status, neighbourhood socioeconomic disadvantage was associated with greater behavioural problems amongst children.

Health Problems

Upon entry to alternative care, children typically have multiple physical and mental health problems (Schneiderman, Brooks, Facher, & Amis, 2007). In a study examining the health problems of 1407 children who received a complete health screening within five days of first entry into foster care, Chernoff, Combs-Orme, Risley-Curtiss, & Heisler, (1994) found that 92% of children had at least one physical abnormality, and of children older than 3 years of age, 15% had suicidal ideation. The majority of children (88%) required urgent or nonurgent referrals for medical services, with only 12% requiring routine follow-up care

(Chernoff et al., 1994). Similarly, in a study of 215 children in foster care, Halfon, Mendonca and Berkowitz (1995) found that 82% of the children had at least one chronic condition (30% had one chronic condition, 23% had two, and 29% had three or more) such as asthma, recurrent ear infections, anaemia, and neurological abnormalities (Halfon et al., 1995)

Being in alternative care does not guarantee that children's healthcare needs will be met (Vig et al., 2005). Foster children may go without adequate and timely health services (Rubin, Alessandrini, Feudtner, Localio, & Hadley, 2004; Schneiderman et al., 2007). Although current data are not available, a 1995 report in the US on the health services of foster children in Los Angeles County, New York City, and Philadelphia County suggested that 32% of foster children had untreated health problems after placement, 34% received no immunizations, and 12% of foster children under 3 years of age received no routine care (US General Accounting Office, 1995).

Many factors contribute to the inadequate system of health care for foster children (Schneidermann et al., 2007). Chief among them is the fact that responsibility for children's healthcare is often delegated to caregivers, as caseworkers do not have the resources to closely monitor all children for whom they are responsible (Vig et al., 2005). For several reasons, caregivers are also at significant disadvantage when assessing the healthcare needs of the children in their care. First, children in alternative care typically have complex and special healthcare needs (Vig et al., 2005). Caregivers may lack the skills needed to identify these needs and negotiate with the health and welfare systems responsible for treatment (Vig et al., 2005). Second, caregivers often have children in their care for relatively short periods of time. As a result, they may have difficulty ascertaining whether mild symptoms or subtle changes in behaviour or functioning are 'normal' or whether they represent a change in children's health status.

Most children enter alternative care with inadequate, incomplete, or unknown medical histories (Raghaven, Inkelas, & Franke, 2007). Thus, caseworkers and caregivers often lack the information they require to detect existing or recurring healthcare problems and obtain appropriate healthcare for foster children (Vig et al., 2005). Furthermore, when foster children present for treatment, medical practitioners have no history on which to draw, hampering their ability to make accurate diagnoses.

Lack of continuity in medical and healthcare for foster children, particularly if they change placements frequently, can contribute to health problems being inadequately treated (Rubin et al., 2004). Changes in placements often cause disruptions to continuity of care at two levels, with both foster parents and healthcare providers changing with each placement (Rubin et al., 2004). This is a significant problem because failure to identify and address medical and mental health problems of foster children not only adversely affects their current quality of life, but may also lead to future health and behaviour problems, which can further impede their ability to adjust to subsequent placements (Chernoff et al., 1994).

Education Problems

Children in alternative care “represent one of the most educationally vulnerable populations” (Zetlin & Weinberg, 2004, p. 917). They are more likely to have significant delays in reading, maths, language, and overall performance compared to their peers in the general community (Heath, Colton & Aldgate; Mitic & Rimer, 2002; Zima et al., 2000). As many as 75% of foster children perform below grade level and more than 50% do not graduate from high school (Kelly, 2000).

Multiple changes in home residence and school can adversely affect learning and achievement of children in care (Eckenrode, Rowe, Laird, & Brathwaite, 1995). School changes, particularly during a single semester, mean that children often miss important

educational material. This can impact negatively upon children's academic performance and sense of competency. Furthermore, new students have to adapt to a new school system and differences in curriculum and educational expectations, while they are struggling with social isolation and the task of establishing new relationships with teachers and peers (Eckenrode et al., 1995; Zetlin & Weinberg, 2004). Children who repeatedly change placements and schools are at increased risk of academic failure (Kelly, 2000).

There are also structural features of the care and education systems which may contribute to the poor education of children in alternative care (Harker, Dobel-Ober, Lawrence, Berridge, & Sinclair, 2002). Foster children usually represent a very small proportion of school populations (Harker et al., 2002). As a result, teachers may have limited understanding of the complex needs of these children, and resources to provide individualised assistance may not be available (Harker et al., 2002). Furthermore, social workers may not be able to prioritise children's educational needs given that their primary concerns are the immediate needs of children, such as dealing with family relationships and securing suitable placements (Harker et al., 2002).

Many children in foster care experience academic problems and/or disruptions to their education, which may adversely affect their long-term outcomes (Zetlin & Weinberg, 2004). Evidence shows that investments in education can reduce poverty, unemployment, and crime, and promote public health and welfare (Nogeura, 2002). Education is a key factor that has the potential to improve foster children's future financial security and outcomes (Zetlin & Weinberg, 2004).

Placement Instability

Although a common priority in Western jurisdictions is avoidance of disruption for children in care (Barber & Delfabbro, 2004), this is often not achieved. Children in care may

experience ambiguity about the stability of fostering arrangements and/or placement changes (Newton, Litrownik, & Landsverk, 2000). For example, James, Landsverk, Slymen and Leslie (2004) found that over an 18 month period, a group of 570 foster children in the United States experienced a mean number of 3.5 placements (SD=2.8). In their study of 235 foster children entering new placements in Australia, Barber and Delfabbro (2003) found that 53% (n=123) experienced at least one placement change within the first four months. The majority of these children (67%) were moved for reasons beyond their control (e.g., change in caregiver circumstances, or availability of a more suitable placement), however the remaining (33%) were moved due to behavioural problems that their caregivers could not manage. The mean number of placements experienced by these children in the 4-month period was 5.6 (SD = 4.2) (Barber & Delfabbro, 2003).

There is considerable evidence that placement breakdown and childhood behaviour problems are associated (Pardeck, 1984; Proch & Taber, 1985). However it has been difficult to determine the direction of the cause and effect relationship. It is possible that placement breakdown and changes lead to behaviour problems. Equally, it is possible that childhood behaviour problems cause placements to breakdown. Results from a prospective study (Newton et al., 2000) of 415 children in foster care in the United States suggest that multiple placements are harmful to children. Using a multivariate regression analysis which controlled for initial behavioural problems assessed at approximately 5 months post entry to foster care, they found a significant relationship between number of placements and internalising and externalising behaviour problems at approximately 17 months post entry to foster care (Newton et al., 2000). In a study which tracked 235 children in alternative care in Australia over 2 years, Barber and Delfabbro (2004) found that placement instability for up to one year was not associated with psychosocial harm (as measured using abbreviated forms of the conduct disorder, hyperactivity and emotional disorder subscales from Boyle et al.'s (1987) Child Behavior Checklist (CBC)). If placement disruption continued beyond this time

however, it was clearly associated with adverse psychosocial outcomes (Barber and Delfabbro, 2004). Despite having similar scores at intake, children in the ‘very unstable’ group scored significantly higher than children in the ‘stable’ group on the CBC’s emotionality and hyperactivity scales (i.e., indicating poorer functioning) at the two year follow-up assessment (Barber and Delfabbro, 2004).

Further Child Maltreatment

The assumption guiding placement of vulnerable children in foster care, is that placements are safe and able to offer protection from the adverse conditions children experienced in their family homes. However, of concern is evidence that a number of children are subsequently maltreated while they are in care (Kendrick, 1994; Shlonsky & Berrick, 2001).

The literature on the abuse and neglect of children in foster care is scarce, and data describing the prevalence of maltreatment in care are unavailable. However, a review conducted by Rosenthal, Motz, Edmonson, & Groze (1991) of 290 reported incidents of child maltreatment in alternative care in Colorado, found that 29% of reports were substantiated (i.e., 56% of sexual abuse cases (38 of 68), 18% of physical abuse cases (27 of 154), and 28% of neglect cases (17 of 60)). Reports of child maltreatment that allegedly occurred in foster homes and institutions were twice as likely to be substantiated as reports of child maltreatment that allegedly occurred in group homes and residential treatment centres (Rosenthal et al., 1991).

Systems Abuse

When children enter foster care, “responsibility for their health and welfare passes to the state” (Chernoff et al., 1994, p. 599). In essence, when states intervene and remove children from their parents of origin, they are proclaiming to protect children from further

harm and to provide better care for children than was provided by their parents of origin (Chernoff et al., 1994). This responsibility commences as soon as children are removed from their homes (Chernoff et al., 1994). However, the current review of the in-care risk factors experienced by children in alternative care suggests that some children may be experiencing substandard care. As discussed, foster children may be placed with caregivers who lack the skills and financial resources to provide high quality care, they may be placed in disadvantaged neighbourhoods, have unmet healthcare and educational needs, and experience placement instability. A minority of foster children also experience subsequent maltreatment at the hands of their caregivers.

In recent years, the term ‘systems abuse’ has been used to describe any harm to children that occurs in the context of policies, programs, or services that were intended to provide care or protection to foster children (Cashmore, Dolby, & Brennan, 1994, as cited in James, 2000). Systems that fail to provide appropriate services and care to foster children create conditions that may potentially exacerbate children’s physical and mental health problems and compromise their well-being and long-term potential.

2.2 The Mental Health of Children in Alternative Care

This section reviews literature describing the mental health of children in alternative care. Initially, attempts were made to select only those studies describing children living in *home-based care*, as this is the focus of the present thesis. However, there have been relatively few previous studies examining this population. In light of this, studies describing children residing in various alternative care placements (e.g., home-based care, community residential care, group homes, and juvenile justice placements) as well as studies describing children who have had some contact with child welfare departments (e.g., were the subject of an investigation of maltreatment) were included in this review.

Based on the measures used to assess foster children's mental health problems, studies in this review were divided into three sections: i) those that used non-standardised measures, ii) those that employed the Child Behaviour Checklist (CBCL), the most widely used standardised instrument in child epidemiological research, and iii) those that used standardised instruments other than the CBCL. This method, of grouping and comparing studies according to the measures used, was employed in Tarren-Sweeney's (2005) comprehensive literature review of the mental health of children in care.

2.2.1 *Studies Examining Mental Health Problems using Non-Standardised Measures*

Considerable research examining the mental health of children in alternative care has employed non-standardised measures (Pilowsky, 1995; Tarren-Sweeney, 2005). Although the use of non-standardised scales has largely been abandoned because it is difficult to interpret the meaning of results (Pilowsky, 1995), many studies continue to use some form of ad hoc or non-standardised measures to assess the mental health of children in alternative care. For example, recent studies have used non-standardised clinical assessment tools (e.g., Chernoff et al., 1994), interviews with foster parents or caseworkers (e.g., Holland & Gorey, 2004), or

extracted information from medical files (Hansen et al., 2005) or case files (Burge, 2007; Fleming, Bamford, & McCaughley, 2005).

Despite the limitations associated with the use of non-standardised measures, findings obtained with these methods have contributed to our understanding of the extent and nature of mental health problems experienced by children in alternative care (Tarren-Sweeney, 2005). In fact, studies that have extracted information from the case files of children in alternative care have reported somewhat similar rates of mental health problems for this group, although the nature of problems identified has varied. For example, Burge's (2007) study which recorded diagnosed mental disorders extracted from case files of 429 foster children in Canada found that 32% (136) of children had mental disorders. Of these, most (66%) had one diagnosis, 26% had 2, and the remainder had 3 or more. The most common disorders were ADHD (21%), mental retardation and pervasive developmental disorders (8%), followed by anxiety disorders (4%), oppositional defiant disorders (4%), and attachment disorders (3%). Fleming et al. (2005) reviewed the case files of 25 children in alternative care in Northern Ireland aged 11 to 18 years and found that 44% were described as being in 'poor mental health', or experiencing 'ongoing mental health issues', 52% had issues related to 'self-esteem' or 'self-image', and 60% had 'significant behaviour difficulties'. Similarly, Hansen et al.'s (2004) retrospective review of medical files for 226 children in alternative care in the United States identified 42% as having 'behaviour problems'. The most prevalent problems were aggressive or destructive behaviour (18%) and short attention span or overactivity (10%).

During the last two decades, researchers have increasingly employed standardised measures to assess the behavioural and emotional functioning of foster children. These measures provide increased consistency and objectivity of assessment, and enable scores to be compared with normative data (Armsden, Pecora, Payne, & Szatkeiwicz, 2000).

2.2.2 *Studies Examining Mental Health Problems using Standardised Measures: The CBCL*

The Child Behaviour Checklist (CBCL) (Achenbach, 1991a) is one of the most widely used standardised instruments for children's epidemiological research (Armsden et al., 2000; Tarren-Sweeney, 2005) and it has been the most frequently used measure to assess the mental health of children in foster care. The CBCL can be completed by children's parents, guardians, or others who see children regularly. It provides three broadband scores (Total Problems, Internalising Problems and Externalising Problems), and nine narrowband or syndrome scales that rate children's behaviour in specific areas. Scores can be standardised (T scores) and used to make categorical distinctions between children and adolescents with and without borderline or clinically significant mental health problems on each scale. For the broadband scales, the borderline clinical cut-point (i.e., the lower cut-point) is $T \geq 60$ (approximately $\geq 84^{\text{th}}$ percentile) and the clinical cut-point (i.e., the higher cut-point) is $T \geq 64$ (approximately $\geq 91^{\text{st}}$ percentile). For the narrowband scales, the cut-points are $T \geq 67$ (approximately $\geq 95^{\text{th}}$ percentile) for the borderline clinical range and $T \geq 71$ (approximately $\geq 98^{\text{th}}$ percentile) for the clinical range (Achenbach, 1991a; Achenbach & Rescorla, 2001). Further information about the CBCL is available in Chapter Three.

The CBCL has the potential advantage of permitting comparisons across studies (Helfinger et al., 2000; Tarren-Sweeney, 2005). However, few studies have reported the full range of data available from the CBCL. Furthermore, findings from the CBCL have not always been reported in a format that allows ready comparisons across studies (Helfinger et al., 2000.). There are a number of ways in which data obtained using the CBCL can be reported. These include reporting standardised T scores versus raw scores, broadband scale scores versus narrowband scale scores, continuous scores versus categorical scores (i.e., scores above and below the clinical cut-point), and using lower versus higher cut-points when describing categorical scores (Tarren-Sweeney, 2005). While some studies have reported the

proportion of children scoring above only one cut-point (e.g., Leslie et al., 2000; Urquiza & Wirtz, 1994), others have reported the proportion of children scoring above both cut-points (e.g., Horwitz, Balestracci & Simms, 2001) on the Total Problems scale. Some studies (e.g., Burns et al., 2004; Hurlbert et al., 2004; Leslie et al., 2004) have reported the proportion of children who scored above the clinical cut-point on *any* of the three broadband scales, without reporting the proportions who scored above the cut-point on *each* scale. All of the above-mentioned studies also failed to report mean scores on any of the CBCL scales. On the other hand, some studies (e.g., Barth, Weigensberg, Fisher, Fetrow, & Green, 2008; Marcus, 1991; McAuely & Trew, 2000; Newton et al., 2000) have reported broadband mean scores, without data about the proportions of children scoring above the clinical cut-offs on these scales (see Table 2.1 for a full summary).

Despite variability in the way in which data have been reported, studies employing the CBCL to measure foster children's mental health have consistently reported high levels of problems (Armsden et al., 2000; Tarren-Sweeney, 2005). An effective way in which to appreciate the similarities and differences between child welfare studies that have employed the CBCL and to compare their results is to provide a summary of these studies in tabular format. Such a format was employed by Tarren-Sweeney (2005) in his literature review of the mental health of children in care. Tarren-Sweeney's (2005) format was used in the current literature review with some modifications, including the use of some different studies (see Tables 2.1, 2.2 and 2.3). Table 2.1 provides a summary of the studies reviewed in this literature review, while the results of these studies are reported in Tables 2.2 (continuous CBCL scale scores) and 2.3 (categorical CBCL scale scores). Using Tarren-Sweeney's (1995) method, these data are presented by care type, namely foster care (i.e., home-based care which, when not specified, presumably includes a proportion of children in kinship care), non-kinship foster care, kinship foster care, and various types of care (including in some

cases, juvenile justice placements). The studies and results are also described in more detail below.

Mental Health of Children in Home-Based Care

Continuous scores: This section reviews the results of three studies (Armsden et al., 2000; Marcus, 1991; Tarren-Sweeney & Hazell, 2006) that reported mean CBCL scores for children in home-based alternative care. The study by Armsden et al. (2000) reported scores for 364 children aged 4 to 18 years who were entering a long-term care program and residing in home-based care in various parts of the United States. The study by Marcus (1991) reported CBCL scores for 52 children aged 4 to 13 years who were residing in home-based care placements and had been in their current placement for at least one month, in Maryland, United States. The study by Tarren-Sweeney and Hazell (2006) reported CBCL scores for 347 children aged 4 to 11 years residing in home-based care placements in New South Wales, Australia. Further information about these studies is reported in Table 2.1, while results of these studies are shown in Tables 2.2 and 2.3.

Mean broadband T scores for children in home-based care were in the range of 56 to 61 for the Total Problems scale, 54 to 57 for the Internalizing scale, and 56 to 59 for the Externalizing scale. The results suggested that children in home-based care have more externalizing than internalizing problems, however, all mean scores were substantially higher than mean scores for normative samples (Achenbach & Rescorla, 2001).

Two studies reported mean narrowband T scores for children in home-based care (i.e., Armsden et al., 2000; Tarren-Sweeney & Hazell, 2006). Results from these studies were similar although there was a trend for the group in the latter study to have slightly higher mean scores on most scales. Both groups had higher mean scores on scales assessing externalizing type behaviours (i.e., Aggressive Behaviour, Delinquent Behaviour) than on

scales assessing internalizing type behaviours (i.e., Withdrawn, Somatic Complaints, Anxious/Depressed).

Categorical scores: Four studies (i.e., Armsden et al., 2000; Helfinger et al., 2000; Horwitz et al., 2001; Leslie et al., 2000) reported the proportion of children in home-based care who had scores above the borderline clinical (i.e., lower) and/or clinical (i.e., higher) cut-points on the Total Problems scale, and two of these (i.e., Armsden et al., 2000; Helfinger et al., 2000) reported the proportion of children who had scores above the borderline clinical and clinical cut-points on the Externalising and Internalising scales (see Table 2.3). The study by Armsden et al. (2000) was described earlier. The study by Helfinger et al. (2000) employed a sample of 254 children aged 2 to 18 years who were residing in various alternative care placements in Tennessee, United States. Because this study reported data stratified by the type of care children were receiving, it was possible to extract results for the 105 children residing in home-based care. The study by Horwitz et al. (2001) used a sample of 120 children aged 1 to 6 years at entry to home-based care in Connecticut, United States. Finally, the sample in the study by Leslie et al. (2000) comprised of 480 children aged 0 to 16 years in San Diego, United States who were entering a new episode of home-based care and who had never spent time in a group placement.

The proportions of children with scores above the borderline clinical cut-point on the Total Problems scale ranged from 24% in the study by Horwitz et al. (2000) to 45% in the study by Leslie et al. (2000). Discrepancies between these results may be partly attributable to the fact that Horwitz et al.'s (2001) sample comprised of very young children (1 to 6 years), thus excluding older children and adolescents who may manifest more signs of behavioural and emotional disturbance. Consistent across all four studies however, is that of the children with scores above a cut-point, the majority had scores above the higher (i.e., clinical) cut-

point. This suggests that of children in home-based care with mental health problems, the majority have severe problems.

Estimates of the proportions of children in home-based care with Externalizing and Internalizing scale scores in the clinical ranges were similar across the two studies that reported these data. For example, on the Externalising scale, 38% of children in the study by Armsden et al. (2000) and 31% of children in the study by Helfinger et al. (2000) scored above the borderline clinical cut-point. On the Internalizing scale, 31% of the children in the study by Armsden et al. (2000) and 23% of the children in the study by Helfinger et al. (2000) scored above the borderline clinical cut-point (see Table 2.3). These findings suggest that a greater proportion of children in home-based care have externalising problems than internalising problems.

Although the type of care in which children were residing was not specified, it is assumed that the sample in the study by Urquiza and Wirtz (1994) comprised mainly of children in home-based care. Results showed that 31% of children scored above the borderline clinical cut-off on the Total Problems scale. Although this is on the lower end of the range identified by studies described above, it is likely to be due to the fact that Urquiza and Wirtz (1994) employed a sample of foster children that excluded those with pre-existing intellectual, physical or developmental disabilities.

Gender Differences: Only one study compared CBCL scores for girls versus boys in *home-based care*. Tarren-Sweeney and Hazell (2006) found that boys (n=176) had moderately poorer mental health than girls (n=171) aged 4 to 11 years as indicated by significantly higher CBCL T-scores on the following scales: Total Problems (boys = 62.3, girls = 58.9, $p=.01$); Externalising Problems (boys = 60.2, girls = 57.6, $p=.03$); Internalising Problems (boys = 55.7, girls = 52.8, $p=.03$); and Thought Problems (boys = 59.0, girls = 57.0, $p=.03$). Similarly,

a greater proportion of boys than girls scored above the borderline-clinical cut-off on all CBCL scales (except the Somatic Complaints scale). The largest differences were on the Externalising Problems (56% versus 44%), Thought Problems (28% versus 19%), Internalising Problems (34% versus 26%) and Externalising Problems (56% versus 44%) scales, however information about whether any of these differences were statistically significant was not provided. These results, however, must be interpreted with caution and may not be generalisable to the larger population of children in home-based care for two reasons. First, the sample comprised of children in a restricted age group (4 to 9 years, with a small proportion of 10 and 11 year olds due to delays in recruitment). Second, the response rate for the study was only 56% of children under GOM orders who were not in the care of fostering agencies and whose contact details could be confirmed. There is a risk that the participants were not representative of all children under GOM orders.

Age Differences: There is limited information about whether mental health problems vary for children of different ages in home-based care. Armsden et al. (2000) found that adolescents (12 to 18 years; n=144) had moderately poorer mental health than preadolescents (4 to 11 years; n=171) as indicated by significantly higher CBCL T-scores on the following scales: Internalising Problems (preadolescents = 52.4, adolescents = 55.6); Anxious/Depressed (preadolescents = 55.9, adolescents = 58.2); and Somatic Complaints (preadolescents = 54.3, adolescents = 56.1). Similarly, Tarren-Sweeney and Hazell (2006) found evidence of a small age effect, with older children having a higher Total Problem raw score than younger children ($r^2 = 0.02$, $p = .01$). Both studies however, reported only very limited information about age differences in CBCL scores. The results from these studies must be interpreted with caution and may not be generalisable to the broader population of children in home-based care. Armsden et al.'s (2000) study sampled only children entering a long-term care program and is therefore not representative of children who stay in care for shorter periods of time, namely those who reunify with their families or are adopted.

Furthermore, additional analyses in the study by Tarren-Sweeney and Hazell (2006) revealed that the age effect found in their study was confounded by children's age at entry to the alternative care system, as older children in their sample entered the system at older ages. The authors suggested that the age effect found in their study may have been due to later-placed children entering the alternative care system with higher levels of existing mental health problems.

Despite the limited number of studies describing mental health problems experienced by children living in home-based foster care, results consistently show that children in home-based care have very high rates of mental health problems. According to Tarren-Sweeney and Hazell (2006), their sample of children in home-based care "resembled clinic-referred children in terms of the scope and severity of their problems" (p. 93). Due to study designs and methodological limitations however, there are currently no data available that describe a representative sample of children and adolescents in home-based care, and provide a comprehensive picture of their mental health. There is also very limited information about whether rates of mental health problems vary for children and adolescents of different gender and age. Furthermore, all data describing the mental health of children and adolescents in home-based care have been reported by caregivers, caseworkers, or other adults who know the child. There are currently no data describing the mental health of children and adolescents in care as reported by the children and adolescents themselves.

Mental Health of Children in Non-Kinship Foster Care and Kinship-Foster Care

Continuous scores: Five studies reported mean CBCL scores for children residing in foster care with unrelated caregivers (i.e., non-kinship care). Two of these studies (i.e., Clausen et al., 1998; McAuley & Trew, 2000) only included children in non-kinship foster care. The other three studies (Holtan, Ronning, Handegard, & Sourander, 2005; Keller et al., 2001; Tarren-Sweeney & Hazell, 2006) included children in both non-kinship and kinship

foster care, but reported separate data for the two groups. Only Tarren-Sweeney and Hazell (2006) additionally reported aggregate data for the total sample of children in foster care, as described above.

As summarised in Table 2.1, the study by Clausen et al. (1998) comprised 140 children aged 4 to 16 years in California, United States, who had been in a new episode of non-kinship home-based care for at least two months. The study by McAuley and Trew (2000) used a sample of 19 children aged 4 to 11 years in Northern Ireland who entered a new non-kinship placement intended for at least one year. The study by Holtan et al. (2005) employed a sample of 214 children aged 4 to 13 years in Norway who had been in their kin or non-kin placement for at least one year. The study by Keller et al. (2001) comprised of 240 children aged 4 to 18 years who had been in a long-term care program for one year and were residing in kinship or non-kinship foster care. The study by Tarren-Sweeney and Hazell (2006) has already been described.

As shown in Table 2.2, the mean broadband T scores describing children in non-kinship foster were in the range of: Total Problems, T = 56 to 61; Internalising Problems, T = 52 to 55; Externalising Problems, T = 56 to 60. The mean broadband T scores for children in kinship care were: Total Problems, T = 52 to 56; Internalising Problems, T = 50 to 52; Externalising Problems, T = 53 to 55 (see Table 2.2). These results suggest that children in non-kinship care have poorer mental health than children in kinship care. The study by Holtan et al. (2005) only reported mean CBCL raw scores (see Table 2.2).

The three studies (Holtan et al., 2005; Keller et al., 2001; Tarren-Sweeney & Hazell, 2006) that included children in both forms of care reported higher mean scores (T scores in the studies by Keller et al. (2001) and Tarren-Sweeney & Hazell (2006) and raw scores in the study by Holtan et al. (2005)) for children in non-kinship care than those in kinship care on all

CBCL broadband and narrowband scales (except the Sex Problems scale in Keller et al's, 2001 study). All studies tested the statistical significance of the between-group differences on the broadband scales, and Holtan et al. (2005) and Tarren-Sweeney and Hazell (2006) tested the significance of differences on the narrowband scales. Differences were statistically significant on the Total Problems scale in all three studies, on the Externalising Problems scale in the studies by Keller et al. (2001) and Tarren-Sweeney and Hazell (2006), and on the Internalising Problems scale in Keller et al's (2001) study. The differences between scores of the kinship and non-kinship samples on the narrowband scales, with the exception of the Somatic Complaints and Anxious/Depressed scales, were statistically significant in Tarren-Sweeney and Hazell's (2006) study. In the study by Holtan et al. (2005), only the differences on the Social Problems, Attention Problems, and Delinquent Behaviour scales were statistically significant.

There was a consistent pattern for children in all studies, whether they were in non-kinship or kinship foster care, to have higher mean scores on CBCL scales measuring externalising behaviours (i.e., Aggressive Behavior and Delinquent Behaviour scales) than on those measuring internalising behaviours (i.e., Withdrawn, Somatic Complaints, Anxious/Depressed scales). In the absence of self-reported data from children and adolescents themselves however, it is unclear whether this pattern of results could be attributable to the fact that externalising behaviours such as aggression and acting out are typically more obvious and easier to identify by respondents, than internalising behaviours such as withdrawal and anxiety.

Categorical scores: As shown in Table 2.3, four studies (i.e., Clausen et al., 1998; Holtan et al., 2004; Keller et al., 2001; Tarren-Sweeney & Hazell, 2006) reported proportions of children in non-kinship care with scores above the cut-points on the CBCL, and three studies (i.e., Holtan et al., 2004; Keller et al., 2001; Tarren-Sweeney & Hazell, 2006) reported

proportions of children in kinship care with scores above the cut-points on the CBCL. These studies have been described earlier in this chapter.

For children in non-kinship care, the proportions who scored above the borderline-clinical cut-point on the broadband scales ranged from 43% to 57% on the Total Problems scale, 31% to 33% on the Internalising Problems scale, and 42% to 52% on the Externalising Problems scale (see Table 2.3). For the samples of children in kinship care, the proportions that scored above the borderline-clinical cut-point on the broadband scales ranged from 24% to 52% on the Total Problems scale, 18% to 24% on the Internalising Problems scale, and 25% to 40% on the Externalising Problems scale. These rates suggest that more children in non-kinship than kinship care have mental health problems.

Of the studies (i.e., Keller et al., 2001; Holtan et al., 2005; Tarren-Sweeny & Hazell, 2006) that compared the proportions of children in non-kinship care with the proportions of children in kinship care who scored above the cut-points, both found that greater proportions of children in non-kinship care scored above the borderline-clinical cut-point of the broadband CBCL scales.

Of the non-kinship and/or kinship studies that reported the proportions of children who scored above both cut-points (Clausen et al., 1998; Keller et al., 2001; Tarren-Sweeney & Hazell., 2006), results consistently showed that greater numbers of children scored in the clinical range than in the borderline-clinical range. These findings suggest that for children in both kinship and non-kinship care, those with mental health problems are more likely to have problems in the clinical than sub-clinical range. Furthermore, results showed that higher proportions of children in both non-kinship and kinship care had externalising problems than internalising problems. Once again, it is unclear whether this finding reflects that

externalising behaviours are typically easier to identify by respondents than internalising behaviours.

Mental Health of Children in Various Placements

A number of studies have described the mental health of samples of children who are in a range of different placements. Studies have published aggregate data for children in home-based care and group care (i.e., Leslie et al., 2004), for children in home-based care and residential care (i.e., McIntyre & Keesler, 1986; Newton et al., 2000; Zima et al., 2000), for children in home-based care and emergency care (i.e., Clark and Prange, 1994), for children in the child welfare system and juvenile justice system, that is, those who are in various alternative care placements including juvenile justice placements (i.e., Glisson et al., 2000; Helfinger et al., 2000), and for children in all types of care including foster care, emergency care units, group or residential care, shelter care, detention care centres, and medical facilities (James, 2004).

Home-based care and group, residential or emergency care: Three studies of children in home-based care and residential or emergency care placements (i.e., Clark & Prange, 1994; Newton et al., 2000; Zima et al., 2000) reported continuous mean CBCL T scores in the range of 55 to 58 on the Total Problems scale, 53 to 61 on the Internalising Problems scale, and 55 to 68 on the Externalising scale (see Table 2.1 for summaries of these studies). These ranges are higher than those reported in studies of children in home-based foster care, and suggest that children in residential care and emergency facilities may have poorer mental health than those in home-based care. Although the study by Barth, Weigensberg, et al. (2008) of 1927 5-12 year old children in the alternative care system did not specify the type of care in which children were living, it seems likely that the sample comprised of children in foster care and group and/or residential care. Children who remained in care during the study period had a mean score of 57 on the Total Problems scale, while children who were reunified with their

families or relatives had a mean score of 59 on the Total Problems scale. These results are consistent with results found for children residing in various placements as described above.

The study by Leslie et al. (2004) of 462 children aged 2 to 15 years who were in home-based care or group care reported categorical CBCL scores, and found that 49% of children scored in the clinical range of *any one* of the three broadband (i.e., Total Problems, Externalising Problems or Internalising Problems) scales. Unfortunately, the authors did not report the proportions who scored above the cut-point on *each* scale, making it difficult to make meaningful comparisons with other studies. However, the results do not seem to be inconsistent with those found by Zima et al. (2000) of children in home-based care and residential care who reported that 27% of children scored in the clinical range of the Total Problems scale, 20% in the clinical range of the Internalising Problems scale, and 25% in the clinical range of the Externalising Problems scale.

Home-based care and group, residential, emergency, shelter, detention, or hospital based care: James (2004) described the mental health of a sample of 580 children aged 2 to 16 years who were residing in all types of care. Although more than half were residing in foster care, long-term foster care, emergency care units, or group or residential care, 28% were residing in some kind of shelter care, 5% were residing in a detention or short-term care centre and 2% were residing in some kind of medical facility. The results showed that 38% of children scored in the borderline clinical range of the Internalising Problems scale, while 47% scored in the borderline clinical range of the Externalising Problems scale. It is difficult to determine whether these results are consistent with findings from the studies by Leslie et al. (2004) and Zima et al. (2000), as these studies did not report the proportions of children who scored above the borderline clinical cut-points of the Internalising and Externalising scales. However, based on the limited categorical results reported by Leslie et al. (2004) and Zima et al. (2000) (as described above), it is likely that the rates identified by James (20004) were

higher. This could be attributable to the fact that the sample in James (2004) comprised of many children who were in placements such as shelters, detention centres, and medical facilities, which are often reserved for children with greater needs.

State custody: Two studies (i.e., Glisson et al., 2000 and Helfinger et al., 2000) reported aggregate CBCL data for children in state custody, i.e., child welfare placements and juvenile justice placements. These studies were included in the current review because the majority of children in both samples were in the child welfare system. The study by Glisson et al. (2000) examined the mental health of 700 children aged 5 to 18 years who entered state custody over a one year period (22% response rate) in Tennessee, United States. The majority of children in this study (64%) received child welfare placements (i.e., alternative care), and the remainder were in juvenile justice placements. Similarly, the study by Helfinger et al. (2000) examined the mental health of a randomly selected sample of 254 children aged 2 to 18 years in state custody in Tennessee, United States. Only a minority of children (19%) were in care for delinquent behaviour suggesting that the remaining children were in child welfare placements.

Results from these studies (i.e., Glisson et al., 2000; Helfinger et al., 2000) revealed mean CBCL T scores of 62 and 53 on the Internalising Problems scale, and 68 and 54 on the Externalising scale. The mean scores reported for Glisson et al.'s (2000) sample were higher than the ranges reported for children in home-based foster care. This is not surprising given that the sample in the study by Glisson et al. (2000) included a larger proportion of children who were in state custody because of their delinquent behaviour. By contrast, the mean scores describing Helfinger et al.'s (2000) sample were lower than the ranges reported previously for children in home-based foster care. Discrepancies between results from the studies by Glisson et al. (2000) and Helfinger et al. (2000) could be due to a number of factors. First, the proportion of children in state custody due to their delinquent behaviour was greater in the

study by Glisson et al. (2000) than in the study by Helfinger et al. (2000) (i.e., 35% versus 19% respectively). Second, the sample in the study by Helfinger et al. (2000) was comprised of children aged 2 to 18 years, whereas the sample of children in the study by Glisson et al. (2000) was comprised of children aged 5 to 18 years. Younger children may exhibit fewer behavioural problems than adolescent children, thus contributing to discrepancies in the results. Third, whereas parents or parent surrogates completed the CBCL for children in the study by Glisson et al. (2000), parents, parent surrogates, or care workers completed the CBCL for children in the study by Helfinger et al. (2000). Care workers are likely to have greater exposure to children with problems, and they may rate children's behaviour problems in comparison to other children they work with, thereby under-estimating problems. Lastly, it is unclear whether the samples in these studies were representative of the populations from which they were drawn. Glisson et al. (2000) reported a response rate of only 22%, whereas Helfinger et al. (2000) did not report a response rate.

Mental Health of Children in Contact with Child Welfare Services: The studies by Burns et al. (2004) and Hurlbert et al. (2004) examined the mental health of children who had come into contact with child welfare services. These studies included large proportions of children who were living with their families of origin (90% in the study by Burns et al. (2004) and 69% in the study by Hurlbert et al. (2004)), however, it was considered important to include them in the current review given that both employed samples from the National Survey of Child and Adolescent Well-Being (NSCAW). NSCAW is the first national and representative longitudinal study of its kind that is examining the experiences of children and families involved with the child welfare system in the US (Leslie et al., 2004; US Department of Health & Human Services, 2005).

The study by Burns et al. (2004) examined the need for and use of mental health services of 3803 children aged 2 to 14 years of age who were the subjects of maltreatment

reports and investigated by child welfare agencies. While most children were residing in their home of origin, 10% had been removed and were living in alternative care. The study by Hurlburt et al. (2004) examined patterns of mental health service use amongst a sample of 2823 children who were the subjects of substantiated reports of child maltreatment and receiving child welfare services. These services ranged from minimal intervention (e.g., information and referral to services) to intense intervention, with 31% of children being removed from their family homes and placed in alternative care. Because both studies were examining mental health need rather than describing mental health problems, only limited CBCL data were reported. Both studies considered children to be in need of mental health services if they scored in the clinical range on any one of the three CBCL broadband scales. Almost half of all children in both studies scored in this range (48% in the study by Burns et al. (2004) and 44% in the study by Hurlburt et al. (2004)). Although these results are very similar, it is perhaps somewhat surprising that a lower proportion of children scored in the clinical range in the study by Hurlburt et al. (2004) given that these children were the subjects of *substantiated* child maltreatment reports and included a larger proportion of children who were removed from their families and placed in alternative care (31% compared to 10% in the study by Burns et al. (2004)). Given the way in which the data were reported however, it is difficult to make more detailed comparisons.

Table 2.1¹
Published CBCL Scores for Children in Care

NOTE:
This table is included on pages 72-74
of the print copy of the thesis held in
the University of Adelaide Library.

¹Table adapted from Tarren-Sweeney (2005) ²Foster = foster care (i.e., home-based care) including kinship care, unless otherwise specified; Resi = residential care or group homes; JJ = juvenile justice placement, Child Welfare Case = children who have come into contact with child welfare services. ³CBCL scores reported as T scores, raw scores or both. ⁴Borderline clinical (lower), clinical (higher), or both cut-points used for defining scores in the clinical range. ⁵CBCL data reported for broadband scales, narrowband scales or both. ⁶If scores were stratified by age, gender, or another variable, this does not mean that the full range of scores reported for the entire sample was also reported for the stratified groups. ⁷NSCAW = National Survey of Child and Adolescent WellBeing, the first national US longitudinal study examining the experiences of children and families involved with the child welfare system. ⁸Pre-1991 CBCL scores cannot be compared to later scores.

Table 2.2¹

Published CBCL Continuous Mean T Scores for Children in Care

NOTE:

This table is included on pages 75-76 of the print copy of the thesis held in the University of Adelaide Library.

¹Table adapted from Tarren-Sweeney (2005). ²It is assumed that when the term 'foster care' is used with no further explanations in studies, it is referring to home-based care including kinship care. ³Mixed care is used to group studies that used samples of children in various alternative care placements, including studies that used samples of children in both child welfare placements and juvenile justice placements. ^{4,5}Some studies did not report results for their entire sample of foster children, but reported separate results for children in non-kinship and children in kinship foster care. ⁶Although type of care was not specified, the sample in Barth et al. was drawn from NSCAW and presumably included children in foster and group or residential care. Note: For studies that reported CBCL scores at more than one time-point, only baseline results are reported here.

Table 2.3¹
Published CBCL Categorical Scores for Children in Care

NOTE:
This table is included on pages 77-78
of the print copy of the thesis held in
the University of Adelaide Library.

¹Table adapted from Tarren-Sweeney (2005) ²C= Borderline clinical (lower) cut-off. ³C=Clinical (higher) cut-off. ⁴It is assumed that when the term 'foster care' is used with no further explanations in studies, it is referring to home-based care including kinship care. ⁵Where possible, data describing only children in foster care (i.e., home-based care) were extracted from studies that used mixed care (i.e., children in foster, residential and/or juvenile justice placements). ⁶Mixed care is used to group studies that used samples of children in various alternative care placements, including studies that used samples of children in both child welfare placements and juvenile justice placements ^{7,8}Some studies did not report results for their entire sample of foster children, but reported separate results for children in non-kinship and children in kinship foster care. ⁹ Child welfare cases is used to group studies that included samples of children who had come into contact with child welfare services. ¹⁰Unspecified sample of maltreated children in state custody. Note: For studies that reported CBCL scores at more than one time-point, only baseline results are reported here.

2.2.3 Studies Examining Mental Health Problems Using Other Standardised Measures

Although most of the research on the mental health of children in foster care has utilised non-standardised measures or the CBCL, there are a number of recent studies that have used standardised measures other than the CBCL. Many of these (e.g., Dimigen et al., 1999; Ford, Vostanis, Meltzer, & Goodman, 2007; McCann, James, Wilson & Dunn, 1996; McMillen et al., 2005) have used measures to estimate the prevalence of DSM or ICD psychiatric disorders among children in care.

Studies included in this review are described in Table 2.4, and their results are briefly summarised in Table 2.5. Although there was a consistent pattern for elevated rates of problems amongst children in care to be reported, the rates of problems varied across studies. For example, of studies that obtained information about the prevalence of conduct disorder (i.e., Barber & Delfabbro, 2003; Dimigen et al., 1999; Leathers, 2002; McCann et al., 1996; McMillen et al., 2005; Minnis et al., 2006), rates ranged from 28% to 66%. Of studies that obtained information about the prevalence of depressive disorder (i.e., Dimigen et al., 1999; Ford et al., 2007; McCann et al., 1996), rates ranged from 3% to 36%. Consistent with results of studies using the CBCL however, there was a consistent pattern for studies to report higher rates of externalising problems than internalising problems.

Differences in identified prevalences of mental health problems can be attributed to many factors including differences in the size and location of the studies, the specific population being studied (e.g., children in home-based care or children in state custody), and the use of different measurement techniques. Results of the studies are also limited because of various methodological issues, such as small sample sizes and/or poor response rates.

Just as there are few studies that have assessed the mental health of children in *home-based care* using the CBCL, there are even fewer that have assessed the mental health of this population using standardised measures other than the CBCL. Perhaps the only study that has done so is that of Minnis et al (2006) (see Table 2.4). This study used the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) to assess the emotional and behavioural functioning of 182 foster children aged 5 to 16 years in Scotland, who were expected to remain in placement for at least another 12 months after study commencement. The SDQ has been scaled so that those with scores above the 90th percentile in a normal population are classed as having ‘abnormal’ problems, and those with scores between the 80th and 90th percentile are classed as having ‘borderline’ problems. For a high risk population, it is suggested that abnormal cases are those either in the borderline or abnormal categories (Minnis et al., 2006). According to foster carer reports, 57% of children fell into the abnormal category and an additional 7% fell into the borderline category on the SDQ. Proportions of children with scores in the abnormal and borderline ranges on the subscales were 45% and 9% respectively on the Hyperactivity scale, 34% and 11% on the Emotional Problems scale, 55% and 11% on the Conduct Problems scale, 54% and 9% on the Peer Problems scale, and 21% and 17% on the (lack of) Prosocial Behaviour scale. These results are consistent with findings from studies that have used the CBCL, in that higher proportions of children had externalising type behaviours (e.g., conduct problems) than internalising type behaviours (e.g., emotional problems).

While most studies have relied on caregiver reports of foster children’s mental health problems, a strength of the study conducted by Minnis et al. (2006) is that the SDQ was also completed by the foster children themselves. Despite this, however, Minnis et al. (2006) only published limited self-report data. Only the proportions of children who scored in or above the borderline range on four out of the six subscales were reported, and no information was

provided about the proportions who scored in the clinical range. According to the data published however, children gave themselves lower ratings than did caregivers (Hyperactivity 37%, Conduct Problems, 44%, Peer Problems 38%, lack of Prosocial Behaviour, 15%).

Two major limitations of this study limit the generalisability of its results. First, the study only achieved a response rate of 42% and thus it is unclear whether the results are representative of the sample it sought to represent. Second, because the sample comprised only of children in medium to long-term care and permanent placement, the results may not apply to the broader population of children in home-based care. More specifically, the results may not be generalisable to children in home-based care who remain in care for shorter periods of time or who move placements frequently.

Mental Health of Children in Non-Kinship Home-Based Care

A study conducted by Leathers (2002) used the Conduct Disorder subscale from the Children's Symptom Inventory (CSI) (Gadow & Sprafkin, 1997) to assess the conduct behaviour problems of 199 children aged 12 to 13 years who had been living in non-kinship foster care for 1 to 8 years. Results showed that the severity of behavioural disturbance was high. Comparative data were not provided for a normative sample, however, Leathers (2002) reported that the mean score of 4.58 (SD = 4.19) for her sample was a standard deviation above the mean score of children from a general population sample. Using the cut-off scores provided by Gadow and Sprafkin (1997) to identify 'moderate severity' and 'high severity' conduct disorder symptomology, Leathers found that 29% of the boys and 24% of the girls in her sample had high severity conduct problems, while an additional 32% of the boys and 10% of the girls had moderate severity conduct problems.

Because Leathers (2002) study only used the Conduct Problems subscale from the CSI, comprehensive information about the mental health and behaviour of this group of

children was not obtained. In particular, no information was collected about internalising problems among this group of children. Furthermore, because the sample comprised children in the age range of 12 to 13 years who had been in non-relative care for one to eight years, the results may not apply to the broader population of children in foster care. For example, the results may not be generalisable to children younger or older than 12 to 13 years, children who stay in care for shorter (under 1 year) or longer (over 8 years) periods of time, or children who alternate between kin and non-kin placements.

Mental Health of Children in Various Placements

As with studies that used the CBCL, a number of studies that used alternative standardised measures have published aggregate mental health data for children in home-based care and residential care (e.g., Barber & Delfabbro, 2003; Dimigen et al. 1999, McCann et al., 2006), and for children residing in various types of alternative care placements (e.g., home-based care, residential care, independent living) (e.g., Ford et al., 2007; McMillen et al., 2005). This is problematic because it makes it very difficult to understand the prevalence and nature of mental health problems specific to children and adolescents in *home-based care*.

Home-Based Care and Residential Care: Barber and Delfabbro (2003) conducted a longitudinal study of all children aged 4 to 17 years (n = 235) who had been referred into a new home-based care or residential placement, excluding those referred for family preservation services, between May 1998 and April 1999, in South Australia, Australia. A major strength of this study is its achievement of a 100% response rate. The behaviour and psychological functioning of these children were assessed at intake and for those who remained in care, at follow-up four months later, using an abbreviated form of Boyle et al.'s (1987) Child Behavior Checklist (CBC) completed by children's caseworkers. The CBC contains four subscales: conduct disorder, hyperactivity, somatization disorder and emotional disorder. In Barber and Delfabbro's (2003) study, abbreviated forms of the conduct disorder,

hyperactivity and emotional disorder were used. Scores on these measures describing children in the sample aged 12 to 17 years ($n = 85$) were compared with scores for a normative sample ($n=985$) of children aged 12 to 17 years from the Canadian general population. Results showed that the proportion of children aged 12 to 17 years in alternative care who scored above the 95th percentile for the normative population at intake and follow-up was 60% and 41% respectively on the conduct disorder scale, 28% and 21% on the hyperactivity scale, and 25% and 23% on the emotional disorder scale.

The normative sample used in Barber and Delfabbro's (2003) study comprised only of children aged 12 to 17 years (thus restricting comparisons to this age group) and was drawn from the general Canadian adolescent population. Although use of an Australian normative sample may have been advantageous, the authors cite evidence that the general Canadian and Australian adolescent populations display similar levels of well-being (Barber & Delfabbro, 2003). Furthermore, although the CBC is a standardised instrument for assessing psychological and behavioural functioning of children, the abbreviated version used in this study has not yet been standardised. Nevertheless, the authors reported that the internal consistency of the abbreviated version of the CBC was acceptable with alpha values for each scale being greater than .81 (Barber & Delfabbro, 2003).

Dimigen et al. (1999) used the Devereux Scales of Mental Disorders (Naglieri, LeBuffe, & Pfeiffer, 1993) (completed by caregivers) to examine the mental health of 70 children aged 5 to 12 years (response rate 79%) who attended for health assessment within six weeks of entering care in Glasgow, Scotland from August 1996 to June 1997. The Devereux Scales are a child mental health checklist designed to identify mental disorders according to the categories in the DSM-III-R and DSM-IV. Cut-off scores on the subscales distinguish between children with 'very elevated' problems (more than 2 SD above the normative mean), 'elevated' problems (1-2 SD above the normative mean), 'borderline' problems (T score 56-

59) and those who are 'average' (i.e., have no problems) (T score \leq 55) (Dimigen et al., 1999). The proportions of children who scored in the 'very elevated' range on each scale were 36% on the conduct disorder scale, 36% on the depression scale, 30% on the attention difficulties scale, 26% on the autistic-like detachment scale, 21% on the acute problems scale, and 16% on the anxiety scale. The other results were displayed in a bar graph, but due to the small size of the graph and insufficient scale information it is difficult to obtain exact figures of children who scored in the 'borderline' and 'elevated' ranges of the scales. It is clear however, that over 60% of the sample scored above the 'borderline' range on the conduct disorder scale, over 50% scored above the 'borderline' range on the anxiety disorders, attention difficulties, and depression scales, and over 45% scored above the 'borderline' range on the acute problems and autistic-like detachment scales. Despite a good response rate (79%), the generalisability of these results, is questionable. The small sample size of children in a restricted age range limited the representativeness of the sample. Furthermore, the results can only be generalised to children *entering* care. The mental health of these children is likely to be affected by recent traumatic events including removal from their family homes and placement in an unfamiliar environment.

McCann et al. (1996) used a two phase multimethod design to assess rates of DSM-III-R psychiatric disorders among 88 children aged 13 to 17 years in home-based and residential care in Oxfordshire, London (66% response rate). The same design was used with the comparison group which comprised of age and sex matched children (n = 100) randomly selected from the same school or general practice with no history of contact with any local authority (75% response rate). Phase one of the study screened participants to identify those who were 'high scorers' on the Child Behaviour Checklist (CBCL) and Youth Self Report (YSR) (Achenbach, 1991a, 1991b). Forty seven children in alternative care (53%) and 12 children in the comparison group (12%) were identified as 'high scorers' and invited to participate in phase two of the study which used the Schedule for Affective Disorder and

Schizophrenia for School-Age Children – Present Version (K-SADS-P) (Chambers et al., 1985) to identify their psychiatric disorders. Only 37 of the 47 ‘high scorers’ in alternative care, and 9 of the 12 ‘high scorers’ in the comparison group participated in phase two. Results showed that the rate of problems amongst the 78 children in alternative care (58% response rate) was higher than the rate of problems amongst the 97 children in the comparison group (78% response rate). Children in care were found to have higher rates of conduct disorder (28% versus 0%), overanxious disorder (26% versus 3%), major depressive disorder (23% versus 3%), attention-deficit disorder (14% versus 2%), other depressive disorders (12% versus 3%), avoidant disorder (8% versus 1%) and unspecified functional psychosis (8% versus 0%). The total weighted prevalence rate of psychiatric disorder in adolescents in the care system was 67% (compared with 15% in the comparison group), with 96% of the adolescents in residential care and 57% in home-based care having psychiatric disorders (McCann et al., 1996). The results of this study provide further evidence that more children in residential care than in home-based care suffer from mental illness. Once again, however, the small sample size, low response rate, and restricted age-range of the children means that the study results may not be generalisable to the broader population of foster children.

Various Alternative Care Placements: Ford et al. (2007) described the prevalence of ICD-10 psychiatric disorders amongst a sample of 1,453 children aged 5-17 years who were ‘looked after’ (p. 319) by the local authority in England, Wales, and Scotland, and living in various accommodation types including in their homes of origin, foster care, residential care, and independent living. Comparisons were made with socio-economically deprived and non-deprived children living in private households (note, comparisons were made for children aged 5 to 15 years of age, as there were no comparative data for children aged 16 to 17 years). Parents or foster caregivers, and children aged 11 years and over, were administered the Development and Well-Being Assessment (DAWBA) (Goodman, Ford, Richards, Gatward, & Meltzer, 2000). An abbreviated version was completed by children’s teachers. A small

team of experienced clinicians used the information provided by the informants, and combined it as they would in a clinical setting, to make diagnoses according to ICD-10 criteria (World Health Organisation, 1993). The psychiatric disorders of 'looked after' children were compared with those of a sample of deprived children (n=761) living in private households and a sample of non-deprived children living in private households (n=9677).

Results showed that the rate of psychiatric disorder was highest amongst 'looked after' children and lowest among non-disadvantaged children living in private households. The proportion of children with at least one psychiatric disorder was 46% among 'looked after' children, 15% among socio-economically disadvantaged children in private households, and 9% among non-disadvantaged children in private households. The differences between these proportions were statistically significant. The most prevalent disorders amongst all groups were behavioural disorders or anxiety disorders. The proportion of children with a behavioural disorder (i.e., Oppositional Defiant Disorder, Conduct Disorder) was 39% for 'looked after' children, 10% for disadvantaged children, and 4% for non-disadvantaged children. The proportion of children with an anxiety disorder (e.g., Separation Anxiety, Post-Traumatic Stress Disorder) was 11% for 'looked after' children, 6% for disadvantaged children, and 4% for non-disadvantaged children. Once again, these differences were all statistically significant. Table 2.5 summarises results showing rates of depression and hyperkinesis.

McMillen et al. (2005) measured the lifetime and past year prevalence of major psychiatric disorders among a sample of 373 17-year old adolescents also residing in various alternative care placements in the United States, including home-based care, group homes, youth shelters, residential treatment facilities, substance abuse treatment centres, in-patient psychiatric programs, and semi-independent living. The majority were residing in home-based care (51%), and group homes or residential treatment facilities (41%). Caseworkers were

contacted to screen youths for exclusion criteria, which included IQ scores below 70, a chronic medical condition that made verbal communication difficult, or 'continual runaway status' (p. 89) 45 days past their 17th birthday. Participating adolescents were administered parts of the Diagnostic Interview Schedule which describes diagnoses based on DSM-IV criteria (Robins et al., 1995). Results showed that 61% of adolescents qualified as having one lifetime psychiatric disorder and 32% qualified as having more than one lifetime psychiatric disorders. In the past year, 37% of adolescents met criteria for one psychiatric disorder and 15% met criteria for more than one disorder. Major depression (18%) and Conduct Disorder or Oppositional Defiant Disorder (17%) were the most prevalent disorders, followed by Attention-Deficit Hyperactivity Disorder (10%), Post-Traumatic Stress Disorder (8%), and Mania (6%).

Table 2.4

Studies Describing the Mental Health of Children in Care Using Other Standardised Measures

| STUDY | CARE TYPE ¹ | n | AGES | SAMPLE | MEASURES & RESPONDENT | ASSESSMENT | LOCATION |
|--------------------------|------------------------------------|------|-------|--|---|-------------------------------------|----------|
| Barber & Delfabbro, 2003 | Foster, resi | 235 | 4-17 | 100% of children who entered a new placement during a 13 month period, excluding those referred for family preservation services | Abbreviated form of Boyle et al.'s (1987) Child Behavior Checklist (CBC) completed by children's caseworkers | Intake and 4 months post-placement | SA |
| Dimigen et al., 1999 | Foster, resi | 70 | 5-12 | 79% of children who attended for health assessment within 6 weeks of admission into care during a 10 month period | The Devereux scales of mental disorders completed by carers (used to assess behaviours according to categories in DSM-III-R & DSM-IV) | Just after entry to the care system | UK |
| Ford et al., 2007 | Foster, resi, parents, independent | 1453 | 5-17 | A sample of children 'looked after' by local authorities randomly selected from relevant databases | Development and Well-Being Assessment (DAWBA) (Goodman et al., 2000) completed by parents or carers, teachers, and children aged 11 yrs plus. A team of experienced clinicians used the questionnaire info to make diagnoses according to ICD-10 criteria | During care | UK |
| Leathers, 2002 | Foster (non-kin only) | 199 | 12-13 | Random sample of children who had been in non-kinship alternative care for 1-8 years | Conduct disorder subscale of the Children's Symptom Inventory (CSI) (Gadow & Sprafkin, 1997) completed by foster parents. | During care | US |
| McCann et al., 1996 | Foster, resi | 88 | 13-17 | Adolescents 'looked after' by the local authority who scored 'highly' on the CBCL or YSR. Initial response rate 66%, final response rate 58% | Kiddie schedule for affective disorders and schizophrenia (Chambers et al., 1985) completed by adolescents (used to identify problems according to DSM-III-R diagnoses) | During care | UK |
| McMillen et al., 2005 | Foster, resi, independent, psych | 373 | 17 | 90% of adolescents turning 17 in the next month in the custody of one division, excluding those with IQs below 70, a chronic medical condition that prohibited effective verbal communication, and those with continual runaway status | Sections of the Diagnostic Interview Schedule for DSM-IV (Robins et al., 1995) completed by adolescents (namely PTSD, Major Depression, Mania, ADHD, Oppositional Disorder, Conduct Disorder) | During care | US |
| Minnis et al., 2006 | Foster | 182 | 5-16 | 42% of children likely to remain in placement for at least a further year, i.e., those in medium to long-term & permanent placements | Strengths & Difficulties Questionnaire (SDQ) (Goodman, 1997) completed by foster carers and children | During care | UK |

¹Foster = foster care (i.e., home-based care) including kinship care, unless otherwise specified; Resi = residential care or group homes; JJ = juvenile justice placement; Parents = living with parents in home of origin; Independent = living independently or semi-independently; Psychiatric = psychiatric and/or treatment centre/facility

Table 2.5
Results of Studies Describing the Mental Health of Children in Care Using Other Standardised Measures

| STUDY | n | AGES | RESULTS ¹ | COMMENTS |
|---|------|-------|---|--|
| Foster² Minnis, 2006 | 182 | 5-16 | SDQ cut-off scores distinguish between scores in the 'normal', 'borderline', and 'abnormal' range of each scale. Proportion of children scoring above the borderline range as reported by caregivers Total SDQ score: 64% Hyperactivity: 54% Emotional Problems: 45% Conduct Problems: 66% Peer Problems: 63% Prosocial Behaviour: 38% | Limited SDQ self-reported child data was published, however generally children gave themselves lower ratings than did parents. |
| Foster: Non-Kin Leathers, 2002 | 199 | 12-13 | CSI cut-off scores distinguish between 'moderate severity' and 'high severity' problems. Conduct problems: Boys: 29% had high severity & an additional 32% had moderate severity conduct problems Girls: 24% had high severity & an additional 10% had moderate severity conduct problems | Limited information about behaviour provided. Age range of sample restrictive. Norms for 'moderate' and 'high' conduct problems developed using samples of children who were predominantly white & middle class. Current sample comprised of 84% of African American, disadvantaged children |
| Mixed Care³ Barber & Delfabbro, 2003 | 235 | 4-17 | Proportion of children who fell outside the 95 th percentile for the normative population at intake & follow-up respectively: Conduct disorder: 60% & 41% Hyperactivity: 28% & 21% Emotionality: 25% & 23% | Only results describing 85 12-17 yr olds reported as comparative data were only available for this age group. Mean scores published for entire sample but are difficult to interpret in absence of normative data. Normative sample drawn from general population in Canada |
| Dimigen et al., 1999 | 70 | 5-10 | Devereux cut-off scores distinguish between 'very elevated', 'elevated', 'borderline' and 'average' problems. Proportions of children who scored in the 'very elevated' range on each scale: Conduct disorder: 36% Depression: 36% Attention difficulties: 30% Autistic-like detachment: 26% Acute problems: 21% Anxiety: 16% According to a bar graph approximately 3-5% of the general community population are expected to score in the 'very elevated' range on these scales (difficult to report exact figure due to insufficient scale information) | Remainder of results are displayed in a bar graph, but it is difficult to obtain exact figures due to insufficient scale information. However, it is clear that over 60% of the sample scored above the 'borderline' range on the conduct disorder scale, and over 50% scored above the 'borderline' range on the anxiety, attention, and depression scales. |
| Ford et al., 2007 | 1453 | 5-17 | ICD-10 psychiatric disorders based on DAWBA responses reported for children 'looked after' by local authorities versus a sample of 761 disadvantaged children living in private households and a sample of 9677 non-disadvantaged children living in private households, respectively: At least one psychiatric diagnosis: 46% vs 15% vs 9% Anxiety disorder: 11% vs 6% vs 4% Depression: 3% vs 1% vs 1% Hyperkinesis: 9% vs 1% vs 1% Behavioural disorder: 39% vs 10% vs 4% | Results were obtained using a combination of a standardised instrument (DAWBA) and clinical diagnoses using the ICD-10. Sample includes all children 'looked after' by local authorities including those not in alternative care placements |
| McCann et al., 1996 | 37 | 13-17 | Total weighted prevalence rate of psychiatric disorder was 67% versus 15% in the normative comparison group. Prevalence of disorders for 'looked after' children vs comparison group were: Conduct disorder: 28% vs 0% Overanxious disorder: 26% vs 3% Major depressive disorder: 23% vs 3% Attention deficit disorder: 14% vs 2% Other depressive disorders: 12% vs 3% Avoidant disorder: 8% vs 1% Unspecified functional psychosis: 8% vs 0% | Comparison group were adolescents with no history of contact with any local authority matched for age & sex, randomly selected from the same school or general practice |
| McMillen et al., 2005 | 373 | 17 | 37% had one disorder & 15% had more than one disorder in past year. Past year prevalence by disorder: Major depression: 18% Mania: 6% PTSD: 8% CD/ODD: 17% ADHD: 10% | Youths with low IQs, poor verbal communication, and those on runaway status were excluded, thus prevalence rates may be underestimated |

¹Only meaningful results (i.e., those that can be compared to normative results or those that have clinical cut-offs that enable scores to be categorised) describing the mental health or emotional and behavioural functioning of children reported.

²It is assumed that when the term 'foster care' is used with no further explanations in studies, it is referring to home-based care including kinship care. ³Mixed care is used to describe studies that used samples of children in various alternative care placements.

2.2.4 Summary of Mental Health of Children in Care

This review highlights that although an increasing number of studies have measured the mental health of children in alternative care or state custody in recent times, there is limited information available about the mental health of children and adolescents in *home-based care*, particularly in Australia. This is despite the fact that home-based care now accounts for the vast majority of alternative care placements for children in all Western jurisdictions (Barber & Delfabbro, 2004). In Australia, 94% of the 31,166 children in alternative care now reside in home-based care placements.

Studies which have measured the mental health of children in alternative care or state care - populations which include large proportions of children in home-based care - were included in the current review in an attempt to provide greater understanding about the mental health of children in home-based care. Because the data from these studies were reported for entire samples however, it was impossible to determine the level of problems specific to those in home-based care. While some studies (e.g., Clark & Prange, 1994; McIntyre & Keesler, 1986; Zima et al., 2000) reported aggregate mental health data for children residing in different alternative care placements (e.g., home-based care, residential care, or emergency care), others reported aggregate data for children in both child welfare placements and juvenile justice placements (e.g., Glisson et al., 2000; Helfinger et al., 2000).

Studies conducted to date describing the mental health of children in alternative care or state custody face a number of challenges including i) that the results of many are compromised by design and/or methodological issues, ii) that most have been conducted overseas and there are concerns about the generalisability of findings to foster children in Australia and, iii) failure to provide full and comprehensive information about children's mental health. These issues are discussed in further detail below.

Non-Standardised Measures: Many studies that have examined the mental health of children in foster care have used non-standardised or ad hoc methods (e.g., Chernoff et al., 1994; Hansen et al., 2004; Holland & Gorey, 2004). The usefulness of results from these studies is more limited, as the measures lack consistency and objectivity, as well as normative data (Pilowsky, 1995).

Standardised Measures: Numerous different standardised measures have been used to assess the mental health of children in alternative care, which makes it difficult to compare results across studies (Helfinger et al., 2000). The mental health assessment tools and checklists differ in their definition of mental health problems, the way they identify mental health problems, and in the range of disorders they measure (Tarren-Sweeney, 2005). It is even difficult to compare results across the studies that have used the CBCL because of variability in the way findings are reported (e.g., mean scores versus proportions of scores in the clinical range and broadband scores versus narrowband scores) and the failure to report sufficient results despite the range of data this instrument yields.

Sample Sizes: There has been considerable variability in the sample sizes used across studies. Of those reviewed, the sample sizes ranged from n=19 in a study of children placed in non-kinship foster care (McAuley & Trew, 2000) to n = 3803 in a study of children involved with child welfare services who were drawn from NSCAW (Burns et al., 2004). On the whole however, almost half of the studies employed small samples which may limit the generalisability of their results.

Low Response Rates: Low response rates limit many studies of children in foster care. Although an attempt was made to review only those studies with higher response rates, many

still had rates under 60% (e.g., Glisson et al., 2000; Keller et al., 2001; Minnis et al., 2006; Tarren-Sweeney & Hazell, 2006). Although Zima et al. (2000) reported a response rate of 92% of children who met their eligibility criteria for participation, one of the criteria was that children had to be contactable by telephone or through a neighbour. Use of such criteria makes it difficult to determine whether samples truly represent the populations of interest or whether large proportions of otherwise eligible participants are excluded simply because they cannot be contacted. The characteristics of children and families who cannot be contacted are likely to differ from those who can be contacted.

Selection Criteria: There has been great variation in the selection criteria studies employ for sampling. For example, some studies have included only those children entering care (e.g., Horwitz et al., 2001; Glisson et al., 2000), those entering a new episode of care (e.g., Clausen et al., 1998), or those entering long-term care programs (e.g., Armsden et al., 2000) during a restricted time-frame. Thus, results of these studies may not be generalisable to children who have been in long-term or stable care. Other studies have excluded children who were in alternative care for less than 6 months (e.g., Zima et al., 2000), while others have excluded children not expected to remain in their current placement for a further year (i.e., not in long-term care) (e.g., Minnis et al., 2006; McAuley & Trew, 2000), thus under-representing children who stay in care for only a short time or children who move placements frequently.

One study selected children with existing behavioural and emotional problems (because the main aim of their study was to evaluate the efficacy of an intervention for these children) (Clark & Prange, 1994), while another selected children without pre-existing intellectual, physical, or developmental disabilities (Urquiza & Wirtz, 1994). Some selection criteria also exclude children for whom family contact details cannot be confirmed. For example, Tarren-Sweeney and Hazell (2006) included only those children whose carers' contact details could be confirmed through the electoral roll or a telephone listing, while Zima

et al. (2000) included only those children whose caregivers were contactable by phone or through a neighbour.

None of the studies reviewed included samples that were fully representative of the general population of children residing in alternative care, let alone home-based care, and none have included an entire jurisdiction of these children. The study that comes close, however, is that of Tarren-Sweeney and Hazell (2006), which included a sample of 347 children aged 4 to 11 in home-based care in New South Wales, Australia. The main limitations of this study, however, are the more moderate response rate of 56%, the restricted age range of 4 to 11 years, and failure to include children whose carers' contact details could not be confirmed through the electoral roll or telephone listing.

Generalisability of Overseas Research

Most of the research examining the mental health of children in care has been conducted overseas, particularly in the United States. This raises questions about the generalisability of these studies' results to Australian children in care. After all, the foster care population in the United States is comprised of children who are culturally dissimilar to foster children in Australia (Ainsworth, 1997; Gilbertson & Barber, 2001). Furthermore, although both foster care populations overrepresent cultural minority groups, these groups are very different. In the United States, African American children are overrepresented in the foster care population (comprising about 34% of the foster care population despite the fact that only 15% of the United States child population is African American) (Daining & DePanilis, 2007), and in Australia, Aboriginal and Torres-Strait Islander children are overrepresented as already discussed (comprising about 29% of the foster care population despite the fact that only 4% of the Australian child population is indigenous) (Australian Bureau of Statistics, 2006; AIHW, 2009).

Australia and the United States also operate on very different child welfare philosophies, policies, and practices that may further contribute to differences between the characteristics of foster children in the two countries. As discussed in Chapter One, most child welfare systems in Australia operate according to policies and practices supporting family reunification as the primary goal, whereas in the United States, the policy preference is for permanency planning.

Absence of Information

Absence of Comprehensive Mental Health Data: Few studies reported full and comprehensive mental health data about children in care. Many studies (e.g., Barth, Weigensberg, et al., 2008; Burns et al., 2004; Hulburt et al., 2004; Horwitz et al., 2001; Leslie et al., 1999, Marcus, 1991; McAuley & Trew, 2000; Leslie et al., 2004; McIntyre & Keesler, 1986; Newton et al., 2000; Urquiza & Wirtz, 1994) failed to report results on all scales of the mental health measure they employed, while others (e.g., Leathers, 2002; McMillen et al., 2005) utilised only selected scales or sections of mental health measures. In part, this has occurred because the mental health of children has commonly been a secondary or side aim of studies. Without full and comprehensive information about the mental health of children in home-based care, it is not possible to adequately address their needs or inform intervention strategies designed to help them.

Absence of Information about Age and Gender Differences: There is very little information available about the health status of children in care of different age and gender. Although the limited data available suggest that boys experience poorer mental health than girls (Tarren-Sweeney & Hazell, 2006), and that older children experience moderately poorer mental health than younger children (Armsden et al., 2000; Tarren-Sweeney & Hazell, 2006), caution must be taken in the interpretation of these results. Both studies that provided these

results, only reported limited age and/or gender data. Furthermore, they suffer from methodological shortcomings that may prohibit the generalisation of results to all children in home-based care.

To date, there is no comprehensive and detailed information available about the mental health of boys versus girls, and of younger children versus older children in home-based care. Thus, it is unclear whether rates and types of problems differ by age and gender for this population.

Foster Children versus Children in the General Community: Very few studies have compared the health status of foster children with that of children in the general community (Hansen et al., 2004). Some researchers (e.g., Barber & Delfabbro, 2004) argue that because of the background problems that place children and young people in care at significant disadvantage compared to children in the general community, normative comparisons must be undertaken with considerable caution and even avoided. However, normative comparisons can yield important information. A general community sample serves as a normative benchmark or general standard. Having such a basis for comparison enables the identification of the extent of problems amongst children in care, and the identification of any issues or problems specific to children in care.

Absence of Information from Children in Alternative Care: The perspectives of children in alternative care have very rarely been included. There is very little information about the mental health or well-being of children in care, as reported by the children themselves. Only four of the studies (i.e., Clark & Prange, 1994; McCann et al., 1996; McMillen et al., 2005; Minnis et al., 2006) used children's responses to assess mental health or behavioural problems. Each of these studies has significant limitations, however. The study by Clark and Prange (1994) only included children who had or were at risk of emotional and

behavioural disturbances. Similarly, McCann et al. (1996) utilised a very small sample size (n=37) of adolescents who scored 'highly' on the CBCL or YSR at screening, while the study by McMillen et al. (2005) only sampled children aged 17 years, and the study by Minnis et al. (2006) only published limited SDQ self-reported data.

Although numerous studies have used the CBCL to assess foster children's mental health problems as reported by caregivers or parent substitutes, only Clarke and Prange (1994) and Auslander et al. (2002) have used the Youth Self Report (YSR) (the CBCL's parallel self-report checklist) to assess mental health problems. Clark and Prange's (1994) study only reported mean scores on the Internalising, Externalising and narrowband scales without reporting the proportions who scored above the clinical cut-points. In contrast, Auslander et al.'s (2003) study only reported the proportion of children who scored over the borderline clinical cut-point on the Externalising, Internalising, and narrow-band scales without presenting mean scores on these scales. Furthermore, neither sample was representative of all children in care. Clark and Prange (1994) only included children who had or were at risk of emotional and behavioural problems, whereas Auslander et al.'s (2003) study excluded children with severe behavioural, emotional, or learning problems and only included youths who self-enrolled in a life skills program.

The absence of information obtained from children in care is a serious omission, especially given the increasing recognition in recent years that alternative care research should include the perspectives of children themselves (Cashmore, 2002; Gilbertson & Barber, 2002).

2.3 Broader Well-Being of Children in Alternative Care

2.3.1 *Health-Related Quality of Life and Health-Risk Behaviours of Children in Care*

As discussed earlier in this chapter, children in alternative care are a vulnerable, high risk population who have often faced numerous adversities including maltreatment, broken attachments, and poverty. Despite this, there is limited information about the broader well-being of this population of children. This is a significant omission given evidence that children with mental health problems often have substantial impairment in their health-related quality of life (Sawyer et al., 2002) and are more likely than children without mental health problems to engage in health-risk behaviours such as smoking, marijuana use, and suicidal ideation and behaviour (Sawyer et al., 2001). Despite the growing body of literature documenting that children in care have elevated rates of mental health problems, there is no information about their health-related quality of life and very little information about the rates in which they engage in different health-risk behaviours. This is concerning given that health-risk behaviours, such as substance abuse, contribute to the main causes of morbidity and mortality among young people (Gramkowski et al., 2009).

The limited information that is available about the health-risk behaviours of children in alternative care, is difficult to interpret as studies have commonly employed non-standardised measures and failed to provide comparative normative data. Nevertheless, the information does suggest that children in foster care engage in elevated rates of health-risk behaviours. For example, in a study by Chernoff et al. (1994) of 775 children aged 3 to 18 years who had a routine health examination within five days of entry to foster care in the United States, results indicated that 15% admitted to or were suspect for suicidal ideation as determined by an assessing paediatric nurse practitioner. Fleming et al. (2005) reviewed the casefiles of 25 of the 50 foster children aged 11 to 18 years who were living in a health and social services trust in the semi-rural south of Northern Ireland at the time of the study. The

results revealed ‘concerns’ that 24% of the children were engaging in self-harm behaviours, 28% were using drugs, 28% had poor eating patterns, and 24% were misusing alcohol. In a recent audit of home-based care services in Victoria, Australia (Department of Human Services, 2002), caseworkers reported that 14% of foster children had threatened suicide and 5% had attempted suicide in the past. Furthermore, caseworkers reported that 20% of children were using alcohol, 15% were using tobacco, and 11% had smoked marijuana. These latter findings are consistent with rates of suicidal ideation and substance use identified amongst adolescents (13-17 years) in the general community in the Australian National Child and Adolescent Survey of Mental Health and Well-Being (Sawyer et al., 2000). However, the results of the Victorian audit are likely to underestimate the true rate of health-risk behaviours amongst foster children for two main reasons. First, rates of health-risk behaviours identified in the Victorian audit were calculated for a sample of foster children aged from 1 to 18 years, despite the fact that health-risk behaviours are less likely to be a concern for pre-adolescent children. Second, the audit relied on caseworker reports of children’s health-risk behaviours. Caseworkers’ knowledge about the children for whom they were reporting varied considerably depending on the length of time they had been working with these children (Department of Human Services, 2002). It is also possible that many children had successfully concealed any health-risk behaviours from their caseworkers.

In recent times, two US studies (Altshuler & Poertner, 2002; Gramkowski et al., 2009) using the Child Health and Illness Profile-Adolescent Edition (CHIP-AE) instrument (Starfield et al., 1999), found that foster youth had a higher mean score than youth in the general community on the ‘Individual Risks’ subdomain which measures activities such as smoking, using illegal substances, and safety practices such as wearing a bicycle helmet. While these results suggest that foster youth engage in elevated rates of health-risk behaviours compared to their peers in the general community, both studies reported a mean overall health-risk behaviour score rather than rates of different health-risk behaviours. Thus, it was

not possible to identify the proportion of foster youth who engaged in health-risk behaviours or whether certain behaviours (e.g., tobacco and alcohol use) were more prevalent than others (e.g., drug use).

Comprehensive information about the broader well-being of foster children, including rates of health-risk behaviours, is needed in order to inform strategies designed to support and assist this group of children.

2.4 The Impact Upon Caregivers of Caring for Children in Alternative Care

While the number of children requiring home-based care placements continues to rise, the number of available carers has been decreasing, resulting in increasing disparity between the demand for and supply of foster carers (Barber & Delfabbro, 2004). In Australia, there is currently a severe shortage of home-based care placements and foster care agencies are struggling to recruit new carers and retain current carers to meet the demand.

The pressure on home-based care services has resulted in caregivers being responsible for larger numbers of children and children with higher levels of problems, who in the past would have been placed in residential facilities (Barber & Delfabbro, 2004). Despite this, the impact of caring for foster children upon caregivers, upon whom the home-based care service depends, has received limited research attention (Wilson, Sinclair, & Gibbs, 2000).

There is some evidence to suggest that caregivers are experiencing difficulty in caring for foster children, particularly those with challenging behaviours and needs. For example, in focus groups conducted with 25 foster carers randomly sampled from South Australia's largest foster care agency, Anglicare SA, all foster carers agreed that foster children place significant demands on carers' patience and parenting skills (Barber & Delfabbro, 2004). Furthermore, in a study of 950 foster carers (62% response rate) registered with seven authorities in the United Kingdom, 18% stated that caregiving affected their current sense of well-being (Wilson et al., 2000). The authors reported that two-thirds of carers had experienced one or more of six potentially stressful foster care 'events' - i.e., placement disruption, removal of foster child from placement against carer advice, severe family tensions, severe difficulties with birth parents, allegation of child maltreatment, or other strong disagreement with social services (Wilson et al., 2000). Those who had experienced a stressful foster care 'event', with the exception of allegations of child maltreatment and the

removal of a foster child against the carer's wishes, were significantly more likely than those who had not experienced a stressful event to be under 'strain'. Results showed, however, that high proportions of carers experienced 'strain' whether they reported stressful foster care 'events' or not. For example, 46% of carers who had experienced severe family tensions and 32% who had not experienced severe family tensions were reported to be under 'high strain'. Similarly, 41% of carers who had experienced a placement disruption and 32% who had not were experiencing 'high strain' (Wilson et al., 2000).

The results from the studies by Barber and Delfabbro (2004) and Wilson et al. (2007) provide some evidence that caring for foster children places strain upon caregivers. Aside from insights provided by studies such as these however, little is known about the caregiving experience or the impact that fostering children has on volunteers' lives and well-being. This is concerning given that caregivers volunteer their resources to provide an essential service for some of the most disadvantaged children in society. Further information is needed in order to identify the needs of foster carers, which in turn can be used to inform strategies designed to support caregivers. The failure to identify and address the impact upon foster carers may contribute to this essential resource becoming increasingly unavailable.

2.5 Why Don't We Know More? Difficulties in Researching Children in Alternative Care

There are a number of reasons at different levels that contribute to the lack of information about children in alternative care. According to Berrick, Frasch and Fox (2000), “administrative, political, legal, and pragmatic barriers all conspire to limit researchers’ access to and contact with foster children” (p. 119). Barriers to conducting research with foster children include difficulties in identifying and accessing samples, gaining informed consent, managing highly emotional topics (Berrick et al., 2000) and securing sufficient funding for the costly research.

2.5.1 *Gaining Access to Foster Children*

It is difficult for researchers to access representative samples of children in alternative care. Unlike research with children in single geographical locations such as schools or hospitals, accessing children in alternative care is more difficult because they are distributed across different homes throughout child welfare jurisdictions (Berrick et al., 2000). It is necessary to make contact with foster children at the individual level, however it can be challenging to obtain necessary information for accurate and representative sampling. Children’s and caregivers’ personal and contact information is kept strictly confidential. It is difficult for researchers to gain the necessary consents from legal, ethical, and child welfare or foster agency officials to access this information (Berrick et al., 2000). Without a co-operative research partnership with the relevant child welfare department or foster carer agencies, accessing the population is not possible (Berrick et al., 2000).

Australian researchers, Gilbertson and Barber (2002), encountered great difficulties in accessing children in care to participate in three studies on placement experiences, due largely to child welfare agency barriers. A non-response rate of 82% of subjects from an initially

small sample resulted in the abandonment of one study, and a combined non-response rate of 73% for the other two studies resulted in vastly reduced sample sizes and increased the likelihood of sample bias. According to the researchers, agency factors accounted for the low response rate in the first study and 41% of loss in the second and third studies. The agency barriers encountered by these researchers included lack of cooperation and support from social workers, and social workers denying access to participants because of various reasons including concerns that research participation would be detrimental to the child or threaten the placement (Gilbertson & Barber, 2002). Similarly, Berrick et al. (2000) stated that in their research with foster children that “one judge’s stroke of a pen compromised our final sample size by one-third” (p. 8).

2.5.2 Obtaining Informed Consent

Informed consent to allow children in alternative care to participate in research is required at a number of levels. Firstly, the child welfare agency must give consent for the participation of children who are wards of the state. Senior child welfare staff need to be engaged and knowledgeable about the study to provide support and address concerns about the study’s purpose (Berrick et al., 2000). Beyond the child welfare agency, consent must be obtained from children’s social workers, caregivers, and older children themselves. In some jurisdictions, consent is also required from judges, children’s lawyers and biological parents (Berrick et al., 2000). The greater the number of people from whom consent is required, the more difficult it is to enrol participants.

2.5.3 Time Investment in Research

Foster care research usually requires additional time than research with other populations of children. First, as already discussed, considerable investment must be made in developing collaborative and co-operative research partnerships with the relevant child welfare agency before research projects can be implemented. Second, in most instances, foster

care research must meet the requirements of numerous ethics committees, and considerable time and resources are often required to refine the study so that it meets these requirements without compromising its integrity. The present study required approval from three ethics committees, all of which had different and sometimes conflicting requirements. Commencement of the study was delayed by more than six months due to the work involved in obtaining approval from all ethics committees.

Third, as already discussed, the foster care population is dispersed in different homes throughout child welfare jurisdictions. As a consequence, contact must be made with participants individually at two levels - recruitment to the study and data collection. Research with populations of children in single geographical locations such as a school or hospital can be conducted time-effectively due to the fact that recruitment of participants and collection of data from participants can be co-ordinated centrally (i.e., through a school or hospital) (Berrick et al., 2000). This, however, is not an option in foster care research.

2.5.4 Low Levels of Funding

Perhaps one of the bigger barriers to conducting research in the area of alternative care has been the historical lack of adequate funding in Australia and internationally for research on children in alternative care (Cashmore, Higgins, Bromfield, & Scott, 2006; Courtney, 2000). Recent audits of alternative care research (Cashmore & Ainsworth, 2004) and child protection research (Higgins, Adams, Bromfield, Richardson, & Aldana, 2005) in Australia both identified very low levels of expenditure on research in these areas compared with the overall expenditure on services. In recent times, there has been growing recognition of the need for adequate research funding for child welfare research (Courtney, 2000; Cashmore et al., 2006; Bromfield & Arney, 2008).

2.5.5 *Selection and Training of Data Collection Staff*

Field workers for data collection must be chosen carefully when conducting research with children in alternative care. General data collection staff require certain qualities such as an engaging personality, research experience, a flexible time schedule, and a driver's license and vehicle. In foster care research however, data collection staff require additional qualities such as familiarity with child protection issues, the ability to communicate effectively with caregivers, the ability to work with disadvantaged children, experience working with families whose lives can be disorganised, and interest in travelling to and working in poor communities (Berrick et al., 2000).

Extensive training for data collection staff in the area of foster care research is also required. Staff must be provided with adequate information about the research to ensure they feel comfortable explaining the study's purpose to participants. In research that includes sensitive questions, data collection staff must feel comfortable asking these questions and must be able to provide justification should caregivers raise concerns about the questions (Berrick et al., 2000).

As pointed out by Berrick et al. (2000), staff must also be trained on ways to develop effective rapport with foster caregivers, and they need to be competent in their communication with caregivers - in confirming appointments, handling cancellations, obtaining consent for research participation, responding to concerns, handling complaints about social workers and/or the child welfare system appropriately, and providing closure at the end of interviews (Berrick et al., 2000). In the case of research which includes children's responses and participation, it is also necessary to train staff on ways to non-offensively talk to caregivers about the need for children's privacy, so as to ensure that children respond to questionnaires or interviews honestly (Berrick et al., 2000).

In addition, data collection staff must be trained to make quick, accurate assessments of caregivers' and children's literacy skills and level of comprehension. Staff must respond sensitively in situations where caregivers or children require assistance in reading and completing relevant questionnaires or responding to interview questions. Staff must also be provided with specific guidelines about how to handle suspected cases of child maltreatment or children's disclosures about unsafe situations (Berrick et al., 2000).

Lastly, it is important to implement certain precautionary and safety measures for staff who conduct home visits with foster families. A number of foster homes are located in low-income, high unemployment neighbourhoods, that may also have high rates of crime (Berrick et al., 2000). In Berrick et al.'s (2000) study, staff collecting data in high-crime neighbourhoods were automatically paired with a 'shadow' (i.e., an accompanying peer or supervisor) (p. 124). Data collection was generally only scheduled on weekdays between the hours of 9am and 4pm Monday to Thursday and 9am and 2pm on Friday. Although precautionary measures such as these increase the amount of time and resources required to carry out the research, they are necessary.

2.6 The Present Study

2.6.1 *Gaps in our Existing Knowledge*

As discussed in the previous section, there are many gaps in our existing knowledge about children in care. In a recent review, Bromfield and Osborn (2007) concluded that there is an overall shortage of research in all areas of Australian alternative care, “such that it is not possible to claim an adequate Australian evidence base for sound policy and practice decisions” (p. 35).

The limited body of predominantly international research documenting the mental health of children in alternative care or state custody, suggests however, that children in care are a disadvantaged population with elevated rates of mental health problems. However, as highlighted earlier, most of these studies are fraught with methodological short-comings, nearly all have excluded self-report information from children themselves, few have provided information about children of different age and gender, and most have been conducted overseas and have not been tested for their applicability to Australian children in care. Furthermore, few studies have focused only on children in home-based care, despite the increased reliance on home-based care services in all Western jurisdictions.

There is also very little, if any, information about the broader well-being of children in care, such as their health-related quality of life and rates of health-risk behaviours. This is a serious omission given the associations between mental health problems and poor health-related quality of life and increased rates of health-risk behaviours (Sawyer et al., 2001, 2002). Health-risk behaviours are amongst the main causes of morbidity and mortality during adolescence (Gramdowski et al., 2009).

Currently, research shows that the long-term outcomes for children who have experienced alternative care are poor. They are more likely to experience continuing mental and physical health problems, low educational attainment, underemployment, economic disadvantage, homelessness, teenage parenthood, substance abuse, juvenile delinquency and adult criminality (Buehler, Orme, Post & Patterson, 2000; Courtney & Dworsky, 2006; Mendes, Moslehuddin, & Goddard, 2008; Pecora et al., 2006; Vacca, 2008). Given the increasing numbers of Australian children entering alternative care, these findings are of great national concern. There is considerable evidence to show that interventions in the lives of children can contribute to positive development and improved outcomes (Bayer et al., 2009). The current lack of information about the mental health and broader well-being of children in home-based care however, results in a failure to adequately inform alternative care practice and hinders the development of intervention strategies designed to help children in home-based care.

In addition, very little is known about the impact upon caregivers of caring for foster children (Bromfield & Osborn, 2007). This is alarming given that alternative care systems now rely almost exclusively on home-based care services provided by caregivers, and there is a critical shortage of caregivers across the country (Barber & Delfabbro, 2004). It has been suggested that retention of caregivers may be impeded because of the impact that caregiving has on volunteers' personal lives (Bromfield & Osborn, 2007). Now, more than ever, there is a need to adequately support and retain our volunteers who provide home-based care for some of the most disadvantaged children in society. In order to do this however, it is important to identify the personal impact and burden of foster caring so that appropriate support and services can be provided.

2.6.2 Aims of the Present Study

The aim of the present study was to obtain information from primary caregivers and older children (aged 13 to 17 years) to provide a comprehensive picture of the mental health, health-related quality of life, health risk behaviours, and service use of a large sample of children living in home-based care in metropolitan Adelaide, South Australia. The study also aimed to obtain information from caregivers about the extent to which caring for foster children impacts upon their emotional wellbeing and the time they have available to attend to their personal needs.

The mental health, health-related quality of life, health risk behaviours, and service use of children in home-based care in South Australia were compared with results describing children in a large general community sample in Australia ($n = 3582$). Despite concerns about the appropriateness of making comparisons between disadvantaged foster children and children in the general community, the only way to identify the extent of problems amongst children in home-based care and determine whether there are problems specific to children in home-based care, is to make comparisons with a normative benchmark.

The children in the general community comparison sample were those who participated in the Australian National Child and Adolescent Survey of Mental Health and Well-Being (Sawyer et al., 2000; Sawyer et al., 2001), a federal government funded project designed to identify the prevalence of mental health problems amongst children in the Australian community. The current study employed the same methodology as that employed in the Australian National Child and Adolescent Survey of Mental Health and Well-Being. This provided the study with major advantages over previous studies in the area, in that it ensured the use of a high quality methodology and made it possible to *directly* compare data describing children in home-based care with corresponding data describing other children in the general community.

Specific aims of the study were:

1. To describe the nature and prevalence of mental health problems amongst children and adolescents in home-based care
2. To describe the health-related quality of life of children and adolescents in home-based care
3. To describe the lifetime and current rates of different health-risk behaviours - namely suicidal ideation and behaviour, body weight and dieting behaviours, and tobacco, alcohol and drug use - amongst adolescents in home-based care
4. To identify the extent to which caregivers and older children (aged 13 to 17 years) perceive mental and physical health problems, perceive a need for help, and receive required treatment
5. To identify the impact that caring for foster children has on the lives of primary caregivers
6. To determine whether there are any gender or age differences in the mental health and well-being of children and adolescents in home-based foster care
7. To directly compare results describing children and adolescents in home-based care with those describing children and adolescents in the Australian general community

Chapter Three

Methodology

3.1 Participants: Children and Adolescents in Home-Based Care

The participants in the present study were 326 children and adolescents living in home-based care in metropolitan Adelaide who were under a Guardianship of the Minister court order, and their caregivers at the time of the study.

3.1.1 Eligibility Criteria for Participation

Children and adolescents were eligible to participate in the study if they were i) under a short-term or long-term Guardianship of the Minister (GOM) court order, ii) aged 6-17 years, iii) residing in their current home-based care placement (including kinship care) for at least one month, iv) residing in metropolitan Adelaide, and v) case managed by one of the ten Families SA metropolitan district offices. Children and adolescents who met the criteria were excluded from the study if Families SA staff responsible for their care deemed that i) they were too distressed or unwell to participate, ii) their placements were so unstable that any further burden may have resulted in the placement to break-down, or iii) their caregivers were likely to have been significantly burdened or distressed by contact from the researcher.

The first criterion was employed because a) the majority of children and adolescents residing in home-based care in Adelaide are under a GOM order, and b) Families SA has custody and legal guardianship of children and adolescents under a GOM order, and could therefore give authorisation for the researcher to make contact.

The second criterion, that children and adolescents aged 6-17 years were eligible to participate, was employed so that the sample would be comparable to the sample of children and adolescents in the National Survey of Child and Adolescent Mental Health and Well-Being which formed the general community comparison group for the present study.

The third criterion, that children and adolescents had been in their current placement for at least one month, ensured that caregivers knew participating children well enough to provide relevant information about children's mental health problems and well-being. The time-frame was kept to a minimum to reduce the probability of excluding children and adolescents who move placements frequently. This is important as there is evidence to show that children and adolescents who move placements frequently have more psychological problems than those who remain in stable care (Barber & Delfabbro, 2004, Newton et al., 2000, Pardeck, 1984).

Lastly, to keep the study to manageable proportions, the study sample was restricted to children and adolescents managed by metropolitan Families SA offices (criterion 5) and residing in the Adelaide metropolitan area (criterion 4). The metropolitan Families SA district offices included Elizabeth, Modbury, Marion, Noarlunga, Adelaide, Enfield, Aberfoyle Park, Salisbury, Gawler, and Woodville. Metropolitan Adelaide equates to the 'Adelaide Statistical Division' as delineated by the Australian Standard Geographical Classification (ASGC) (2000 edition), a classification system designed and maintained by the Australian Bureau of Statistics (ABS), which divides Australia into geographical areas for the purpose of collecting and disseminating statistics (Australian Bureau of Statistics, 2004).

3.1.2 Sampling

Initial Estimation

The Child Information System (CIS) within the Justice Information System (JIS) was used to obtain an estimate of the number of children and adolescents in South Australia who were eligible to participate in this study. A review of this system in January 2004, identified 595 children and adolescents aged 6 to 17 years under a Guardianship of the Minister order who were supervised by one of the 10 Families SA metropolitan district offices. However, this was an over-estimate of the number of children and adolescents eligible to participate in this study as it included those in placements outside of metropolitan Adelaide, as well as those living in alternative types of accommodation to home-based foster care (e.g., community residential care, facility-based care, supported accommodation). Nevertheless, the estimate proved useful for planning purposes and the development of data collection protocols.

Rather than identifying participants using the central Child Information System, participants in the study were identified through the Families SA district offices in metropolitan Adelaide. The district offices participated in the study one district office at a time. This decreased the likelihood that participants initially identified as meeting the criteria would have moved (e.g., changed placement, reunified with biological family) before they could be interviewed, thus maximizing the sample size.

Identifying Eligible Children and Adolescents at each District Office

Families SA staff were informed about the study in a variety of ways, the most important of which was an orientation program undertaken at each district office. Following the orientation program, a further meeting was arranged with the relevant supervisors (i.e., supervisors who manage staff in each district office who are responsible for children under a GOM order) to identify children and adolescents managed by that office who were eligible for the study, and to obtain relevant contact details. Relevant details included the child's name,

date of birth, phone number, suburb in which they were placed, and their caregiver's name. This information was obtained from key supervisory staff at the district offices rather than obtaining the information from the CIS. There were several reasons for adopting this approach. First, as records on the CIS are often out-of-date, obtaining information from the district offices increased the likelihood that the required details were accurate. Second, because staff members are familiar with the cases managed by their offices, they were able to exclude any children or adolescents who met the study's exclusion criteria (namely, if they felt contact from the researcher would be detrimental for the young person, their placement, or their caregiver). Lastly, identifying the sample at the district offices ensured staff knew which children and adolescents on their files were being included in the study, enabling them to discuss the study with families before the researcher made initial contact.

The advantages of working with the district offices to identify the sample far outweighed any delays in obtaining the required information. Nevertheless, when delays were significant, the CIS system proved useful as an alternative source of information, and in some instances contact information was also obtained using this system.

Children and Adolescents who Met the Eligibility Criteria

Initially, 480 children and adolescents were identified as being eligible to participate in the study. A total of 21 children and adolescents were no longer eligible to participate by the time of study commencement; 14 had changed placement, 2 had turned 18 years of age, and 5 had been reunified with their biological mothers. In addition, 34 children and adolescents were excluded; 17 because Families SA staff felt their caregivers would be too burdened or distressed by the researcher making contact, 9 because the stability of their placements was under threat, and 8 because they were too distressed or unwell to participate.

3.1.3 Response Rates

There was a total of 425 children and adolescents who were eligible to participate in the study. During initial phone contact with the caregivers of these children, at which stage participation was sought, caregivers of 368 children agreed to participate and were enrolled in the study. Caregivers of 43 children and adolescents declined to participate. Of these, caregivers of 20 did not have the required time, caregivers of 13 chose not to participate, caregivers of 4 were experiencing family difficulties (often associated with the child or adolescent who was eligible to participate), caregivers of 4 felt the study was not relevant as their child/ren had no problems, 1 caregiver felt that her child was so severely disabled that she would not be able to answer any questions about well-being or behaviour, while another caregiver was concerned that raising the foster care status of the child could cause unnecessary distress. Caregivers of an additional 14 children and adolescents could not be contacted.

Of the 368 children and adolescents initially enrolled in the study, caregivers of 42 subsequently withdrew, either at follow-up contact when their caregivers were called to schedule an appointment to meet to participate (i.e., to complete questionnaires), or during the home visit to collect data. Of the children and adolescents withdrawn from the study, caregivers of 22 lacked the time to participate, caregivers of 9 were too unwell to participate, caregivers of 8 decided against participation, 1 caregiver felt that she did not know the child in her care well enough to provide the necessary information, 1 caregiver resigned, and 1 died.

This left 326 participating children who were residing with 224 caregivers. The participation rate was 77% (i.e., 326 children of the 425 in the sampling pool) and the response rate was 71% (i.e., 326 children of the 459 who were eligible by study commencement) (see Figure 3.1). Of those aged 13-17 years, 91 (response rate = 73%)

completed a self-report questionnaire. Of the 33 adolescents who did not complete a questionnaire, 39% were unable to do so due to disability, 36% chose not to participate, 15% were not home at any of the arranged meeting times, while caregivers of the remaining 9% indicated that they did not want the adolescent to complete a self-report questionnaire.

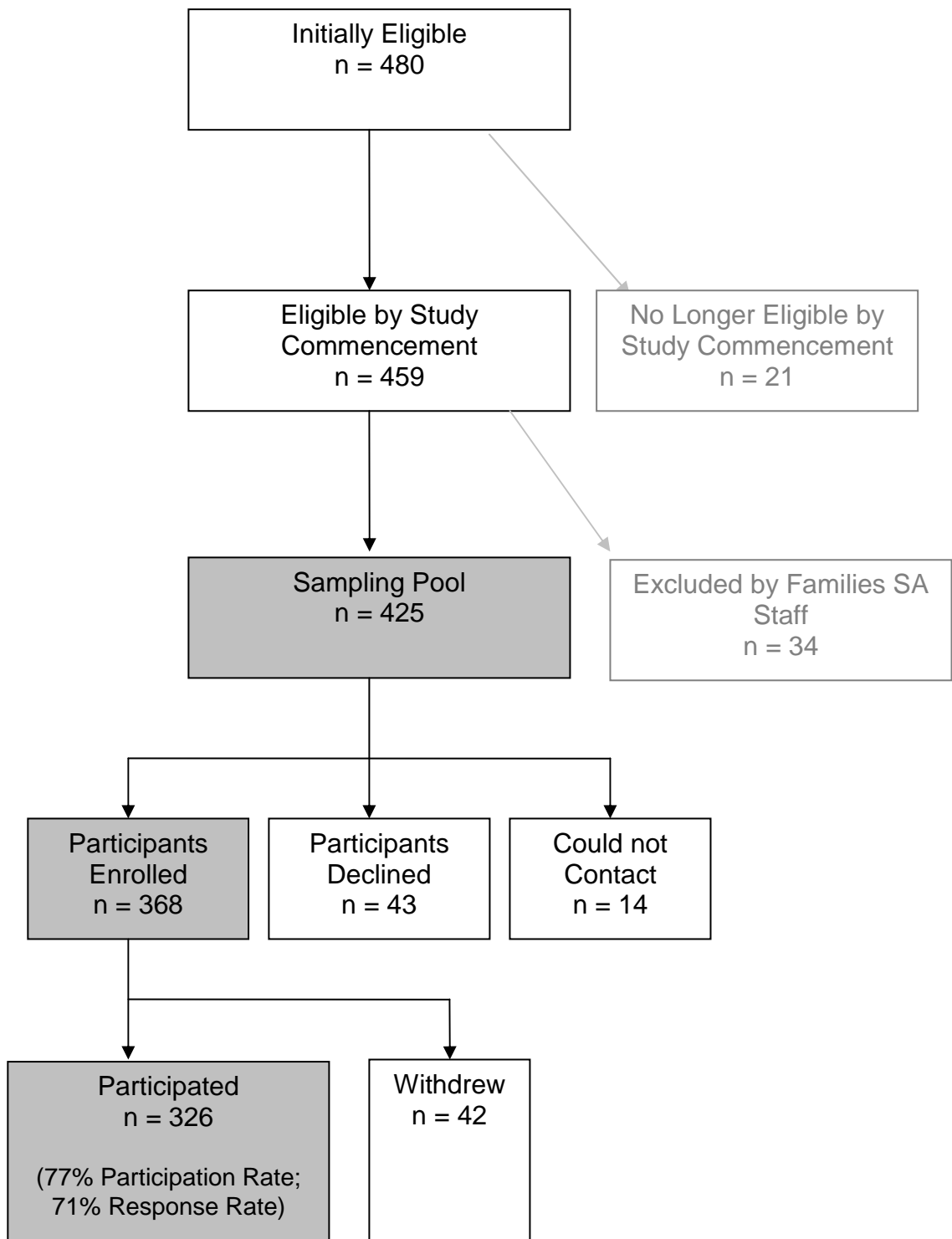


Figure 3.1 *Sampling Frame and Response Rate*

3.2 The Normative Sample: Children and Adolescents in the General Community

Comparative data for the children and adolescents in home-based care were obtained from the Child and Adolescent Component of the Australian National Survey of Mental Health and Well-Being (Sawyer et al., 2000; Sawyer et al., 2001). Participants in this study were 4509 children and adolescents aged 4 to 17 years living in the general community in Australia. Participants were identified using a multi-stage sampling methodology. 'Clusters' of 10 fully responding households with children or adolescents aged 4 to 17 years were sampled from each of 450 Census Collector's Districts across Australia. Participants were recruited by interviewers who approached a number of randomly selected households that were chosen in proportion to the population of each state or territory (Sawyer et al., 2000; Sawyer et al., 2001).

The participation rate, calculated as the proportion of households that were successfully contacted, identified to house a child or adolescent in the required age-range, and participated, was 86%. When non-contacted households that were estimated to contain a child or adolescent in the required age-range were taken into account however, the response rate was calculated to be 70%. The main reason for the difference between the response rate and the participation rate was that interviewers sometimes replaced households that they could not contact, before completing the four required 'call-backs' (Sawyer et al., 2000; Sawyer et al., 2001). To test for any biases in the study sample, the demographic characteristics of children/adolescents, parents and families who participated in the study were compared with the demographic characteristics of the larger Australian population from which they were selected (based on the 1996 Australian Bureau of Statistics Census figures). Although children aged 4 to 5 had been slightly over-sampled and those aged 16 to 17 years had been slightly under-sampled, the demographic characteristics of the sample were comparable with those of the total Australian population (Sawyer et al., 2001).

Data was collected during face-to-face interviews with parents and adolescents conducted by research assistants. The method used to collect data for the National Survey of Child and Adolescent Mental Health and Well-Being was identical to the methodology used to collect data about children and adolescents in the present study. This ensured that the results describing children and adolescents in home-based care were not influenced by different methods, and were directly comparable to results describing children and adolescents living in the general community.

For the purpose of the present study, those children aged 4 to 5 years and those living with foster parents at the time of the National Survey were excluded from the community comparison group, resulting in a sample size of 3582.

3.3 Procedure

3.3.1 Research Partnership with the Child Welfare Department

A co-operative research partnership was established with Families SA, the relevant child welfare department to undertake the study. Key staff in the Department for Human Services (now the Department for Families and Communities), including the Director of Children, Youth and Family Services (CYFS) (now known as Families SA), and the Director of Guardianship and Alternative Care, approved of and actively supported the study and ensured the researcher had access to the information required in order to conduct the study. Good acceptance and support of the study by relevant Families SA staff, namely the social workers with delegated responsibility for children and adolescents under GOM orders, was achieved by ensuring they were fully orientated about the study, its aims, importance, and benefits. This was important given previous documentation (e.g., by Gilbertson & Barber, 2002) that one of the main barriers to including foster children in research has been a lack of support from the children and adolescents' social workers

3.3.2 Information for Families SA Staff

Internal Memorandums

During April 2004, relevant Families SA staff were sent an information sheet which provided information about the study and its aims (see Appendix B). Shortly following this, the Director of Children, Youth and Family Services (CYFS) (now called Families SA) sent all staff an internal memorandum. This memorandum notified staff that the researcher would be in contact with individual district offices, and advised that the Department was providing its full support for the research project. Additional memorandums reinforcing the Department's support for the study were sent to staff at regular intervals between April 2004 and February 2006.

Presentation to Key Supervisory Staff

Following the initial memorandum being sent, a one hour presentation about the study was given to all key supervisory staff from each Families SA district office at their annual conference. This presentation described the aims of the study, the methodology being employed, and the potential benefits of the research findings.

District Office Orientation Programs

Orientation programs were conducted at each Families SA metropolitan district office. The program provided information about the aims of the study, the methodology being employed, and the potential benefits of the study. Copies of the information sheet, consent form, and questionnaires were distributed to staff so that they had the opportunity to view the materials being employed in the study. Staff members were also encouraged to offer any advice or suggestions about the data collection process, e.g., the best way in which to contact and engage families, and collect data. These programs were conducted in an informal manner, giving staff the opportunity to ask questions or raise concerns at any stage.

Newsletter Updates

Families SA district office managers and supervisors were regularly sent newsletters which reviewed the study aims and provided information about the progress of the study.

3.3.3 Information for Carer Agencies and Foster Carers

Carer Agencies

Independent carer agencies were also notified about the study via a letter from the then Director of CYFS (now Families SA) during June 2004. A follow-up letter providing information about the study's progress was sent to carer agencies in late 2005, towards the end of the study.

Notifying Foster Carers about the Study

Information about the study, its aims, and potential benefits was also included in a newsletter that was distributed to caregivers in South Australia during June 2004. Again, a follow-up notice detailing the study's progress was published in the same newsletter in late 2005, towards the end of the study.

3.3.4 Enrolling Participants in the Study: Initial Contact

In each Families SA district office, once contact details of all eligible children and adolescents were obtained, contact was made with their caregivers. Caregivers were contacted via phone on weekdays during the hours of 9am and 8pm between August 2004 and January 2006.

To ensure uniformity in the way the study was presented to caregivers, Families SA gave consent for the author of this thesis to contact caregivers by telephone. Prior to the telephone call, social workers in the district offices were given the opportunity to advise children under their care, and their caregivers, about the study.

During the telephone conversation, caregivers of eligible children/adolescents were informed about the study, its aims, and potential benefits. They were advised that participation was voluntary, no payment would be received for participating, individual results would be kept strictly confidential, and that they were free to withdraw from the study at any time, before being asked whether they would be willing to participate. Caregivers who indicated that they did not wish to be involved in the study received no further contact. Children and adolescents whose caregivers indicated that they would like to participate, were enrolled in the study.

As already explained, caregivers of children managed by a single district office were contacted one district at a time. There was always the possibility, however, that an eligible child/adolescent belonging to the district with which the researcher was working, co-resided with another eligible child/adolescent who was managed by a district office yet to be included in the study. For this reason, caregivers were asked during the initial conversation whether any other children or adolescents resided in their placement. If it was discovered that any additional children or adolescents from other offices met the study's eligibility criteria, they were also enrolled in the study. Every effort was made to evaluate all eligible children and adolescents in the one household at the same time to reduce the burden on caregivers, i.e., to avoid contacting them about the study and subsequently meeting with them on more than one occasion, and to increase the efficiency of the data collection process.

3.3.5 Data Collection

All data were collected during face-to-face contact with participating families. There are many advantages to researchers meeting with participants; they can ensure that participants are fully informed about the study, answer any questions, clarify ambiguity in any of the questionnaire items, provide assistance in completing the questionnaires if needed (which is important to ensure confidential and independent responses), and ensure the questionnaires are completed and returned properly, thus maximizing both the quality of the data and the response rate. A small number of research assistants were employed to assist the author of this thesis to complete the data collection. The research assistants had experience in a relevant field (e.g., most had tertiary training in psychology or a related field), underwent a Criminal History Check, and participated in a training program conducted by the author of this thesis. Each research assistant followed strict data collection protocols to ensure uniform procedure.

Participants enrolled in the study received a follow-up phone call during the hours of 9am to 8pm on weekdays within two weeks of initial contact, from one of the research assistants to schedule a time to meet. Research assistants were flexible and offered to meet with participants at a time and place that was convenient for them. The data collection most commonly took place in the caregivers' homes, but occasionally caregivers requested to meet elsewhere such as their local coffee shop or at the Women's and Children's Hospital where the study was based.

Prior to questionnaires being completed, the research assistants provided caregivers and adolescents who were completing a self-report questionnaire, with a letter (see Appendices C and D) and an information sheet (see Appendix E) from the Women's and Children's Hospital. These described the study's purposes and procedures, as well as the fact that participation was voluntary, that results would be kept strictly confidential, and that participants were free to withdraw at any stage. Once research assistants were satisfied that participants had read the information sheet and understood the nature and purpose of the study, they obtained signed consent from the caregivers and adolescents (see Appendix F) who were completing a self-report questionnaire.

Caregivers and adolescents completed questionnaires (Appendices G-I) independently and were not able to see each other's responses. Ideally, caregivers and adolescents completed their questionnaires in different rooms, however if this was not possible they were asked to sit as far apart as practical to ensure their privacy. Research assistants provided assistance in completing the questionnaires if this was required. In some instances, this involved the research assistants reading questionnaires, but in most cases participants were able to complete the questionnaires with minimal assistance. If participants were unable to complete the questionnaires at a single home visit, a second appointment was scheduled to collect the questionnaires or to provide assistance to complete the questionnaire.

Once data collection was completed for children and adolescents managed by a Families SA district office, the procedure was repeated for the next district office, until all families who were eligible to participate had been identified.

3.3.6 *Statistical Analyses*

Questionnaires were optically scanned so that the accuracy of the data was maximised. Data were analysed using the statistical package SPSS for Windows Version 12.

For measures using continuous scores (e.g., the CBCL, YSR, CHQ-PF50, CHQ-CF87), a series of factorial ANOVAs were conducted. Amongst children in home-based care, a series of 2 Gender (Males versus Females) x 2 Age Group (6-12 years versus 13-17 years) factorial ANOVAS were conducted to test for gender and age group differences. To test for differences between children in home-based care and those in the general community, a series of 2 Group (Home-Based Care vs General Community) x 2 Gender (Males versus Females) x 2 Age Group (6-12 years versus 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. Main effects and interaction effects that did not include “Group” were not included, as the principal research interest was to describe the health and wellbeing of children and adolescents in home-based care, and to make comparisons with the health and wellbeing of children and adolescents in the general community.

For measures using categorical scores (e.g., CBCL and YSR categorical scores, Youth Risk Behaviour Surveillance Survey, and Service Use items), chi-square for independence tests were used to compare proportions of children and adolescents who scored in various categories. These tests were also conducted for children of different gender and age group.

The sizes of the differences between mean scores were assessed using the effect size statistic of Cohen's d (Cohen, 1998, 1992). Cohen defined d as the difference between the means divided by the standard deviation of either group. Cohen argued that the standard deviation of either group could be used when the variances of the two groups are homogenous. In practice, the pooled standard deviation (the root mean square of the two standard deviations) is commonly used as it was in the present study. Effect sizes were classified as small ($d \geq 0.2$), medium ($d \geq 0.5$) or large ($d \geq 0.8$) using the guidelines recommended by Cohen (1998).

In some cases, foster carers reported on more than one child in their care. Ideally, the correlation due to the carer reporting on more than one child would have been controlled for in mixed models analyses. However, since the majority of carers reported on only one child, the correlation would have been confounded with the individual variance. Therefore, that correlation was not accounted for in the analyses.

3.4 Materials

3.4.1 Mental Health Problems

The mental health problems of children and adolescents were assessed by means of the Child Behaviour Checklist (CBCL) 4-18 (Achenbach, 1991a) completed by caregivers, and its parallel self-report checklist, the Youth Self Report (YSR) (Achenbach, 1991b), completed by adolescents aged 13-17 years. The 1991 version of these checklists were used because these were employed in the Australian National Child and Adolescent Survey of Mental Health and Well-Being, and thereby ensured that data describing the mental health of children in home-based care would be directly comparable to data describing the mental health of children in the general community. The CBCL is designed to be completed by parents, guardians, and others who see children regularly (e.g., in home-like settings), while the YSR is designed to be completed by 11 to 18 year olds to describe their own functioning. The CBCL consists of 121 items and the YSR consists of 120 items that describe a wide range of child and adolescent emotional and behavioural problems. Examples of items in the CBCL include “Argues a lot”, “Feels worthless or inferior”, “Destroys things belonging to his/her family or others”, “Disobedient at home”, “Feels too guilty”. Items in the YSR are very similar, but are asked in the first person, for example “I argue a lot”, “I feel worthless or inferior”. Respondents indicate whether each item describes the participant using the following 3-point scale: “0 = Not True”, “1 = Somewhat or Sometimes True” and “2 = Very True or Often True”. It should be noted that problems on the checklists are typically rated “now or within the past six months”. Caregivers who knew the children/adolescents for less than 6 months were asked to rate problems “now and over the total length of time they had known the child”. Professor Tom Achenbach, the developer of this checklist, provided advice on this matter and indicated that it was acceptable to use the CBCL in this way.

The checklists share a set of broadband problem behaviour scales (see Table 3.2), (which includes 2 broadband scales and a total summary scale) as well as 8 narrowband or syndrome scales. Narrowband scales include “Withdrawn”, “Somatic Complaints”, “Anxious/Depressed”, “Delinquent Behaviour”, “Aggressive Behaviour”, “Social Problems”, “Thought Problems”, and “Attention Problems”. In addition, the CBCL has a “Sex Problems” scale for children aged under 12 years, while the YSR has a “Self-Destructive/Identity Problems” scale for boys. The broadband scales include the “Externalising” scale which rates disruptive, aggressive, antisocial, undercontrolled behaviour (and comprises the “Delinquent Behaviour” and “Aggressive Behaviour” scales), the “Internalising” scale which rates inhibited, depressive, overcontrolled behaviour (and comprises the “Withdrawn”, “Somatic Complaints”, and “Anxious/Depressed” scales), and the “Total Problems” scale which comprises all the behaviour items on the checklist and provides an overall rating of the child or adolescent’s mental health.

The CBCL and YSR can yield both raw scores and normalised T scores for each scale, with higher scores indicating more problems. Raw scores are calculated by summing scores on all items that comprise the scale. Although they reflect the full variation in scale scores that is possible, they cannot be used to make comparisons across different scales, as each scale comprises a different number of items (Achenbach, 1991a) (see Table 3.1). Raw scores can be transformed to normalised T scores which are standard scores that provide a similar metric for scales comprising of differing item numbers and score distributions (Achenbach & Rescorla, 2001). Normalised T scores enable comparisons across different checklists and scales, and thereby provide a way of comparing children’s functioning in one area (e.g., withdrawn behaviours) with their functioning in other areas (e.g., disruptive, aggressive behaviours). The T scores also enable standard comparisons between one sample’s scale scores with scale scores describing normative samples. As T scores are based on separate

normative samples for each gender and age group, they take into account gender and age differences (Achenbach, 1991a; Achenbach & Rescorla, 2001).

The checklists have clinical cut-points that can be used to distinguish between children and adolescents with and without clinically significant mental health problems (Achenbach 1991a, Achenbach 1991b). The checklists have two clinical cut-points, a 'borderline clinical range' and a 'clinical range'. Scores in the borderline range are high enough to be of concern, but are not as deviant as scores that are in the clinical range (Achenbach, 1991a). When only one cut-point is required for reporting purposes, the borderline clinical range is most commonly used to represent the bottom of the clinical range (Achenbach, 1991a, Achenbach, 1991b). For the narrowband scales, the cut-points are $T \geq 71$ for the clinical range and $T \geq 67$ for the borderline clinical range. For the broadband scales, the cut-points are $T \geq 64$ for the clinical range and $T \geq 60$ for the borderline clinical range (Achenbach, 1991a). Lower cut-points are used for the broadband scales because they encompass more numerous and diverse problems than the narrowband scales (Achenbach, 1991a). Substantial information is available to support the psychometric properties of the CBCL and YSR (Achenbach, 1991a, 1991b).

The 1991 versions of the checklist were selected for this study as they were used in the Australian National Child and Adolescent Survey of Mental Health and Well-Being (Sawyer et al., 2001). This ensured that the items comprising the corresponding checklists for the two samples were identical, thus enabling exact comparisons to be made between the data.

Table 3.1¹

Overview of the CBCL and YSR Scales

NOTE:

This table is included on page 130
of the print copy of the thesis held in
the University of Adelaide Library.

¹ Table adapted from Sawyer et al. (2000)

3.4.2 *Depression*

Adolescents' depression was measured using the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977, 1991). Children aged 13-17 years completed the questionnaire. The CES-D scale is a short self-report scale designed to measure depressive symptomatology in the general population (Radloff, 1977). The scale comprises of 20 items measuring symptoms associated with depression including depressive mood, feelings of guilt and worthlessness, psychomotor retardation, loss of appetite and sleep disturbance. Respondents rate the frequency with which they experience each symptom in the past week on a four-point scale from "Rarely or none of the time (less than 1 day)" to "Most or all of the time (5-7 days)". Each response is assigned a score from 0 to 3. The total summed score can range from 0-60, with higher scores indicating more depressive symptoms.

Cut-off scores can be employed to distinguish between adolescents with and without depressive symptomatology. A score of ≥ 16 is used as the recommended cut-off to identify adolescents with mild or greater levels of depression (Barnes & Prosen, 1984). A study conducted by Roberts, Lewinsohn and Seeley (1991) also identified categorical distinctions that can be used to identify adolescents with different levels of depression. These categories were employed in the current study and are: "No Depression" (score of 0-15), "Mild Depression" (score of 16-20), "Moderate Depression" (score of 21-30) and "Severe Depression" (score of 31-60) (Roberts, Lewinsohn & Seeley, 1991). The CES-D has demonstrated sound psychometric properties (Garrison, Schluchter, Schoenbach, & Kaplan, 1989; Radloff, 1977, 1991).

3.4.3 *Health-Related Quality of Life*

The health-related quality of life (HRQL) of children and adolescents was assessed by means of the Child Health Questionnaire (CHQ) (Landgraf, Abetz, & Ware, 1996), a multi-

domain generic health-related quality of life questionnaire which assesses the physical, psychological, and social functioning of children.

Caregivers completed the 50-item parent form of the CHQ (i.e., the CHQ-PF50) and adolescents aged 13 to 17 years completed the 87-item child form of the CHQ (i.e., the CHQ-CF87). The CHQ-PF50 was designed to be self-completed by parents or guardians of children aged 5 years or older and assesses different domains of children's functioning including children's physical functioning, mental health, behaviour, school and social limitations arising from the children's physical or psychosocial health problems, and the impact of the children's health on caregivers/parents (see Table 3.2 for further information). The CHQ-CF87 was designed to be self-completed by children at least 10 years of age and is similar to the 50-item parent version (see Table 3.2), with the exception that the two scales assessing the impact of children's health on caregivers/parents are not included (Landgraf et al., 1996).

The scales (described in Table 3.2) use a 4 week recall period, except for the "Family Cohesion" and "General Health Perceptions" scales. No recall period is used for "Family Cohesion" and "General Health Perceptions" as they ask about health and family relationships in general.

Raw scores for each domain are transformed on a 0-100 scale, with higher scores indicating better health-related quality of life. This makes it possible to readily compare the functioning of children across the different HRQL domains. The CHQ-PF50 and CHQ-CF87 questionnaires have been demonstrated to be psychometrically sound (Landgraf et al., 1996).

Table 3.2¹

Overview of the CHQ-PF50 and CHQ-CF87 Scales

NOTE:
This table is included on page 133
of the print copy of the thesis held in
the University of Adelaide Library.

¹ Table adapted from Landgraf et al. (1996) ² Scales are grouped under headings created by the author of this thesis

3.4.4 *Health-Risk Behaviours*

Information about health risk behaviours was obtained from adolescents aged 13 to 17 years using items from the 1991 self-report Youth Risk Behaviour Survey (YRBS). This survey was developed by the Centers for Disease Control and Prevention (CDC) in the USA for use in the Youth Risk Behaviour Surveillance System (YRBSS) (Kolbe, Kann, & Collins, 1993) which monitors health risk behaviours that contribute to the main causes of death, disability, and health and social problems among youth in the United States (Centers for Disease Control and Prevention, 2004).

The YRBS measures health risk behaviours including safety (e.g., wearing motorcycle helmet, rode with drinking driver), violence-related behaviour, suicide, tobacco use, alcohol use, marijuana use, other drug use, sexual behaviour, body weight and dietary behaviours, nutritional intake, physical activity, and other health-related topics.

In the present study, the YRBS items that were employed in the Australian National Child and Adolescent Survey of Mental Health and Well-Being were used. These items included those which ask about suicide, tobacco use, alcohol use, marijuana use, other drug use, and body weight. The 4 items about suicide employed in the current study, measured suicide ideation, attempted suicide, and the seriousness of those attempts. The 6 items about tobacco use measured lifetime and current smoking patterns, age of initiation, and attempts to quit smoking, while the 3 items asking about alcohol consumption measured lifetime and current use of alcohol, age of initiation, and episodic heavy drinking. Items related to drug use measured lifetime and current use of marijuana (4 items), hallucinogenic drugs (2 items), and amphetamines (2 items), and lifetime use of inhalants (2 items), designer drugs such as ecstasy (1 item), cocaine (1 item), heroin (1 item), injected drugs (1 item), and legal medication for non-medical purposes (2 items). The 6 items asking about body weight measured self-perception of body weight status and specific weight control behaviours.

Although there is limited information available about the psychometric properties of the YRBS, a study conducted by Brener, Collin, Kann, Warren and Williams (1995) reported that the YRBS has adequate test-retest reliability. They administered the 1991 version of the YRBS to a convenience sample of 1679 youth in school grades 7 to 12 in the US on two occasions, 2 weeks apart. Almost three quarters (72%) of the items were rated as having substantial or greater reliability ($\kappa = 61-80\%$) and there were no statistically significant differences between the prevalence rates at time 1 or time 2 (Brener et al., 1995, 2004). As yet, no study has been conducted to assess the validity of all self-reported health-risk behaviours included in the YRBS questionnaire. This is most likely due to the difficulty in conducting such a study. The CDC has determined that although self-reports of the behaviours measured by the YRBS are affected by cognitive and contextual factors, these factors do not have an equal impact upon the validity of self-reports of each type of behaviour (Brener et al., 2004). Furthermore, there is variance in the extent to which each type of behaviour can be objectively validated (Brener et al., 2004).

3.4.5 Perceived Problems, Need for Help and Service Use

A series of questions were asked to obtain information about whether children and adolescents were perceived (by their caregivers and/or by the adolescents themselves) to have emotional or behavioural problems or physical health problems, whether they were perceived to need professional help with these problems, and whether help had been received. Using a Yes/No response format, caregivers were asked to provide information about whether:

- they felt the child in their care had any emotional or behavioural problems in the last 6 months

If so, they were then asked to provide information about whether:

- they believed the child had more emotional or behavioural problems than others of the same age and gender
- they felt the child needed professional help with these problems

If they felt the child needed professional help, they were asked to provide information about whether:

- the child received the help he/she needed for these problems

Using the same format, caregivers were then asked to provide information about whether

- they felt the child in their care had any physical health problems in the last 6 months

If so, they were then asked to provide information about whether:

- they believed the child had more physical health problems than others of the same age and gender
- whether they felt the child needed professional help with these problems

If they felt the child needed professional help, they were asked to provide information about whether:

- the child received the help he/she needed for these problems

Adolescents aged 13-17 years were asked to provide the same information as caregivers, about themselves. In addition to this information, adolescents who indicated that they needed professional help with problems but did not get it, were asked why this occurred (e.g., 'I didn't know where to get help', 'Services were too far away').

These items have been used in several surveys of child mental health including the Australian National Survey (Sawyer et al., 2000).

3.4.6 Impact of Child and Adolescent Problems on Foster Carers

Two scales from the CHQ-PF50 were used to assess the impact of caring for children and adolescents upon caregivers. These were the "Emotional impact on parents" and "Time impact on parents" scales (see section 3.4.3). The "Emotional impact on parents" scale measures the emotional worry or concern experienced by the caregiver/parent due to the

child's physical and/or psychosocial health, whereas the "Time impact on parents" scale measures the limitations on the caregiver/parent's time for their own personal needs due to the child's physical and/or psychosocial health.

3.4.7 Demographic Characteristics

Demographic information about children and adolescents, their caregivers, and households was obtained using two demographic questionnaires (see Appendix G & H) completed by caregivers. The first questionnaire asked about basic demographic characteristics of the participating child/adolescent (i.e., age, gender, whether they identified as being of Aboriginal or Torres Strait Islander origin, and whether they had any current illness or disability), as well as information about the length of time they had been in their current placement and the total number of different placements they had experienced. The first questionnaire also asked for demographic characteristics of the primary caregiver and, if relevant, secondary caregiver (i.e., their educational attainment, usual occupation, employment status), as well as information about their household (i.e., whether it was a single or two-'parent' household and the number and ages of all dependent children under 18 years of age residing in the household).

The second demographic questionnaire (Appendix H) asked for background information about children and adolescents that was deemed more sensitive in nature and had provisions for qualitative responses (i.e., total length of time spent in alternative care, whether they were in kinship care, whether they had siblings in alternative care, whether they were placed with any siblings, and whether they had any contact with their family of origin). Research assistants verbally asked these questions and recorded all relevant information.

3.4.8 Questionnaire Design

Questionnaires used in this study were collated into three different booklets. One of these booklets was administered to caregivers, one was administered to adolescents aged 13 to 17 years, while responses to questions in the last booklet were obtained verbally from caregivers (see Table 3.3). Questionnaires were formatted in a way which enabled them to be optically scanned. The advantage of scanning data rather than manually coding and entering them, was that the possibility of human error was greatly reduced. This maximised the accuracy and quality of the data. Despite this, manual checking was conducted to ensure the data were scanned correctly.

Table 3.3

Content of Questionnaire Booklets

| Respondent | Completion | Questionnaires |
|------------------------------|---------------------|---|
| Caregivers | Self-complete | Child Behaviour Checklist (CBCL) 4-18 Child Health Questionnaire (CHQ)-PF50 Service Use Questionnaire Demographic Questionnaire |
| Adolescents (13-17 years) | Self-complete | Youth Self Report (YSR) Child Health Questionnaire (CHQ)-CF87 Youth Risk Behaviour Survey (YRBS) Centres for Disease & Epidemiology-Depression (CESD) Scale Service Use Questionnaire |
| Caregivers | Verbal interview | Sensitive Information about Placement & Contact with Family of Origin |

Chapter Four

Sample Characteristics

4.1 Demographic Characteristics

The demographic characteristics of children and adolescents in home-based care are provided in Table 4.1. The mean age of children and adolescents in home-based care was 11.4 (SD = 3.3) (62% were aged 6-12 years and 38% were aged 13-17 years), 46% were female, and 15% identified as being of Aboriginal or Torres Strait Islander origin. Caregivers reported that 42% of the children and adolescents had an illness or disability.

Primary caregivers were female for the vast majority of the children and adolescents who participated in the study (92%). Male primary caregivers responded for 15 children and adolescents (5%), while secondary caregivers provided information about the remaining participants (3%). Just over half of the sample (56%) was residing in a two 'parent' family, while the majority of the remaining children and adolescents were living in a single 'parent' family (41%).

The community comparison group consisted of all children and adolescents aged 6-17 years who had participated in the Australian National Survey of Child and Adolescent Mental Health and Wellbeing (excluding 15 children and adolescents who were residing with foster parents at the time of the survey). The demographic characteristics of this sample are also reported in Table 4.1. The only significant differences between the characteristics of children and adolescents in the two groups were that a higher proportion in the home-based care group than in the community group were identified as being of Aboriginal or Torres Strait Islander origin (15% versus 4%), and lived in a single 'parent' household (41% versus 15%). These

findings are not surprising, as indigenous children are commonly over-represented in the alternative care sector, as are single parent caregivers.

Table 4.1

Demographic Characteristics of Children and Adolescents in Home-Based Care and the General Community

| Characteristic | Home-Based Care n=326 | General Community n=3582 | <i>p</i> |
|--------------------------------------|-----------------------------|--------------------------------|----------|
| Gender (%) | | | |
| Female | 46.0 | 50.2 | 0.17 |
| Age (Mean±SD) | 11.4±3.3 | 11.4±3.4 | 0.84 |
| Age categories (%) | | | |
| 6-12 years | 62.0 | 58.6 | 0.26 |
| 13-17 years | 38.0 | 41.4 | |
| Indigenous (%) | | (n=3303) | |
| Aboriginal or Torres Strait Islander | 15.0 | 3.7 | <.001 |
| Illness or disability (%) | 41.7 | n/a | n/a |
| Respondent | | | |
| Primary caregiver-Female | 92.0 | n/a | n/a |
| Primary caregiver-Male | 4.6 | n/a | n/a |
| Secondary caregiver-Female | 1.5 | n/a | n/a |
| Secondary caregiver-Male | 1.8 | n/a | n/a |
| Household family structure | (n=325) | (n=3578) | |
| 2 'parents' | 56.3 | 83.1 | <.001 |
| Single 'parent' family | 41.2 | 15.2 | |
| Other (e.g., 2 or more 'parents') | 2.5 | 1.6 | |

Note. The number of participants for whom data were available is as indicated at the beginning of the table, unless otherwise stated in the body of the table.

4.2 Placement History and Characteristics

Seventy percent of children and adolescents had been in care for more than 4 years, 25% for 1 to 3 years, and 5% for less than 1 year. During this time, 51% of the children and adolescents had experienced only 1 or 2 placements (including their current placement), 31% had experienced 3 to 5 placements, while the remaining 19% had experienced 6 or more placements. Over half of the children and adolescents (56%) had been living in their current placement for 4 or more years.

Of the 18% of children and adolescents residing in kinship home-based care (i.e., with relatives), 39% were residing with a grandparent or both grandparents, 32% were residing with an aunt or uncle, 10% were residing with their biological mother, while the remaining 20% were residing with a more distant relative. Of the 223 children and adolescents who had one or more siblings in alternative care, half were placed with at least one sibling.

Table 4.2

Placement History and Characteristics of Children and Adolescents in Home-Based Care

| Placement Information and History | % |
|---|------|
| Placement History | |
| Length of time in alternative care (n=322) | |
| Less than 1 year | 5.0 |
| 1 to 3 years | 25.2 |
| 4 to 6 years | 22.0 |
| 7 to 9 years | 18.9 |
| 10 to 12 years | 14.0 |
| 13 or more years | 15.0 |
| Number of placements (n=308) | |
| 1-2 | 51.0 |
| 3-5 | 30.5 |
| 6-8 | 6.2 |
| 9-11 | 4.5 |
| 12-14 | 2.3 |
| 15 or more | 5.5 |
| Current Placement Information | |
| Length of time in current placement (n=326) | |
| < 12 months | 12.6 |
| 1-3 years | 31.0 |
| 4-6 years | 24.5 |
| 7-9 years | 13.2 |
| 10 years or more | 18.7 |
| Type of care (n=326) | |
| Kinship home-based care | 18.4 |
| Non-kinship home-based care | 81.6 |
| Type of kinship care (n=60) (1 missing) | |
| Maternal grandparent/s | 22.0 |
| Paternal grandparent/s | 16.9 |
| Maternal aunt and/or uncle | 20.3 |
| Paternal aunt and/or uncle | 11.9 |
| Biological mother | 10.2 |
| Other relative | 20.0 |
| Siblings in alternative care? (n=321) | 69.5 |
| Placement of siblings (n=223) | |
| Child placed separately to siblings | 41.7 |
| Child placed with at least one sibling | 49.8 |
| Unknown | 8.5 |

4.3 Caregiver and Household Characteristics

Just under half of the primary caregivers had not completed secondary schooling (48%), 14% had completed secondary school, and although 38% had some tertiary qualification, only a small proportion had a university qualification (see Table 4.3). The educational attainment of secondary caregivers was very similar. Only 30% of the primary caregivers and 65% of secondary caregivers were in paid employment.

As discussed earlier (see Table 4.1), just over half of the children and adolescents were residing in a two 'parent' family, while the majority of the remaining children and adolescents were residing in a single 'parent' family. Over a quarter (27%) of the children and adolescents resided in a household where they were the only dependent child under 18 years of age, almost half (48%) resided with 1 or 2 other dependent child/ren, while the remaining 13% resided with 3 or more other dependent children (Table 4.3).

Table 4.3

Caregiver and Household Characteristics for Children and Adolescents in Home-Based Care

| Caregiver and Household Characteristics | % |
|--|------|
| Caregivers' Education Level | |
| Primary caregiver (n=325) | |
| Primary school | 8.3 |
| Some years of high school | 40.0 |
| Year 12, Matric or equivalent | 13.5 |
| Technical, trade or TAFE certificate | 25.8 |
| Completed university qualifications | 12.3 |
| Secondary caregiver (n=190) | |
| Primary school | 4.7 |
| Some years of high school | 41.1 |
| Year 12, Matric or equivalent | 12.1 |
| Technical, trade or TAFE certificate | 30.5 |
| Completed university qualifications | 11.6 |
| Caregivers' Employment | |
| Primary caregiver in paid employment (n=326) | 30.1 |
| Secondary caregiver in paid employment (n=190) | 65.3 |
| Caregivers' Occupation Status | |
| Primary Caregiver (n=323) | |
| High | 2.5 |
| Medium | 27.6 |
| Low | 13.3 |
| Home Duties | 46.4 |
| Retired/Pensioner | 7.7 |
| Other | 2.4 |
| Secondary Caregiver (n=189) | |
| High | 7.4 |
| Medium | 32.3 |
| Low | 31.2 |
| Home Duties | 6.3 |
| Retired/Pensioner | 18.0 |
| Other | 4.7 |
| Other dependent children aged under 18 years in household (n=326) | |
| None | 26.7 |
| 1 other child | 23.6 |
| 2 other children | 23.9 |
| 3 other children | 14.3 |
| 4 other children | 7.8 |
| 5 other children | 1.6 |
| 6 other children | 2.2 |

4.4 Contact with Parents of Origin

Caregivers reported that a total of 170 children and adolescents (52%) had some form of contact with their biological mother, and that a total of 71 (22%) had some form of contact with their biological father, with the vast majority having face-to-face contact (Table 4.4). Of the children and adolescents who had contact with their mother or father, caregivers reported that over half had some form of contact weekly or fortnightly. Only 16% of the children and adolescents had some form of contact with both their biological mother and biological father, as reported by caregivers.

Table 4.4

Contact with Family of Origin for Children and Adolescents in Home-Based Care

| Contact with Family of Origin | % |
|---|------|
| Contact with biological mother (n=326) | |
| In person | 49.3 |
| Via phone | 1.5 |
| Card exchange only | 0.3 |
| Unknown type of contact | 0.9 |
| No contact | 47.9 |
| Frequency of contact with biological mother (n=170) | |
| Daily (living with biological mother) | 3.5 |
| At least once a week | 30.0 |
| At least once a fortnight | 25.9 |
| At least once a month | 11.2 |
| At least every few months | 11.8 |
| Twice a year | 2.9 |
| Once a year | 3.5 |
| Unknown frequency of contact | 11.2 |
| Contact with biological father (n=326) | |
| In person | 19.9 |
| Via phone | 0.9 |
| Card exchange only | 0.0 |
| Unknown type of contact | 0.9 |
| No contact | 78.2 |
| Frequency of contact with biological father (n=71) | |
| Daily (living with biological father) | 0.0 |
| At least once a week | 36.6 |
| At least once a fortnight | 15.5 |
| At least once a month | 11.3 |
| At least every few months | 16.9 |
| Twice a year | 1.4 |
| Once a year | 0.0 |
| Unknown | 18.3 |
| Contact with both parents? | 16 |

Chapter Five

The Mental Health of Children and Adolescents in Home-Based Care

This chapter describes the nature and prevalence of mental health problems amongst children and adolescents living in home-based foster care as reported by caregivers on the CBCL, and adolescents on the YSR and CES-D. One of the primary aims of this study was to provide comprehensive data describing the mental health of foster children of different gender and age. In the first instance, mental health data were reported and stratified by gender and age. Comparisons were then made between the nature and prevalence of mental health problems reported for children and adolescents in home-based care and those in the general community.

CBCL and YSR raw scores were used for analyses throughout this chapter to take account of the full variation in these scales and to allow comparisons between children and adolescents of different age and gender. The only exception was in sections 5.5, 5.6, 5.7 and 5.8 where CBCL and YSR T-scores were used to facilitate identification of children and adolescents with clinically significant mental health problems, and those without problems.

5.1 Mental Health Problems of Children and Adolescents as Reported by Caregivers on the CBCL: HOME-BASED CARE

CBCL mean scores describing children and adolescents in home-based care are summarised in Tables 5.1 and 5.2. A series of 2 Gender (Males vs Females) x 2 Age Group (Younger (6-12 years) vs Older (13-17 years)) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. There was a significant main effect of Gender on the Somatic Complaints scale, with females having a significantly higher mean score than males. There were two significant Age Group effects - on the Withdrawn and Delinquent Behaviour scales - with 13-17 year old children having a significantly higher mean score on these scales than 6-12 year old children. The sizes of these differences, however, were in the range defined as a small effect size (Somatic Complaints – Cohen's $d = 0.28$; Withdrawn – Cohen's $d = 0.24$; Delinquent Behaviour – Cohen's $d = 0.26$). Aside from these small differences, children and adolescents in home-based care had similar mean scores on the CBCL scales, regardless of age or gender.

There was also a significant Gender x Age Group interaction effect for the Total Problems, Aggressive Behaviour and Thought Problems scales. To interpret these interactions, separate age group analyses were conducted for each level of gender. Simple main effects analyses showed that, whereas younger boys (6-12 years) had a higher mean score than younger girls on the Total Problems, Aggressive Behaviour and Thought Problems scales, this pattern reversed amongst the older children (13–17 years). Older females had a higher mean score than older males on the Total Problems, Aggressive Behaviour and Thought Problems scales. These results suggest that whereas younger males experience more mental health problems than younger females, this pattern reverses amongst older children.

Table 5.1

Home-Based Care: Mean (\pm SD) CBCL Scores

| CBCL Scales | Total Sample n = 326 | Male n = 176 | Female n = 150 | Younger n = 202 | Older n = 124 | Gender <i>F</i> | Age Group <i>F</i> |
|--------------------------|--|--|--|--------------------|-------------------|--------------------|-----------------------|
| Broadband Scales | | | | | | | |
| Total Problems | 53.83 \pm 33.70 | 54.52 \pm 33.19 | 53.01 \pm 34.37 | 54.93 \pm 33.00 | 52.03 \pm 34.86 | 0.07 | 0.31 |
| Internalising | 12.08 \pm 9.70 | 11.52 \pm 9.55 | 12.73 \pm 9.87 | 11.66 \pm 9.61 | 12.76 \pm 9.86 | 2.26 | 1.42 |
| Externalising | 20.00 \pm 13.56 | 20.78 \pm 13.11 | 19.09 \pm 14.05 | 20.37 \pm 13.16 | 19.41 \pm 14.21 | 0.48 | 0.24 |
| Narrowband Scales | | | | | | | |
| <i>Internalising</i> | | | | | | | |
| Withdrawn | 3.98 \pm 3.61 | 3.99 \pm 3.56 | 3.95 \pm 3.68 | 3.64 \pm 3.48 | 4.52 \pm 3.76 | 0.14 | 5.19* |
| Somatic complaints | 2.20 \pm 2.79 | 1.84 \pm 2.59 | 2.63 \pm 2.97 | 2.17 \pm 2.81 | 2.25 \pm 2.78 | 7.31** | 0.21 |
| Anxious/Depressed | 6.35 \pm 5.72 | 6.13 \pm 5.82 | 6.61 \pm 5.60 | 6.26 \pm 5.77 | 6.50 \pm 5.65 | 1.14 | 0.28 |
| <i>Externalising</i> | | | | | | | |
| Delinquent behaviour | 5.04 \pm 4.34 | 5.28 \pm 4.30 | 4.65 \pm 4.38 | 4.60 \pm 3.84 | 5.76 \pm 4.99 | 1.41 | 5.42* |
| Aggressive behaviour | 14.98 \pm 9.96 | 15.34 \pm 9.64 | 14.44 \pm 10.33 | 15.76 \pm 9.93 | 13.70 \pm 9.92 | 0.22 | 2.74 |
| <i>Other</i> | | | | | | | |
| Social problems | 5.08 \pm 3.72 | 5.06 \pm 3.56 | 5.10 \pm 3.92 | 5.35 \pm 3.62 | 4.63 \pm 3.85 | 0.09 | 2.40 |
| Thought problems | 2.45 \pm 2.84 | 2.69 \pm 3.12 | 2.23 \pm 2.46 | 2.47 \pm 2.94 | 2.49 \pm 2.68 | 0.50 | .07 |
| Attention problems | 8.56 \pm 5.40 | 8.96 \pm 5.44 | 8.10 \pm 5.34 | 8.89 \pm 5.65 | 8.03 \pm 5.23 | 1.14 | 1.63 |
| Sex problems | 0.86 \pm 1.62 (6-12 yr olds only) | 0.83 \pm 1.50 (6-12 yr olds only) | 0.88 \pm 1.76 (6-12 yr olds only) | 0.86 \pm 1.62 | n/a | 0.04 | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.2

Home-Based Care: Mean (\pm SD) CBCL scores: Age Group x Gender

| | Younger (6-12 years) | | Older (13-17 years) | | Gender x Age Group <i>F</i> |
|-----------------------------|-------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| | Male n = 105 | Female n = 97 | Male n = 71 | Female n = 53 | |
| CBCL Scales | | | | | |
| Broadband Scales | | | | | |
| Total Problems | 58.62 \pm 31.36 | 50.93 \pm 34.40 | 48.46 \pm 35.08 | 56.81 \pm 34.31 | 4.32* |
| Internalising | 11.64 \pm 9.38 | 11.69 \pm 9.90 | 11.34 \pm 9.87 | 14.64 \pm 9.61 | 2.76 |
| Externalising | 22.18 \pm 12.34 | 18.40 \pm 13.80 | 18.72 \pm 14.01 | 20.34 \pm 14.55 | 3.02 |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 3.87 \pm 3.59 | 3.40 \pm 3.35 | 4.19 \pm 3.52 | 4.96 \pm 4.06 | 2.26 |
| Somatic complaints | 1.90 \pm 2.51 | 2.47 \pm 3.09 | 1.76 \pm 2.73 | 2.91 \pm 2.73 | 0.79 |
| Anxious/Depressed | 6.32 \pm 5.90 | 6.20 \pm 5.66 | 5.84 \pm 5.73 | 7.38 \pm 5.37 | 1.59 |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 5.06 \pm 3.75 | 4.11 \pm 3.90 | 5.86 \pm 4.99 | 5.62 \pm 5.03 | 0.51 |
| Aggressive behaviour | 17.12 \pm 9.29 | 14.29 \pm 10.42 | 12.94 \pm 9.66 | 14.72 \pm 10.25 | 4.13* |
| <i>Other</i> | | | | | |
| Social problems | 5.41 \pm 3.43 | 5.17 \pm 3.83 | 4.37 \pm 3.65 | 4.98 \pm 4.12 | 1.26 |
| Thought problems | 3.01 \pm 3.32 | 1.89 \pm 2.34 | 2.20 \pm 2.75 | 2.87 \pm 2.55 | 7.67** |
| Attention problems | 9.65 \pm 5.63 | 8.06 \pm 5.48 | 7.93 \pm 5.18 | 8.17 \pm 5.12 | 2.10 |
| Sex problems | 0.83 \pm 1.50 | 0.88 \pm 1.76 | n/a | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.2 Comparison of Mental Health Problems as Reported by Caregivers on the CBCL: HOME-BASED CARE VS GENERAL COMMUNITY

A series of 2 Group (Home-Based Care vs General Community) x 2 Gender (Males vs Females) x 2 Age Group (6-12 years vs 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. Main effects and interaction effects that did not include “Group” were not included, as the principal research interest was to describe the mental health of children and adolescents in home-based care, and to make comparisons with the mental health of children and adolescents in the general community.

The relevant main effects and interactions can be seen in Tables 5.3 (main effect of Group), 5.6 (Group x Gender), 5.7 (Group x Age Group) and 5.8 (Group x Gender x Age Group). There was a significant main effect of Group on all CBCL scales. There was one significant Group x Gender interaction effect on the Somatic Complaints scale. Group x Age Group interaction effects were significant for two scales (Withdrawn and Delinquent Behaviour), and Group x Gender x Age Group interactions were significant for four scales (Total Problems, Externalising Problems, Aggressive Behaviour and Thought Problems scales). Results of these analyses are discussed in detail below. These main effects and interactions all remained statistically significant when 2 Group (Home-Based Care vs General Community) x 2 Gender (Males vs Females) x 2 Age Group (6-12 years) factorial ANCOVAs were used to adjust for the different prevalence of single parents and indigenous children in the two groups.

5.2.1 CBCL Mean Scores: Main Effect of Group

There was a significant main effect of Group on all CBCL scales. Children and adolescents in home-based care had consistently higher mean scores on all the CBCL scales than children and adolescents in the general community (Table 5.3). The sizes of these

differences were in the range defined as a large effect size (d ranged from 0.81 to 1.37) for all scales except the Somatic complaints scale ($d = 0.39$ – small effect size) and the Sex problems scale ($d = 0.58$ – moderate effect size).

Table 5.3
Home-Based Care vs General Community: Mean (\pm SD) CBCL Scores

| CBCL Scales | Home-Based Care n=323 | General Community n=3241 | Group <i>F</i> |
|-----------------------------|--------------------------|-----------------------------|-------------------|
| Broadband Scales | | | |
| Total problems | 53.83 \pm 33.70 | 18.38 \pm 18.79 | 827.62*** |
| Internalising | 12.08 \pm 9.70 | 5.17 \pm 6.07 | 334.88*** |
| Externalising | 20.00 \pm 13.56 | 6.59 \pm 7.49 | 740.84*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 3.98 \pm 3.61 | 1.56 \pm 2.21 | 315.44*** |
| Somatic complaints | 2.20 \pm 2.79 | 1.27 \pm 1.83 | 68.10*** |
| Anxious/Depressed | 6.35 \pm 5.72 | 2.55 \pm 3.39 | 314.19*** |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 5.04 \pm 4.34 | 1.44 \pm 2.25 | 604.18*** |
| Aggressive behaviour | 14.98 \pm 9.96 | 5.15 \pm 5.73 | 684.33*** |
| <i>Other</i> | | | |
| Social problems | 5.08 \pm 3.72 | 1.35 \pm 2.00 | 772.86*** |
| Thought problems | 2.45 \pm 2.84 | 0.32 \pm 0.89 | 906.11*** |
| Attention problems | 8.56 \pm 5.40 | 2.40 \pm 3.20 | 860.26*** |
| Sex problems | 0.86 \pm 1.62 | 0.16 \pm 0.50 | 604.18*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

The same pattern of results was observed when comparisons were made for males (see Table 5.4) and females (see Table 5.5) separately. Males in home-based care had higher mean scores on all CBCL scales than males in the general community (Table 5.4). Independent-samples t-tests showed that all of these differences were statistically significant. The sizes of the differences were large (Cohen's d ranged from 0.78 to 1.33) on all scales except the Somatic Complaints scale (Cohen's $d = 0.35$).

Table 5.4

Home-Based Care vs General Community: Mean (\pm SD) CBCL Scores for Males

| CBCL Scales | Home-Based Care n = 174 | General Community n = 1629 | <i>t</i> |
|--------------------------|----------------------------|-------------------------------|----------|
| Broadband Scales | | | |
| Total Problems | 54.52 \pm 33.19 | 19.27 \pm 19.72 | 13.83*** |
| Internalising | 11.52 \pm 9.55 | 4.85 \pm 6.01 | 9.04*** |
| Externalising | 20.78 \pm 13.11 | 7.44 \pm 8.19 | 13.23*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 3.99 \pm 3.56 | 1.55 \pm 2.29 | 8.90*** |
| Somatic complaints | 1.84 \pm 2.59 | 1.09 \pm 1.62 | 3.76*** |
| Anxious/Depressed | 6.13 \pm 5.82 | 2.42 \pm 3.40 | 8.29*** |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 5.28 \pm 4.30 | 1.70 \pm 2.53 | 11.12*** |
| Aggressive behaviour | 15.34 \pm 9.64 | 5.74 \pm 6.18 | 13.07*** |
| <i>Other</i> | | | |
| Social problems | 5.06 \pm 3.56 | 1.39 \pm 2.09 | 13.38*** |
| Thought problems | 2.69 \pm 3.12 | 0.35 \pm 0.99 | 9.84*** |
| Attention problems | 8.96 \pm 5.44 | 2.83 \pm 3.46 | 14.35*** |
| Sex problems | 0.83 \pm 1.50 | 0.16 \pm 0.52 | 4.26*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

Similarly, females in home-based care had higher mean scores on all CBCL scales than females in the general community (Table 5.5). Independent-samples t-tests showed all of these differences to be statistically significant. The sizes of these differences were large (Cohen's d ranged from 0.79 to 1.41) for all scales except the Somatic Complaints scale (Cohen's $d = 0.46$).

Table 5.5

Home-Based Care vs General Community: Mean (\pm SD) CBCL Scores for Females

| CBCL Scales | Home-Based Care n = 149 | General Community n = 1612 | <i>t</i> |
|-----------------------------|----------------------------|-------------------------------|----------|
| Broadband Scales | | | |
| Total Problems | 53.01 \pm 34.37 | 17.48 17.76 | 12.51*** |
| Internalising | 12.73 \pm 9.87 | 5.40 \pm 6.13 | 8.83*** |
| Externalising | 19.09 \pm 14.05 | 5.74 \pm 6.60 | 11.52*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 3.95 \pm 3.68 | 1.57 \pm 2.13 | 7.83*** |
| Somatic complaints | 2.63 \pm 2.97 | 1.46 \pm 2.01 | 4.73*** |
| Anxious/Depressed | 6.61 \pm 5.60 | 2.69 \pm 3.37 | 8.44*** |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 4.65 \pm 4.38 | 1.18 \pm 1.90 | 9.63*** |
| Aggressive behaviour | 14.44 \pm 10.33 | 4.56 \pm 5.18 | 11.58*** |
| <i>Other</i> | | | |
| Social problems | 5.10 \pm 3.92 | 1.30 \pm 1.91 | 11.75*** |
| Thought problems | 2.23 \pm 2.46 | 0.28 \pm 0.78 | 9.68*** |
| Attention problems | 8.10 \pm 5.34 | 1.98 \pm 2.85 | 13.61*** |
| Sex problems | 0.88 \pm 1.76 | 0.15 \pm 0.49 | 3.62** |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.2.2 CBCL Mean Scores: Group x Gender

There was a significant Group x Gender interaction for the Somatic Complaints scale. To interpret this interaction, separate group comparisons were conducted for each level of gender (i.e., male and female). These simple effects analyses showed that, although there was a significant group difference in Somatic Complaints irrespective of gender, the mean difference was much larger for females (see Table 5.6). That is, females in the foster care sample had a disproportionately higher mean score on the Somatic Complaints scale than females in the community.

Table 5.6

Mean (\pm SD) CBCL Scores: Group x Gender

| | Home-Based Care | | General Community | | Group x Gender <i>F</i> |
|-----------------------------|-------------------|--------------------|-------------------|---------------------|----------------------------|
| | Males n = 174 | Females n = 149 | Males n = 1629 | Females n = 1612 | |
| CBCL Scales | | | | | |
| Broadband Scales | | | | | |
| Total Problems | 54.52 \pm 33.19 | 53.01 \pm 34.37 | 19.27 \pm 19.72 | 17.48 \pm 17.76 | 0.57 |
| Internalising | 11.52 \pm 9.55 | 12.73 \pm 9.87 | 4.85 \pm 6.01 | 5.40 \pm 6.13 | 1.38 |
| Externalising | 20.78 \pm 13.11 | 19.09 \pm 14.05 | 7.44 \pm 8.19 | 5.74 \pm 6.60 | 0.37 |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 3.99 \pm 3.56 | 3.95 \pm 3.68 | 1.55 \pm 2.29 | 1.57 \pm 2.13 | 0.18 |
| Somatic complaints | 1.84 \pm 2.59 | 2.63 \pm 2.97 | 1.09 \pm 1.62 | 1.46 \pm 2.01 | 4.01* |
| Anxious/Depressed | 6.13 \pm 5.82 | 6.61 \pm 5.60 | 2.42 \pm 3.40 | 2.69 \pm 3.37 | 0.67 |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 5.28 \pm 4.30 | 4.65 \pm 4.38 | 1.70 \pm 2.53 | 1.18 \pm 1.90 | 0.03 |
| Aggressive behaviour | 15.34 \pm 9.64 | 14.44 \pm 10.33 | 5.74 \pm 6.18 | 4.56 \pm 5.18 | 0.68 |
| <i>Other</i> | | | | | |
| Social problems | 5.06 \pm 3.56 | 5.10 \pm 3.92 | 1.39 \pm 2.09 | 1.30 \pm 1.91 | 0.49 |
| Thought problems | 2.69 \pm 3.12 | 2.23 \pm 2.46 | 0.35 \pm 0.99 | 0.28 \pm 0.78 | 1.34 |
| Attention problems | 8.96 \pm 5.44 | 8.10 \pm 5.34 | 2.83 \pm 3.46 | 1.98 \pm 2.85 | 0.12 |
| Sex problems | 0.83 \pm 1.50 | 0.88 \pm 1.76 | 0.16 \pm 0.52 | 0.15 \pm 0.49 | 0.20 |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.2.3 CBCL Mean Scores: Group x Age Group

There were significant Group x Age Group interactions for Withdrawn and Delinquent Behaviour subscales. Simple main effects analyses were conducted by comparing the two groups at each level of age (i.e., for younger children and older children separately). The results showed that, although there were significant group differences irrespective of age group, the differences were much larger for the older children. That is, older children in home-based care had disproportionately higher mean scores than those in the community.

Table 5.7

Mean (\pm SD) CBCL Scores: Group x Age Group

| | Home-Based Care | | General Community | | Group x Age <i>F</i> |
|-----------------------------|----------------------------------|---------------------------------|-----------------------------------|---------------------------------|----------------------------|
| | Younger (6-12 yrs) n = 201 | Older (13-17 yrs) n = 122 | Younger (6-12 yrs) n = 1923 | Older (6-12 yrs) n = 1318 | |
| Broadband Scales | | | | | |
| Total Problems | 54.93 \pm 33.00 | 52.03 \pm 34.86 | 19.23 \pm 18.77 | 17.14 \pm 18.76 | 0.001 |
| Internalising | 11.66 \pm 9.61 | 12.76 \pm 9.86 | 5.06 \pm 5.81 | 5.34 \pm 6.43 | 1.81 |
| Externalising | 20.37 \pm 13.16 | 19.41 \pm 14.21 | 6.89 \pm 7.46 | 6.16 \pm 7.52 | 0.004 |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 3.64 \pm 3.48 | 4.52 \pm 3.76 | 1.49 \pm 2.07 | 1.66 \pm 2.39 | 7.38** |
| Somatic complaints | 2.17 \pm 2.81 | 2.25 \pm 2.78 | 1.13 \pm 1.69 | 1.48 \pm 2.00 | 0.67 |
| Anxious/Depressed | 6.26 \pm 5.77 | 6.50 \pm 5.65 | 2.63 \pm 3.35 | 2.44 \pm 3.43 | 1.53 |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 4.60 \pm 3.84 | 5.76 \pm 4.99 | 1.28 \pm 1.93 | 1.67 \pm 2.64 | 6.42* |
| Aggressive behaviour | 15.76 \pm 9.93 | 13.70 \pm 9.92 | 5.61 \pm 5.90 | 4.50 \pm 5.42 | 1.11 |
| <i>Other</i> | | | | | |
| Social problems | 5.35 \pm 3.62 | 4.63 \pm 3.85 | 1.50 \pm 2.07 | 1.13 \pm 1.88 | 1.24 |
| Thought problems | 2.47 \pm 2.94 | 2.49 \pm 2.68 | 0.32 \pm 0.90 | 0.31 \pm 0.88 | 0.40 |
| Attention problems | 8.89 \pm 5.65 | 8.03 \pm 5.23 | 2.54 \pm 3.26 | 2.21 \pm 3.10 | 1.39 |
| Sex problems | 0.86 \pm 1.62 | n/a | 0.16 \pm 0.50 | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.2.4 CBCL Mean Scores: Group x Gender x Age Group

The series of 2 Group x 2 Gender x 2 Age Group factorial ANOVAS revealed significant 3-way interactions on the Total Problems, Externalising Problems, Thought Problems, and Aggressive Behaviour scales. These 3 way interactions were broken down in order to determine the source of the interactions.

In the first stage, separate Group x Age Group interactions were conducted for each level of gender (i.e., for males and females separately). For the Total Problems, Thought Problems and Aggressive Behaviour scales, there was a significant Age Group x Group interaction for males. Further simple main effects analyses applied to this result involved

Group comparisons conducted for each Age Group separately. These analyses revealed group differences at both age level, but highlighted a relatively larger difference for the 6-12 year olds. In other words, 6-12 year old males in foster care were particularly more likely to experience difficulties with Total Problems, Thought Problems and Aggressive Behaviour.

For the Thought Problems scale, there was also a significant Group x Age Group interaction for females. Further simple main effects analyses applied to this result involved Group comparisons conducted for each Age Group separately. These analyses revealed group differences at both age level, but highlighted a relatively larger difference for the 13-17 year olds. In other words, 13-17 year old females in foster care appeared to be particularly more likely to experience Thought Problems. This pattern was also observed on the Total Problems and Externalising Problems scales, but the Age Group x Group interactions were not statistically significant.

Table 5.8

Mean (±SD) CBCL Scores: Group x Gender x Age Group

| CBCL Scales | Younger (6 – 12 yrs) | | | | Older (13 – 17 yrs) | | | | Group x Gender x Age <i>F</i> |
|--------------------------|----------------------|------------------|-------------------|-------------------|---------------------|------------------|-------------------|-------------------|-------------------------------------|
| | Home-Based Care | | General Community | | Home-Based Care | | General Community | | |
| | Male n = 104 | Female n = 97 | Male n = 979 | Female n = 944 | Male n = 70 | Female n = 52 | Male n = 650 | Female n = 668 | |
| Broadband Scales | | | | | | | | | |
| Total Problems | 58.62 ± 31.36 | 50.93 ± 34.40 | 20.55 ± 19.93 | 17.85 ± 17.38 | 48.46 ± 35.08 | 56.81 ± 34.31 | 17.34 ± 19.26 | 16.96 ± 18.27 | 7.71** |
| Internalising | 11.64 ± 9.38 | 11.69 ± 9.90 | 5.00 ± 6.03 | 5.11 ± 5.48 | 11.34 ± 9.87 | 14.64 ± 9.61 | 4.63 ± 5.97 | 6.04 ± 6.79 | 1.56 |
| Externalising | 22.18 ± 12.34 | 18.40 ± 13.80 | 7.73 ± 8.12 | 6.01 ± 6.58 | 18.72 ± 14.01 | 20.34 ± 14.55 | 6.99 ± 8.29 | 5.25 ± 6.60 | 7.32** |
| Narrowband Scales | | | | | | | | | |
| <i>Internalising</i> | | | | | | | | | |
| Withdrawn | 3.87 ± 3.59 | 3.40 ± 3.35 | 1.53 ± 2.21 | 1.45 ± 1.92 | 4.19 ± 3.52 | 4.96 ± 4.06 | 1.58 ± 2.40 | 1.73 ± 1.58 | 3.21 |
| Somatic complaints | 1.90 ± 2.51 | 2.47 ± 3.09 | 1.03 ± 1.59 | 1.24 ± 1.79 | 1.76 ± 2.73 | 2.91 ± 2.73 | 1.17 ± 1.65 | 1.77 ± 2.26 | 0.14 |
| Anxious/Depressed | 6.32 ± 5.90 | 6.20 ± 5.66 | 2.65 ± 3.55 | 2.61 ± 3.13 | 5.84 ± 5.73 | 7.38 ± 5.37 | 2.07 ± 3.12 | 2.80 ± 3.68 | 1.06 |
| <i>Externalising</i> | | | | | | | | | |
| Delinquent behaviour | 5.06 ± 3.75 | 4.11 ± 3.90 | 1.52 ± 2.15 | 1.04 ± 1.62 | 5.86 ± 4.99 | 5.62 ± 5.03 | 1.97 ± 2.99 | 1.38 ± 2.23 | 1.84 |
| Aggressive behaviour | 17.12 ± 9.29 | 14.29 ± 10.42 | 6.21 ± 6.36 | 4.98 ± 5.20 | 12.94 ± 9.66 | 14.72 ± 10.25 | 5.03 ± 5.83 | 3.98 ± 4.93 | 8.87** |
| <i>Other</i> | | | | | | | | | |
| Social problems | 5.41 ± 3.43 | 5.17 ± 3.83 | 1.62 ± 2.24 | 1.37 ± 1.88 | 4.37 ± 3.65 | 4.98 ± 4.12 | 1.06 ± 1.80 | 1.20 ± 1.96 | 1.17 |
| Thought problems | 3.01 ± 3.32 | 1.89 ± 2.34 | 0.37 ± 1.03 | 0.27 ± 0.74 | 2.20 ± 2.75 | 2.87 ± 2.55 | 0.32 ± 0.94 | 0.31 ± 0.83 | 34.86*** |
| Attention problems | 9.65 ± 5.63 | 8.06 ± 5.48 | 3.01 ± 3.54 | 2.05 ± 2.87 | 7.93 ± 5.18 | 8.17 ± 5.12 | 2.55 ± 3.32 | 1.88 ± 2.83 | 3.42 |
| Sex problems | 0.83 ± 1.50 | 0.88 ± 1.76 | 0.16 ± 0.52 | 0.15 ± 0.49 | n/a | n/a | n/a | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.3 Mental Health Problems of Adolescents as Self-Reported on the YSR:

HOME-BASED CARE

YSR mean scores describing adolescents in home-based care can be seen in Table 5.9. Although differences between scores for males and females were very small on all YSR scales, there was a consistent pattern for females to score higher than males on the Total Problems, Internalising broadband and narrowband scales, as well as on the Aggressive Behaviour, Social Problems, and Thought Problems scales. Independent-samples t-tests revealed that only the mean differences on the Internalising Problems and Somatic Complaints scales were statistically significant (Table 5.9). The size of these differences were moderate (Internalising - Cohen's $d = 0.43$; Somatic Complaints - Cohen's $d = 0.55$).

Table 5.9

Home-Based Care: Mean (\pm SD) YSR Scores

| YSR Scales | Total Sample n=91 | Males n=53 | Females n=38 | Males vs Females <i>t</i> |
|--|---------------------------------|-------------------|-------------------|---------------------------------|
| Broadband Scales | | | | |
| Total problems | 49.92 \pm 27.07 | 47.60 \pm 27.10 | 53.16 \pm 27.06 | 0.97 |
| Internalising | 13.14 \pm 9.17 | 11.51 \pm 8.44 | 15.32 \pm 9.76 | 2.04* |
| Externalising | 16.85 \pm 9.77 | 17.02 \pm 10.30 | 16.61 \pm 9.10 | 0.2 |
| Narrowband Scales | | | | |
| <i>Internalising</i> | | | | |
| Withdrawn | 3.77 \pm 2.37 | 3.53 \pm 2.28 | 4.11 \pm 2.47 | 1.15 |
| Somatic complaints | 3.01 \pm 3.06 | 2.32 \pm 2.67 | 3.97 \pm 3.34 | 2.62* |
| Anxious/Depressed | 6.80 \pm 5.35 | 6.04 \pm 5.18 | 7.87 \pm 5.70 | 1.59 |
| <i>Externalising</i> | | | | |
| Delinquent behaviour | 5.12 \pm 3.64 | 5.32 \pm 3.58 | 4.71 \pm 3.72 | 0.91 |
| Aggressive behaviour | 11.73 \pm 7.25 | 11.60 \pm 7.56 | 11.90 \pm 6.89 | 0.19 |
| <i>Other</i> | | | | |
| Social problems | 3.99 \pm 3.06 | 3.85 \pm 3.01 | 4.18 \pm 3.17 | 0.51 |
| Thought problems | 2.64 \pm 2.47 | 2.42 \pm 2.41 | 2.95 \pm 2.54 | 1.02 |
| Attention problems | 6.98 \pm 3.84 | 7.17 \pm 4.13 | 6.71 \pm 3.42 | 0.56 |
| Self-destructive/ identity problems | 3.42 \pm 3.52 (males only) | 3.42 \pm 3.52 | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.4 Comparison of Mental Health Problems as Self-Reported on the YSR:

HOME-BASED CARE VS GENERAL COMMUNITY

A series of 2 Group (Home Based Care vs General Community) x 2 Gender (Males vs Females) factorial ANOVAs were conducted to test for main effects (excluding Gender) and interactions involving these factors on the YSR scales. The results of these analyses are described below. The statistical significance of results did not differ when factorial ANCOVAs were used to adjust for the different prevalence of single parents and indigenous children in the two groups (i.e., in home-based care and the general community).

5.4.1 YSR Mean Scores: Main Effect of Group

There was a significant main effect of Group for all YSR scales except the Somatic Complaints scale, upon which adolescents in both groups scored very similarly (Table 5.10). These results are generally consistent with those on the CBCL, with adolescents in home-based care having significantly higher mean scores than adolescents in the general community on most YSR scales. The magnitudes of the mean differences were somewhat smaller than those observed on the CBCL. Effect sizes (i.e., Cohen's *d*) ranged from 0.26 to 0.75 (except for the Somatic Complaints scale).

Table 5.10

Home-Based Care vs General Community: YSR Mean (\pm SD) Scores

| YSR Scales | Home-Based Care n=91 | General Community n=1268 | Group <i>F</i> |
|--|---------------------------------|---------------------------------|-------------------|
| Broadband Scales | | | |
| Total problems | 49.92 \pm 27.07 | 35.28 \pm 23.05 | 35.11*** |
| Internalising | 13.14 \pm 9.17 | 10.82 \pm 8.76 | 8.40** |
| Externalising | 16.85 \pm 9.77 | 11.13 \pm 7.72 | 43.03*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 3.77 \pm 2.37 | 2.96 \pm 2.42 | 11.24** |
| Somatic complaints | 3.01 \pm 3.06 | 3.03 \pm 2.82 | 0.23 |
| Anxious/Depressed | 6.80 \pm 5.35 | 5.10 \pm 5.15 | 10.37** |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 5.12 \pm 3.64 | 3.33 \pm 2.87 | 28.93*** |
| Aggressive behaviour | 11.73 \pm 7.25 | 7.80 \pm 5.43 | 40.18*** |
| <i>Other</i> | | | |
| Social problems | 3.99 \pm 3.06 | 2.22 \pm 2.18 | 53.15*** |
| Thought problems | 2.64 \pm 2.47 | 1.58 \pm 1.94 | 25.75*** |
| Attention problems | 6.98 \pm 3.84 | 4.33 \pm 3.24 | 52.48*** |
| Self-destructive/ identity problems | 3.42 \pm 3.52 (males only) | 1.89 \pm 2.56 (males only) | 16.14*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

The same pattern of results was observed when comparisons were made for males and females separately. Males in home-based care had much higher mean scores than males in the general community on all YSR scales except the Somatic Complaints scale (Table 5.11). Independent-samples t-tests revealed all of these mean differences (except on the Somatic Complaints scale) to be statistically significant. The sizes of the differences were small for the Internalising, Anxious/Depressed and Thought Problems scales (Cohen's d ranged from 0.35 to 0.42), medium for the Total Problems, Externalising, Withdrawn, Delinquent Behaviour, Aggressive Behaviour, Social Problems, and Thought Problems scales (Cohen's d ranged from 0.47 to 0.64), and large for the Attention Problems scale (Cohen's $d = 0.80$).

Table 5.11

Home-Based Care vs General Community: YSR Mean (\pm SD) Scores for Males

| YSR Scales | Home-Based Care n=53 | General Community n=610 | <i>t</i> |
|-------------------------------------|-------------------------|----------------------------|----------|
| Broadband Scales | | | |
| Total problems | 47.60 \pm 27.10 | 32.50 \pm 21.51 | 3.95*** |
| Internalising | 11.51 \pm 8.44 | 8.68 \pm 7.54 | 2.60* |
| Externalising | 17.02 \pm 10.30 | 11.23 \pm 7.70 | 4.00*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 3.53 \pm 2.28 | 2.48 \pm 2.22 | 3.28** |
| Somatic complaints | 2.32 \pm 2.67 | 2.35 \pm 2.40 | 0.09 |
| Anxious/Depressed | 6.04 \pm 5.18 | 4.11 \pm 4.48 | 2.96** |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 5.32 \pm 3.58 | 3.48 \pm 2.88 | 3.83*** |
| Aggressive behaviour | 11.60 \pm 7.56 | 7.75 \pm 5.40 | 3.63** |
| <i>Other</i> | | | |
| Social problems | 3.85 \pm 3.01 | 2.16 \pm 2.20 | 4.01*** |
| Thought problems | 2.42 \pm 2.41 | 1.49 \pm 2.02 | 2.71** |
| Attention problems | 7.17 \pm 4.13 | 4.23 \pm 3.19 | 5.05*** |
| Self-destructive/ identity problems | 3.42 \pm 3.52 | 1.89 \pm 2.56 | 3.08** |

* $p < .05$; ** $p < .01$; *** $p < .001$

Females in home-based care had higher mean scores than females in the general community on all YSR scales. Independent-samples t-tests showed that differences on the Total Problems, Externalising Problems, Social Problems, Thought Problems, Attention Problems, Delinquent Behaviour, and Aggressive Behaviour scales were statistically significant (Table 5.12). The sizes of these differences were all in the medium to large range (Cohen's *d* ranged from 0.46 to 0.70).

Table 5.12

Home-Based Care vs General Community: YSR Mean (\pm SD) Scores for Females

| YSR Scales | Home-Based Care n=38 | General Community n=658 | <i>t</i> |
|-------------------------------------|-------------------------|----------------------------|----------|
| Broadband Scales | | | |
| Total problems | 53.16 \pm 27.06 | 38.06 \pm 24.09 | 3.73*** |
| Internalising | 15.42 \pm 9.76 | 12.81 \pm 9.32 | 1.68 |
| Externalising | 16.61 \pm 9.10 | 11.04 \pm 7.73 | 4.27*** |
| Narrowband Scales | | | |
| <i>Internalising</i> | | | |
| Withdrawn | 4.11 \pm 2.47 | 3.40 \pm 2.51 | 1.68 |
| Somatic complaints | 3.97 \pm 3.34 | 3.65 \pm 3.03 | 0.64 |
| Anxious/Depressed | 7.87 \pm 5.70 | 6.20 \pm 5.42 | 1.81 |
| <i>Externalising</i> | | | |
| Delinquent behaviour | 4.71 \pm 3.72 | 3.19 \pm 2.85 | 2.48* |
| Aggressive behaviour | 11.90 \pm 6.89 | 7.85 \pm 5.46 | 4.30*** |
| <i>Other</i> | | | |
| Social problems | 4.18 \pm 3.17 | 2.27 \pm 2.16 | 3.67*** |
| Thought problems | 2.95 \pm 2.54 | 1.66 \pm 1.87 | 3.07** |
| Attention problems | 6.71 \pm 3.42 | 4.42 \pm 3.28 | 4.17*** |
| Self-destructive/ identity problems | n/a | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.4.2 YSR Mean Scores: Group x Gender

There were no significant Group x Gender interactions for any of the YSR scales as can be seen in Table 5.13, indicating that group differences did not differ for males or females. These results are generally consistent with results on the CBCL, where only one Group x Gender interaction was significant (on the Somatic Complaints scale).

Table 5.13

Mean (\pm SD) YSR Scores: Group x Gender

| YSR Scales | Home-Based Care | | General Community | | Group x Gender <i>F</i> |
|--|-------------------|-------------------|-------------------|-------------------|-------------------------------|
| | Males n=53 | Females n=38 | Males n=610 | Females n=658 | |
| Broadband Scales | | | | | |
| Total problems | 47.60 \pm 27.10 | 53.16 \pm 27.06 | 32.50 \pm 21.51 | 38.06 \pm 24.09 | 0.00 |
| Internalising | 11.51 \pm 8.44 | 15.32 \pm 9.76 | 8.68 \pm 7.54 | 12.81 \pm 9.32 | 0.01 |
| Externalising | 17.02 \pm 10.30 | 16.61 \pm 9.10 | 11.23 \pm 7.70 | 11.04 \pm 7.73 | 0.02 |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 3.53 \pm 2.28 | 4.11 \pm 2.47 | 2.48 \pm 2.22 | 3.40 \pm 2.51 | 0.43 |
| Somatic complaints | 2.32 \pm 2.67 | 3.97 \pm 3.34 | 2.35 \pm 2.40 | 3.65 \pm 3.03 | 0.34 |
| Anxious/Depressed | 6.04 \pm 5.18 | 7.87 \pm 5.70 | 4.11 \pm 4.48 | 6.20 \pm 5.42 | 0.05 |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 5.32 \pm 3.58 | 4.71 \pm 3.72 | 3.48 \pm 2.88 | 3.19 \pm 2.85 | 0.42 |
| Aggressive behaviour | 11.60 \pm 7.56 | 11.90 \pm 6.89 | 7.75 \pm 5.40 | 7.85 \pm 5.46 | 0.02 |
| <i>Other</i> | | | | | |
| Social problems | 3.85 \pm 3.01 | 4.18 \pm 3.17 | 2.16 \pm 2.20 | 2.27 \pm 2.16 | 0.20 |
| Thought problems | 2.42 \pm 2.41 | 2.95 \pm 2.54 | 1.49 \pm 2.02 | 1.66 \pm 1.87 | 0.67 |
| Attention problems | 7.17 \pm 4.13 | 6.71 \pm 3.42 | 4.23 \pm 3.19 | 4.42 \pm 3.28 | 0.82 |
| Self-destructive/ identity problems | 3.42 \pm 3.52 | n/a | 1.89 \pm 2.56 | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.5 Prevalence of Mental Health Problems as Reported by Caregivers on the CBCL:

HOME-BASED CARE

To determine the prevalence of mental health problems amongst children and adolescents in home-based care, CBCL T-scores were used to make categorical distinctions between those with and without problems. Children and adolescents who scored above the borderline clinical cut-point (point ($T \geq 67$ for the narrowband scales and $T \geq 60$ for the broadband scales) were considered to have mental health problems in the borderline clinical range, whereas children and adolescents who scored above the clinical cut-point ($T \geq 71$ for the narrowband scales and $T \geq 64$ for the broadband scales) were considered to have mental health problems in the clinical range. When only one categorical cut-point was desired for statistical purposes, the borderline clinical range was used to represent the bottom end of the clinical range (Achenbach 1991).

The proportions of children and adolescents in home-based care who scored above the borderline clinical cut-point can be seen in Table 5.14. There were very small differences in the proportions of children and adolescents of different age and gender who scored above this cut-point. A series of chi-square tests were conducted to test for gender differences in the prevalence of mental health problems, and to test for age differences in the prevalence of mental health problems. There were no significant gender differences and only one significant age group difference. A higher proportion of younger children (6-12 years) than older children (13-17 years) scored in the borderline clinical range of the Social Problems scale.

Table 5.14

Home-Based Care: Prevalence (%) of Mental Health Problems on the CBCL

| CBCL Scales | Total | | Males vs | | | | Younger |
|--------------------------|-------------------|------------------|-------------------|----------------------------|--------------------|------------------|-----------------------------|
| | Sample n = 323 | Male n = 174 | Female n = 149 | Females χ^2 (df=1) | Younger n = 201 | Older n = 122 | vs Older χ^2 (df=1) |
| Broadband Scales | | | | | | | |
| Total problems | 61.0 | 59.8 | 62.4 | 0.14 | 63.7 | 56.6 | 1.33 |
| Internalising | 44.9 | 46.0 | 43.6 | 0.10 | 44.8 | 45.1 | 0.00 |
| Externalising | 60.1 | 58.0 | 62.4 | 0.47 | 60.7 | 59.0 | 0.03 |
| Narrowband Scales | | | | | | | |
| Internalising | | | | | | | |
| Withdrawn | 22.9 | 25.9 | 19.5 | 1.52 | 21.9 | 24.6 | 0.18 |
| Somatic complaints | 18.3 | 16.7 | 20.1 | 0.44 | 20.4 | 14.8 | 1.26 |
| Anxious/Depressed | 20.1 | 20.7 | 19.5 | 0.02 | 20.4 | 19.7 | 0.00 |
| Externalising | | | | | | | |
| Delinquent behaviour | 40.9 | 40.2 | 41.6 | 0.02 | 40.3 | 41.8 | 0.02 |
| Aggressive behaviour | 38.1 | 37.9 | 38.3 | 0.00 | 41.3 | 32.8 | 1.98 |
| Other | | | | | | | |
| Social problems | 41.8 | 43.1 | 40.3 | 0.16 | 46.8 | 33.6 | 4.88* |
| Thought problems | 36.2 | 36.2 | 36.2 | 0.00 | 34.8 | 38.5 | 0.30 |
| Attention problems | 44.0 | 42.5 | 45.6 | 0.20 | 47.8 | 37.7 | 2.72 |
| Sex problems | 21.7 | 23.6 | 19.5 | 0.21 | 21.7 | n/a | n/a |
| | (6-12yr olds) | (6-12yr olds) | (6-12yr olds) | | | | |

* $p < .05$; ** $p < .01$; *** $p < .001$

Comparisons were also made for each age group by gender. Amongst the younger age group (6-12 years), there were only small differences between the prevalence of mental health problems amongst males and females. Amongst the older age groups (13-17 years), there were also small differences between the prevalence of mental health problems amongst males and females, with the exception that a higher proportion of females than males experienced thought problems. Chi-square tests for independence revealed only this latter difference to be statistically significant (Table 5.15).

Table 5.15

Home-Based Care: Prevalence (%) of Mental Health Problems on the CBCL by Gender and Age Group

| CBCL Scales | Younger (6-12 years) | | | Older (13-17 years) | | |
|-----------------------------|----------------------|------------------|--|---------------------|------------------|--|
| | Male n = 104 | Female n = 97 | Males vs Females χ^2 (df=1) | Male n = 70 | Female n = 52 | Males vs Females χ^2 (df=1) |
| Broadband Scales | | | | | | |
| Total problems | 65.4 | 61.9 | 0.14 | 51.4 | 63.5 | 1.30 |
| Internalising | 48.1 | 41.2 | 0.69 | 42.9 | 48.1 | 0.15 |
| Externalising | 61.5 | 59.8 | 0.01 | 52.9 | 67.3 | 2.01 |
| Narrowband Scales | | | | | | |
| <i>Internalising</i> | | | | | | |
| Withdrawn | 26.9 | 16.5 | 2.61 | 24.3 | 25.0 | 0.00 |
| Somatic complaints | 19.2 | 21.6 | 0.06 | 12.9 | 17.3 | 0.18 |
| Anxious/Depressed | 20.2 | 20.6 | 0.00 | 21.4 | 17.3 | 0.11 |
| <i>Externalising</i> | | | | | | |
| Delinquent behaviour | 40.4 | 40.2 | 0.00 | 40.0 | 44.2 | 0.08 |
| Aggressive behaviour | 44.2 | 38.1 | 0.54 | 28.6 | 38.5 | 0.91 |
| <i>Other</i> | | | | | | |
| Social problems | 50.0 | 43.3 | 0.66 | 32.9 | 34.6 | 0.00 |
| Thought problems | 40.4 | 28.9 | 2.45 | 30.0 | 50.0 | 4.23* |
| Attention problems | 48.1 | 47.4 | 0.00 | 34.3 | 42.3 | 0.51 |
| Sex problems | 23.6 | 19.5 | 0.21 | n/a | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.6 Prevalence of Mental Health Problems as Reported by Caregivers/Parents on the CBCL: HOME-BASED CARE VS GENERAL COMMUNITY

5.6.1 Prevalence of Mental Health Problems: Home-Based Care versus General Community

As shown in Table 5.16, a much higher proportion of children and adolescents in home-based care than in the general community scored above the borderline and clinical cut-points on the CBCL. For example, on the Total Problems scale, 61% of the children and adolescents in home-based care scored above the borderline clinical cut-point, whereas only 14% of children and adolescents in the general community scored above the borderline clinical cut-point. Chi-square tests for independence showed that there were significant differences between the proportion of children and adolescents in home-based care and the general community who scored above the cut-points on all CBCL scales (Table 5.16).

Of the children and adolescents in home-based care who scored above the borderline clinical cut-point, most scored above the clinical cut-point. For example, on the Total Problems scale, 52% of children and adolescents in home-based care scored in the clinical range, whereas only 9% scored in the borderline clinical range. On the other hand, the proportion of children and adolescents in the general community who scored in the clinical range (9%) was similar to the proportion that scored in the borderline clinical range (5%).

As can be seen in Table 5.16, a greater proportion of children and adolescents in home-based care scored above the borderline clinical cut-point on the Externalising broadband and narrowband scales than on the Internalising broadband and narrowband scales, but there were similar proportions of children and adolescents in the general community scoring above the borderline clinical cut-point on the Externalising and Internalising broadband and narrowband scales.

Table 5.16

Home-Based Care vs General Community: Prevalence (%) of Mental Health Problems on the CBCL

| CBCL Scales | Home-Based Care n = 323 | | General Community n = 3241 | | HBC vs GC $\chi^2(df=2)$ |
|--------------------------|----------------------------|----------|-------------------------------|----------|-----------------------------|
| | Borderline Clinical | Clinical | Borderline Clinical | Clinical | |
| Broadband Scales | | | | | |
| Total problems | 9.0 | 52.0 | 5.2 | 8.7 | 522.01*** |
| Internalising | 14.6 | 30.3 | 5.2 | 8.0 | 224.06*** |
| Externalising | 10.8 | 49.2 | 4.3 | 8.2 | 518.90*** |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 9.3 | 13.6 | 2.5 | 1.8 | 195.01*** |
| Somatic complaints | 9.0 | 9.3 | 4.9 | 2.6 | 53.17*** |
| Anxious/Depressed | 5.6 | 14.6 | 1.9 | 1.9 | 180.83*** |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 15.5 | 25.4 | 3.9 | 2.9 | 421.14*** |
| Aggressive behaviour | 10.2 | 27.9 | 2.9 | 2.1 | 522.83*** |
| <i>Other</i> | | | | | |
| Social problems | 13.3 | 28.5 | 2.7 | 2.1 | 595.55*** |
| Thought problems | 16.4 | 19.8 | 2.1 | 0.8 | 626.26*** |
| Attention problems | 10.8 | 33.1 | 3.2 | 3.0 | 553.58*** |
| Sex problems | (n = 166) | | (n = 1631) | | |
| | 9.0 | 12.7 | 2.1 | 0.9 | 135.72*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.6.2 Prevalence of Mental Health Problems by Group and Gender

The proportion of children and adolescents who scored above the borderline clinical-cut point on the CBCL scales was compared across groups by gender. There was a consistent pattern for a much higher proportion of males in home-based care than males in the general community to score above the borderline clinical cut-point on all CBCL scales (see Table 5.17). Likewise, there was a consistent pattern for a much higher proportion of females in

home-based care than females in the general community to score above the cut-point on all CBCL scales (see Table 5.17). Chi-square tests for independence revealed all of these differences to be statistically significant.

Table 5.17

Prevalence (%) of Mental Health Problems on the CBCL by Group and Gender

| CBCL Scales | Home-Based Care | | General Community | | Males vs | Females vs |
|-----------------------------|-----------------|------------------|-------------------|-------------------|--------------------------|----------------------------|
| | Males n=174 | Females n=149 | Males n=1629 | Females n=1612 | Males χ^2 (df=1) | Females χ^2 (df=1) |
| Broadband Scales | | | | | | |
| Total Problems | 59.8 | 62.4 | 14.4 | 13.5 | 209.81*** | 221.99*** |
| Internalising | 46.0 | 43.6 | 14.9 | 11.4 | 101.03*** | 113.92*** |
| Externalising | 58.0 | 62.4 | 12.4 | 12.6 | 231.03*** | 238.58*** |
| Narrowband Scales | | | | | | |
| <i>Internalising</i> | | | | | | |
| Withdrawn | 25.9 | 19.5 | 5.4 | 3.2 | 92.14*** | 78.29*** |
| Somatic complaints | 16.7 | 20.1 | 8.9 | 6.2 | 10.00** | 36.70*** |
| Anxious/Depressed | 20.7 | 19.5 | 4.3 | 3.3 | 73.41*** | 75.30*** |
| <i>Externalising</i> | | | | | | |
| Delinquent behaviour | 40.2 | 41.6 | 6.9 | 6.6 | 189.06*** | 188.28*** |
| Aggressive behaviour | 37.9 | 38.3 | 5.6 | 4.3 | 200.91*** | 231.90*** |
| <i>Other</i> | | | | | | |
| Social problems | 43.1 | 40.3 | 5.9 | 3.5 | 249.24*** | 290.81*** |
| Thought problems | 36.2 | 36.2 | 3.1 | 2.8 | 288.25*** | 281.36*** |
| Attention problems | 42.5 | 45.6 | 6.9 | 5.5 | 210.42*** | 267.76*** |
| Sex problems | 23.6 | 19.5 | 3.5 | 2.5 | 59.57*** | 48.36*** |
| | (6-12 yr olds) | (6-12 yr olds) | (6-12 yr olds) | (6-12 yr olds) | | |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.6.3 Prevalence of Mental Health Problems by Group and Age Group

The proportion of children and adolescents who scored above the borderline clinical-cut point on the CBCL scales was compared across groups for younger children, and then for older children. There was a consistent pattern for a much higher proportion of younger children in home-based care than in the general community to score above the borderline clinical cut-point on all CBCL scales. Likewise, there was a consistent pattern for a much higher proportion of older children in home-based care than in the general community to score above the borderline clinical cut-point on all CBCL scales. Chi-square tests for independence revealed all of these differences to be statistically significant (see Table 5.18).

Table 5.18

Prevalence (%) of Mental Health Problems on the CBCL by Group and Age Group

| CBCL Scales | Home-Based Care | | General Community | | Younger vs Older χ^2 (df=1) | Older vs Older χ^2 (df=1) |
|-----------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|--|--------------------------------------|
| | Younger (6-12yrs) n = 201 | Older (13-17 yrs) n = 122 | Younger (6-12yrs) n = 1923 | Older (13-17yrs) n = 1318 | | |
| Broadband Scales | | | | | | |
| Total Problems | 63.7 | 56.6 | 14.6 | 12.9 | 278.66*** | 150.62*** |
| Internalising | 44.8 | 45.1 | 13.9 | 12.1 | 121.31*** | 93.62*** |
| Externalising | 60.7 | 59.0 | 12.2 | 12.9 | 302.37*** | 166.58*** |
| Narrowband Scales | | | | | | |
| <i>Internalising</i> | | | | | | |
| Withdrawn | 21.9 | 24.6 | 4.4 | 4.3 | 95.59*** | 77.26*** |
| Somatic complaints | 20.4 | 14.8 | 6.8 | 8.6 | 43.33*** | 4.29* |
| Anxious/Depressed | 20.4 | 19.7 | 3.9 | 3.7 | 92.76*** | 55.79*** |
| <i>Externalising</i> | | | | | | |
| Delinquent behaviour | 40.3 | 41.8 | 7.3 | 6.0 | 209.29*** | 170.02*** |
| Aggressive behaviour | 41.3 | 32.8 | 5.4 | 4.4 | 289.66*** | 137.43*** |
| <i>Other</i> | | | | | | |
| Social problems | 46.8 | 33.6 | 5.6 | 3.4 | 353.30*** | 175.93*** |
| Thought problems | 34.8 | 38.5 | 2.8 | 3.1 | 333.56*** | 237.94*** |
| Attention problems | 47.8 | 37.7 | 7.2 | 4.7 | 299.74*** | 170.57*** |
| Sex problems | 21.7 | n/a | 3.0 | n/a | 112.59*** | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.6.4 Prevalence of Mental Health Problems by Group, Gender and Age Group

Table 5.19 shows the prevalence of mental health problems across groups by age and gender. Regardless of age and gender, a consistently higher proportion of those in home-based care than in the general community scored above the borderline clinical cut-point on all CBCL scales. For example, a higher proportion of 6-12 year old males in home-based care than in the general community had mental health problems in the borderline clinical range. Likewise, a higher proportion of 6-12 year old females in home-based care than in the general community had mental health problems in the borderline clinical range. This pattern of results also held true for the adolescents (13-17 years) as can be seen in Table 5.19. Chi-square tests for independence revealed that nearly all of these differences were statistically significant.

Table 5.19

Prevalence (%) of Mental Health Problems on the CBCL by Group, Gender, and Age Group

| CBCL Scales | Younger (6 -12 years) | | | | | | Older (13 -17 years) | | | | | |
|--------------------------|-----------------------|------------------|-------------------|-------------------|--------------------------------------|--------------------------------------|----------------------|------------------|-------------------|-------------------|--------------------------------------|--------------------------------------|
| | Home-Based Care | | General Community | | Male vs Female χ^2 (df=1) | Female vs Male χ^2 (df=1) | Home-Based Care | | General Community | | Male vs Female χ^2 (df=1) | Female vs Male χ^2 (df=1) |
| | Male n = 104 | Female n = 97 | Male n = 979 | Female n = 944 | | | Male n = 70 | Female n = 52 | Male n = 650 | Female n = 668 | | |
| Broadband Scales | | | | | | | | | | | | |
| Total Problems | 65.4 | 61.9 | 15.1 | 14.1 | 145.65*** | 129.75*** | 51.4 | 63.5 | 13.2 | 12.6 | 62.83*** | 88.09*** |
| Internalising | 48.1 | 41.2 | 15.8 | 12.0 | 61.61*** | 57.78*** | 42.9 | 48.1 | 13.5 | 10.6 | 37.53*** | 55.35*** |
| Externalising | 61.5 | 59.8 | 12.9 | 11.5 | 150.59*** | 148.46*** | 52.9 | 67.3 | 11.7 | 14.1 | 77.85*** | 89.39*** |
| Narrowband Scales | | | | | | | | | | | | |
| Internalising | | | | | | | | | | | | |
| Withdrawn | 26.9 | 16.5 | 6.0 | 2.6 | 52.77*** | 40.99*** | 24.3 | 25.0 | 4.6 | 4.0 | 36.91*** | 36.49*** |
| Somatic complaints | 19.2 | 21.6 | 7.8 | 5.8 | 13.92*** | 30.25*** | 12.9 | 17.3 | 10.6 | 6.7 | 0.14 | 6.32* |
| Anxious/Depressed | 20.2 | 20.6 | 4.7 | 3.1 | 36.26*** | 56.53*** | 21.4 | 17.3 | 3.7 | 3.7 | 35.42*** | 16.83*** |
| Externalising | | | | | | | | | | | | |
| Delinquent behaviour | 40.4 | 40.2 | 7.4 | 7.2 | 105.42*** | 100.34*** | 40.0 | 44.2 | 6.2 | 5.8 | 80.74*** | 85.55*** |
| Aggressive behaviour | 44.2 | 38.1 | 6.1 | 4.6 | 150.29*** | 135.19*** | 28.6 | 38.5 | 4.9 | 3.9 | 49.27*** | 90.71*** |
| Other | | | | | | | | | | | | |
| Social problems | 50.0 | 43.3 | 7.3 | 3.9 | 166.43*** | 188.93*** | 32.9 | 34.6 | 3.8 | 3.0 | 80.88*** | 90.27*** |
| Thought problems | 40.4 | 28.9 | 3.1 | 2.5 | 205.01*** | 122.95*** | 30.0 | 50.0 | 3.1 | 3.1 | 80.36*** | 166.00*** |
| Attention problems | 48.1 | 47.4 | 8.4 | 6.0 | 134.77*** | 164.37*** | 34.3 | 42.3 | 4.8 | 4.6 | 73.91*** | 94.93*** |
| Sex problems | 23.6 | 19.5 | 3.5 | 2.5 | 59.57*** | 48.36*** | n/a | n/a | n/a | n/a | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.7 Prevalence of Mental Health Problems amongst Adolescents as Self-Reported on the YSR: HOME-BASED CARE

To determine the prevalence of mental health problems amongst adolescents in home-based care, YSR T-scores were used to make categorical distinctions between those with and without problems. Adolescents with scores above the borderline clinical cut-point ($T \geq 67$ for the narrowband scales and $T \geq 60$ for the broadband scales) were considered to have mental health problems in the borderline clinical range, while adolescents with scores above the clinical cut-point ($T \geq 71$ for the narrowband scales and $T \geq 64$ for the broadband scales) were considered to have mental health problems in the clinical range. When only one categorical cut-point was desired for statistical purposes, the borderline clinical range was used to represent the bottom end of the clinical range.

The proportions of adolescents in home-based care who scored above the borderline clinical cut-point, can be seen in Table 5.20. A series of chi-square tests for independence were run to test for gender differences. Although a higher proportion of females than males scored above the borderline clinical cut-point on the Total Problems, Externalising Problems, Somatic Complaints, and Social Problems scales, these differences were very small and none were statistically significant.

Table 5.20

Home-Based Care: Prevalence (%) of Mental Health Problems on the YSR

| YSR Scales | Total Sample n = 91 | Males n=53 | Females n=38 | Males vs Females χ^2 (df=1) |
|-------------------------------|------------------------|---------------|-----------------|-------------------------------------|
| Broadband Scales | | | | |
| Total Problems | 35.2 | 34.0 | 36.8 | 0.004 |
| Internalising | 22.0 | 24.5 | 18.4 | 0.19 |
| Externalising | 40.7 | 35.8 | 47.4 | 0.79 |
| Narrowband Scales | | | | |
| <i>Internalising</i> | | | | |
| Withdrawn | 5.5 | 5.7 | 5.2 | 0.00 |
| Somatic complaints | 14.3 | 13.2 | 15.8 | 0.002 |
| Anxious/Depressed | 13.2 | 17.0 | 7.9 | 0.90 |
| <i>Externalising</i> | | | | |
| Delinquent behaviour | 26.4 | 26.4 | 26.3 | 0.00 |
| Aggressive behaviour | 19.8 | 20.8 | 18.4 | 0.00 |
| <i>Other</i> | | | | |
| Social problems | 18.7 | 17.0 | 21.1 | 0.05 |
| Thought problems | 6.6 | 7.5 | 5.3 | 0.00 |
| Attention problems | 24.2 | 26.4 | 21.1 | 0.12 |
| Self destructive behaviour | 17.0 (males only) | 17.0 | n/a | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.8 Prevalence of Mental Health Problems amongst Adolescents as Self-Reported on the YSR: HOME-BASED CARE VS GENERAL COMMUNITY

5.8.1 Prevalence of Mental Health Problems: Home-Based Care vs General Community

Table 5.21 shows the proportion of adolescents in home-based care and the general community who scored above the borderline clinical and clinical range of the YSR scales. As can be seen, a higher proportion of those in home-based care than those in the general community scored above the borderline and clinical cut-points on all YSR scales. Chi-square tests for independence revealed significant differences between the proportion of adolescents in home-based care and the proportion in the general community who scored above the cut-points on all scales, except the Internalising Problems and Withdrawn scales.

As with results on the CBCL, a greater proportion of adolescents in home-based care scored above the borderline clinical cut-point on the Externalising Problems scale than on the Internalising Problems scale.

Table 5.21

Home-Based Care vs General Community: Prevalence (%) of Mental Health Problems on the YSR

| YSR Scales | Home-Based Care n = 91 | | General Community n = 1268 | | HBC vs GC χ^2 (df=2) |
|--|---------------------------|---------------------|-------------------------------|---------------------|------------------------------|
| | Borderline Clinical | Clinical | Borderline Clinical | Clinical | |
| Broadband Scales | | | | | |
| Total problems | 12.1 | 23.1 | 8.4 | 10.3 | 16.48*** |
| Internalising | 8.8 | 13.2 | 6.9 | 9.5 | 1.99 |
| Externalising | 14.3 | 26.4 | 7.5 | 11.9 | 23.57*** |
| Narrowband Scales | | | | | |
| <i>Internalising</i> | | | | | |
| Withdrawn | 5.5 | 0.0 | 2.2 | 0.6 | 4.41 |
| Somatic complaints | 9.9 | 4.4 | 4.1 | 2.6 | 7.87* |
| Anxious/Depressed | 9.9 | 3.3 | 4.0 | 2.5 | 7.22* |
| <i>Externalising</i> | | | | | |
| Delinquent behaviour | 13.2 | 13.2 | 8.3 | 3.3 | 25.33*** |
| Aggressive behaviour | 6.6 | 13.2 | 5.0 | 2.4 | 32.82*** |
| <i>Other</i> | | | | | |
| Social problems | 8.8 | 9.9 | 2.1 | 1.7 | 43.50*** |
| Thought problems | 3.3 | 3.3 | 2.1 | 0.8 | 6.23* |
| Attention problems | 8.8 | 15.4 | 4.6 | 2.1 | 57.34*** |
| Self-destructive/ identity problems | 7.5 (males only) | 9.4 (males only) | 3.0 (males only) | 3.1 (males only) | 9.11* |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.8.2 Prevalence of Mental Health Problems by Group and Gender

The proportion of adolescents who scored above the borderline clinical cut-point on the YSR scales was compared across groups by gender. A greater proportion of males in home-based care than in the general community scored above the cut-point on all YSR scales, and chi-square tests for independence revealed these differences to be statistically significant for the Total Problems, Externalising Problems, Anxious/Depressed, Delinquent

Behaviour, Aggressive Behaviour, Social Problems, Attention Problems, and Self Destructive/Identity Problems scales (see Table 5.22). The same pattern of results was found for females, with a greater proportion of females in home-based care than in the general community scoring above the cut-point on all YSR scales. Chi-square tests for independence showed that the differences were statistically significant for the Externalising Problems, Delinquent Behaviour, Aggressive Behaviour, Social Problems, and Attention Problems scales (see Table 5.22).

Table 5.22

Prevalence (%) of Mental Health Problems on the YSR by Group and Gender

| | Home-Based Care | | General Community | | Males vs | Females vs |
|-------------------------------|-----------------|-----------------|-------------------|------------------|--------------------------|----------------------------|
| | Males n=53 | Females n=38 | Males n=610 | Females n=658 | Males χ^2 (df=1) | Females χ^2 (df=1) |
| YSR Scales | | | | | | |
| Broadband Scales | | | | | | |
| Total Problems | 34.0 | 36.8 | 15.1 | 22.2 | 11.23*** | 3.57 |
| Internalising | 24.5 | 18.4 | 15.9 | 16.7 | 2.04 | 0.002 |
| Externalising | 35.8 | 47.4 | 16.1 | 22.5 | 11.81** | 10.91** |
| Narrowband Scales | | | | | | |
| <i>Internalising</i> | | | | | | |
| Withdrawn | 5.7 | 5.2 | 3.0 | 2.7 | .45 | 0.17 |
| Somatic complaints | 13.2 | 15.8 | 6.6 | 6.8 | 2.34 | 3.02 |
| Anxious/Depressed | 17.0 | 7.9 | 6.4 | 6.7 | 6.64* | 0.00 |
| <i>Externalising</i> | | | | | | |
| Delinquent behaviour | 26.4 | 26.3 | 10.8 | 12.3 | 9.76** | 5.03* |
| Aggressive behaviour | 20.8 | 18.4 | 5.7 | 9.0 | 14.79*** | 2.72* |
| <i>Other</i> | | | | | | |
| Social problems | 17.0 | 21.1 | 3.8 | 3.6 | 15.76*** | 21.00*** |
| Thought problems | 7.5 | 5.3 | 3.3 | 2.6 | 1.47 | 0.22 |
| Attention problems | 26.4 | 21.1 | 6.7 | 6.5 | 22.34*** | 9.12** |
| Self destructive behaviour | 17.0 | n/a | 6.1 | n/a | 7.39* | n/a |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.9 Adolescent Depression as Self-Reported on the CES-D:

HOME-BASED CARE

Mean CES-D scores describing adolescents in home-based care can be seen in Table 5.23. Although females had a higher mean score than males, an independent samples t-test showed that the difference was not statistically significant.

Table 5.23

Home-Based Care: Mean (\pm SD) CES-D Scores for Adolescents

| | Total Sample n = 91 | Males n = 53 | Females n = 38 | Males vs Females <i>t</i> |
|-------------|------------------------|------------------|-------------------|---------------------------------|
| CES-D score | 15.00 \pm 10.27 | 14.54 \pm 8.03 | 15.65 \pm 12.86 | 0.51 |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.10 Adolescent Depression as Self-Reported on the CES-D:

HOME-BASED CARE VS GENERAL COMMUNITY

CES-D mean scores for adolescents in home-based care and the general community are shown in Table 5.24. A 2 Group x 2 Gender Factorial ANOVA was conducted to test for the main effect of Group and the Group x Gender interaction.

The relevant main effect and interactions can be seen in Tables 5.24 (main effect of Group) and 5.26 (Group x Gender). Results of these analyses are discussed in detail below. The statistical significance of results did not differ when factorial ANCOVAs were used to adjust for the different prevalence of single parents and indigenous children in the two groups.

5.10.1 CES-D Mean Scores: Main Effect of Group

The main effect of Group was significant, with adolescents in home-based care having a significantly higher mean score on the CES-D scale than adolescents in the general community. The size of this effect was moderate (Cohen's $d = 0.45$) (Table 5.24).

Table 5.24

Home-Based Care vs General Community: Mean (\pm SD) CES-D Scores for Adolescents by Group

| | Home-Based Care n = 91 | General Community n = 1227 | Group <i>F</i> |
|-------------|---------------------------|-------------------------------|-------------------|
| CES-D Score | 15.00 \pm 10.27 | 10.44 \pm 9.90 | 19.09*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

When comparisons were made by gender, the same pattern of results was found with females in home-based care having a higher mean CES-D score than females in the general community, and males in home-based care having a higher mean CES-D score than males in

the general community. Independent-samples t-tests revealed both of these differences to be statistically significant (Table 5.25).

Table 5.25

Home-Based Care vs General Community: Mean (\pm SD) CES-D Scores for Males and Females

| | Home-Based Care | General Community | <i>t</i> |
|---------|-----------------------------|------------------------------|----------|
| Males | n = 53 14.54 \pm 8.03 | n = 583 8.88 \pm 8.92 | 4.45*** |
| Females | n = 38 15.65 \pm 12.86 | n = 644 11.85 \pm 10.52 | 2.14* |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.10.2 CES-D Mean Scores: Group x Gender

The Group x Gender interaction was not significant, indicating that the CES-D mean group difference did not vary for males or females (Table 5.26).

Table 5.26

Mean (\pm SD) CES-D Scores: Group x Gender

| | Home-Based Care | | General Community | | Group x Gender <i>F</i> |
|-------------|------------------|-------------------|-------------------|--------------------|----------------------------|
| | Males n = 53 | Females n = 38 | Males n = 583 | Females n = 644 | |
| CES-D Score | 14.54 \pm 8.03 | 15.65 \pm 12.86 | 8.88 \pm 8.92 | 11.85 \pm 10.52 | 0.73 |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.11 Prevalence of Adolescent Depression as Self-Reported on the CES-D:

HOME-BASED CARE

The proportion of adolescents who scored in each of the depression categories of the CES-D (Roberts et al., 1991) can be seen below in Table 5.27. Approximately 35% of adolescents had a score on the CES-D that suggested some level of depression, with 13% scoring in the ‘mild depression’ category, 16% scoring in the ‘moderate depression’ category and 7% scoring in the ‘severe depression’ category.

A similar proportion of males and females scored in the ‘no depression’ category. Of those scoring in one of the three depression categories, however, males were more likely to score in the ‘mild’ or ‘moderate’ categories of depression, whereas females were more likely to score in the more severe category of depression. A chi-square test for independence, however, showed that there was no significant difference between males and females.

Table 5.27

Home-Based Care: Prevalence (%) of Depression on the CES-D

| | Total Sample n = 91 | Males n = 53 | Females n = 38 | Males vs Females $\chi^2(df=3)$ |
|---------------------|------------------------|-----------------|-------------------|---------------------------------------|
| CES-D Category | | | | |
| No Depression | 64.4 | 62.3 | 67.6 | 3.17 |
| Mild Depression | 13.3 | 17.0 | 8.1 | |
| Moderate Depression | 15.6 | 17.0 | 13.5 | |
| Severe Depression | 6.7 | 3.8 | 10.8 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.12 Prevalence of Adolescent Depression as Self-Reported on the CES-D:

HOME-BASED CARE VS GENERAL COMMUNITY

5.12.1 Prevalence of Depression: Home-Based Care vs General Community

As shown in Table 5.28, a higher percentage of adolescents in home-based care than in the general community scored in the ‘mild depression’, ‘moderate depression’, and ‘severe depression’ categories (Roberts et al., 1991). Chi-square tests for independence showed that there was a significant difference in the proportions of adolescents in home-based care and the general community scoring in the different categories of the CES-D (Table 5.28).

Table 5.28

Home-Based Care vs General Community: Prevalence (%) of Depression on the CES-D

| CES-D Category | Home-Based Care | General Community | χ^2 (df=3) |
|---------------------|-----------------|-------------------|-----------------|
| | n = 91 | n = 1227 | |
| No Depression | 64.4 | 77.7 | 9.01* |
| Mild Depression | 13.3 | 7.8 | |
| Moderate Depression | 15.6 | 9.1 | |
| Severe Depression | 6.7 | 5.4 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.12.2 Prevalence of Depression by Group and Gender

The proportion of adolescents who scored in the different depression categories was compared across groups by gender. For both levels of gender, a higher proportion in the general community than in home-based care scored in the ‘no depression’ category. For males, a greater proportion of those in home-based care than in the general community scored in the ‘mild depression’ and ‘moderate depression’ categories. For females, a greater proportion in home-based care than in the general community scored in the ‘moderate depression’ and ‘severe depression’ categories. For males, the chi-square test for independence was significant (Table 5.29).

Table 5.29

Prevalence (%) of Depression on the CES-D by Group and Gender

| | Home-Based Care | | General Community | | Males vs | Females vs |
|---------------------|-----------------|---------|-------------------|---------|-----------------|-----------------|
| | Males | Females | Males | Females | Males | Females |
| | n = 53 | n = 38 | n = 583 | n = 644 | χ^2 (df=3) | χ^2 (df=3) |
| CES-D Category | | | | | | |
| No Depression | 62.3 | 67.6 | 84.0 | 72.0 | 19.96*** | 1.22 |
| Mild Depression | 17.0 | 8.1 | 5.5 | 10.0 | | |
| Moderate Depression | 17.0 | 13.5 | 6.5 | 11.4 | | |
| Severe Depression | 3.8 | 10.8 | 3.9 | 6.7 | | |

* $p < .05$; ** $p < .01$; *** $p < .001$

5.13 Summary: The Mental Health of Children and Adolescents in Home-Based Care

Home-Based Care

The present study found that children and adolescents in home-based care had some of the highest mean scores on the CBCL scales (as reported by caregivers) and the YSR scales (as reported by adolescents themselves) that have been published for a sample of foster children. The results showed that, regardless of gender or age group, children and adolescents in home-based care had similar mean scores on all scales with a few exceptions. As reported by caregivers, females had a significantly higher mean score on the Somatic Complaints scale than males, whereas adolescents (13-17 years) had significantly higher mean scores than younger children (6-12 years) on the Withdrawn and Delinquent Behaviour scales. Further analyses showed however, that gender differences varied by age group on the Total Problems, Thought Problems, and Aggressive Behaviour scales. Whereas younger males experienced more problems than younger females in these areas, this reversed amongst the older children (13-17 years), with older females experiencing greater problems than older males. There were no differences in the proportion of children and adolescents who scored above the borderline-clinical cut-offs by gender or age group on any of the CBCL scales, with two exceptions. As measured by the CBCL, younger children had higher rates of social problems than older children, and amongst older children (13-17 years), females had higher rates of thought problems than males.

There were no differences between the YSR mean scores reported by males and females in home-based care, with two exceptions. Adolescent females had significantly higher mean scores than adolescent males on the YSR Internalising Problems and Somatic Complaints scales. These results are consistent with CBCL results - caregivers also reported that females experienced significantly greater somatic problems than males. The proportion of

adolescents who scored above the borderline-clinical cut-offs did not differ by gender on any of the YSR scales.

Taken together, these results suggest that children and adolescents in foster care experience similar levels of mental health problems across a wide range of domains, regardless of their age or gender, with a few exceptions. Firstly, females have greater internalising problems such as Somatic Complaints than males. Secondly, older children (13-17 year olds) exhibit more Withdrawn and Delinquent Behaviour than younger children (13-17 year olds). Lastly, whereas younger males (6-12 years) experience moderately poorer mental health than younger females, as evidenced by higher mean scores on the Total, Thought and Withdrawn CBCL scales, this reverses amongst older children. Older females experience moderately poorer mental health in these areas than older males. The results also showed a higher prevalence of social problems amongst younger children than older children, and amongst adolescents (13-17 years), there was a higher prevalence of thought problems amongst females than males.

These results are generally consistent with limited data previously published describing gender and age differences on the CBCL for young people in home-based foster care. In their study of 364 children in alternative care in the US, Armsden et al. (2000) found evidence of a small age effect with adolescents (12-18 years) having moderately poorer mental health than preadolescents (4-11 years). However, whereas adolescents in the study by Armsden et al. (2000) had significantly higher mean scores than preadolescents on the Internalising, Anxious/Depressed, and Somatic Complaints scales, adolescents in the present study had significantly higher mean scores than younger children on the Withdrawn and Delinquent Behaviour scales. Some caution must be exercised in comparing results of the two studies, however. Because Armsden et al.'s (2000) study comprised of children entering a long-term care program in the US, the results may not be representative of children who stay

in care for shorter periods of time and may not be generalisable to broader populations of children served by home-based care. Furthermore, due to differences in policies and practices, caution must always be exercised in comparing results describing children in different child protection systems. It should also be noted that the age effect found in the present study may be partly attributable to the fact that older children in the current sample had spent longer periods of time in the alternative care system, and as a result, may have developed more significant mental health problems than younger children who had spent less time in care.

Consistent with findings from the present study, Tarren-Sweeney and Hazell (2006), in their study of 347 young children in home-based care in New South Wales, Australia, found that amongst 4-11 year old children, boys had moderately poorer mental health than girls as evidenced by significantly higher mean scores on the Total Problems and Thought Problems CBCL scales. Unlike the present study however, Tarren-Sweeney and Hazell (2006) found that younger boys also had significantly higher mean scores on the Externalising and Internalising Problems CBCL scales. It is unclear to what extent gender effects found for older children in the present study – i.e., that older females have moderately poorer mental health than older males - are consistent with previous findings. To the best of the author's knowledge, there are no published data describing gender differences in CBCL scores for adolescent children in home-based foster care.

Consistent with previous research (Armsden et al., 2000; Clausen et al., 1998; Helfinger et al., 2000; Keller et al., 2001; McAuley & Trew, 2000; Tarren-Sweeney & Hazell, 2006) was the finding that externalising problems were more frequent than internalising problems amongst foster children. In the absence of self-reported data from young people themselves however, it has traditionally been unclear whether this pattern of results could be attributable to the fact that externalising behaviours such as aggression and acting out are typically more obvious and easier to identify by respondents (e.g., caregivers and social

workers), than internalising behaviours such as withdrawal and anxiety. The results of this study confirmed, however, that amongst adolescents, clinically significant externalising problems were much more frequent than internalising problems (41% vs 22%) as identified using the self-report YSR.

Home-Based Care vs General Community

Not surprisingly, given the adverse histories of children in foster care, when comparisons were made with children and adolescents in the general community, the results showed that those in home-based care had poorer mental health across all domains, as evidenced by significantly higher mean scores on all CBCL and YSR scales (with the exception of the YSR Somatic Complaints scale). Adolescents in home-based care also experienced higher levels of depressive symptomatology, as measured by the CES-D scale, than adolescents in the general community. The rate of depression amongst adolescents in home-based care was 36% compared to 22% in the general community.

Mean differences between children in foster care and the general community existed on the CBCL, YSR and CES-D regardless of gender or age group, although there was a trend for differences on some CBCL scales to be disproportionately large. Females in foster care had a disproportionately higher mean score than females in the general community on the Somatic Complaints scale, and older children (13-17 years) had disproportionately higher mean scores than their peers in the general community on the Withdrawn and Delinquent Behaviour scales. Furthermore, younger males (6-12 years) had disproportionately higher mean scores on the Total Problems, Thought Problems and Aggressive Problems scales, and older females (13-17 years) had a disproportionately higher mean score on the Thought Problems scale.

Although the mean CBCL and YSR scores reported for the present sample of children and adolescents in care were very high, the differences between scores describing young people in home-based care and young people in the general community were larger when reported by caregivers than adolescents. For example, 61% of children and adolescents in the present study had mental health problems in the borderline-clinical and clinical range (on the Total Problems scale) as reported by caregivers, whereas 35% of the adolescents had mental health problems in the borderline-clinical or clinical range (on the Total Problems scale) as reported by adolescents themselves. However, these rates are both considerably higher than the rates reported for young people living in the Australian general community (14% of children and adolescents as reported by parents and 19% of adolescents as self-reported).

Compared to previous child welfare studies that have employed the CBCL to describe rates of problems (as reviewed in Chapter 2), the rates identified for the current sample are the highest yet. They are, however, similar to results reported for a sample of children (aged 4 to 11 years) in home-based care in NSW, who participated in the only other Australian study to employ the CBCL to examine the mental health of children in care (Tarren-Sweeney & Hazell, 2006). For example, the proportion of children and adolescents who scored above the borderline-clinical range in the present study and in the study by Tarren-Sweeney and Hazell (2006) was 61% and 56% respectively on the Total Problems scale, 60% and 50% on the Externalising Problems scale, and 45% and 30% on the Internalising Problems scale. Although the results show that children in the present study (i.e., in care in South Australia) have higher rates of problems than children in care in New South Wales, this discrepancy is likely attributable to sampling differences. Firstly, participants in the present study comprised of children and adolescents aged 6 to 17 years of age, whereas participants in the study by Tarren-Sweeney and Hazell (2006) were mostly younger children (aged 4 to 9 years of age, with a small proportion aged 10 to 11 years of age). Secondly, while the response rate in the

present study was high resulting in a more representative sample, the response rate in the study by Tarren-Sweeney and Hazell (2006) was more moderate (56%).

Despite sampling and methodological differences however, of the limited number of Australian studies that have examined the mental health and behaviour of children and adolescents in alternative care, results are remarkably consistent. Both the present study and the study by Tarren-Sweeney and Hazell (2006) found that about 60% of children had clinically significant mental health problems, as identified by scores above the borderline clinical cut-off on the CBCL Total Problems scale. Likewise, using an abbreviated form of Boyle et al.'s Child Behaviour Checklist (Boyle et al., 1987), Barber and Delfabbro (2004) found that 60% of adolescents aged 14 to 17 years had clinically significant conduct behaviour problems. Taken together, these results suggest that rates of problems amongst children in home-based care in Australia are somewhat higher than those identified amongst foster children in the United States. Of studies describing American children in foster care across a broad age range, rates of problems (as identified by scores above the borderline clinical cut point on the CBCL Total Problems scale) have ranged from approximately 38% for a sample of 4 to 18 year olds (Keller et al., 2001) to 45% for a sample of 2 to 16 year olds (Leslie et al., 2000).

There are a number of possible explanations as to why rates of problems identified for Australian children in care are higher than those identified for American children in care. Firstly, Australian and US child protection systems have different philosophies, policies and practices. As discussed in Chapter One, most child welfare systems in Australia operate according to policies and practices supporting family reunification as the primary goal, whereas in the United States, the policy preference is for permanency planning (Brydon,

2004, Cashmore, 2000). In Australia there is no time limit for family reunification, and where children are unable to return home, they remain in long-term foster care. In the US however, where family reunification is not possible (due to very serious parental offences towards their children) or unsuccessful within a prescribed time frame, parental rights can be terminated and children may be moved out of the alternative care system into adoptive arrangements (Barber & Delfabbro, 2004). Thus, children from more complex and adverse backgrounds where family reunification is difficult or not possible tend to remain in the alternative care system in Australia, whereas they may be moved out of the alternative care system in the US. Furthermore, because Australian children typically spend longer periods of time in alternative care, they may experience greater disruption and instability which is thought to contribute to poorer mental health (Barber & Delfabbro, 2004; Newton et al. 2000), than their American counterparts who are often reunified with their families of origin or placed in a stable adoptive family within 22 months.

Thirdly, differences in rates of problems may simply be because Australian data are some of the most recent and reflect that children are entering the alternative care system with increasingly difficult behaviours and mental health problems. As pointed out by Bromfield and Osborn (2007), the increasing numbers of children who require child welfare services combined with the reduced availability of placement options has resulted in alternative care being used only as a last resort for children and families who are in need of service support. Thus, only children with the greatest or most serious needs now placed in alternative care (Bromfield & Osborn, 2007).

Furthermore, it is possible that home-based care samples in Australian studies (including the present study) include children who, in other jurisdictions would be placed in

residential care because their behaviour problems are deemed too significant for conventional foster care (Tarren-Sweeney, 2005). Although foster families in all Western jurisdictions are now caring for many children who were traditionally considered unsuitable for foster care and placed in residential care (Tarren-Sweeney, 2005), this is especially the case in Australia where the decline in the provision of residential care has been steeper than in the US and UK (Smyth & Eardley, 2008).

Chapter Six

The Health-Related Quality of Life of Children and Adolescents in Home-Based Care

This chapter describes the health-related quality of life (HRQL) of children and adolescents living in home-based care as reported by caregivers on the Child Health Questionnaire-Parent Form 50 (CHQ-PF50) and adolescents on the Child Health Questionnaire-Child Form 87 (CHQ-CF87). In the first instance, results describing children and adolescents in home-based care were reported to provide a comprehensive depiction of their HRQL. In the second instance, comparisons were made between the HRQL of children and adolescents in home-based care with the HRQL of those in the general community.

Results from the CHQ scales that assess children and adolescents' HRQL are included in this chapter, but results from the two CHQ scales that describe the impact of children's problems on caregivers and parents are reported in Chapter 9. Chapter 9 describes the impact of caring for children and adolescents upon caregivers and parents.

6.1 Health-Related Quality of Life of Children and Adolescents as Reported by Caregivers on the CHQ-PF50: HOME-BASED CARE

CHQ-PF50 mean scores describing children and adolescents in home-based care can be seen in Tables 6.1 and 6.2. A series of 2 Gender (Males vs Females) x 2 Age Group (6-12 years vs 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. There was a significant main effect of Gender on 6 scales - Global Health, Bodily Pain and Discomfort, Role/Social Limitations due to Physical Health, Mental Health, Self-Esteem, and Role/Social Limitations due to Emotional or Behavioural Difficulties. Whereas males had significantly higher mean scores than females on the Global Health, Bodily Pain, Mental Health and Self-Esteem scales, females had significantly higher mean scores than males on the Role/Social Limitations due to Physical Health Problems and Role/Social Limitations due to Emotional/Behavioural Problems. These results suggest that males have somewhat better health-related quality of life than females in the areas of physical and mental health, yet females experience less limitation in their daily lives as a result of their physical and mental health problems. The sizes of these mean differences were however, in the small range (Cohen's *d* ranged from 0.25 to 0.32).

There were also two significant main effects of Age Group on the Self-Esteem and General Behaviour scales. Whereas younger children (6-12 years) had a higher mean score than older children (13-17 years) on the Self Esteem scale, younger children had a lower mean score than older children on the General Behaviour scale. These results indicate that, compared to older children, younger children experience better self esteem, but poorer general behaviour.

Lastly, there was a significant Gender x Age Group interaction on the Bodily Pain and Discomfort scale. Simple main effects analyses showed that, whereas younger males and

females (6-12 years) had very similar mean scores on the Bodily Pain and Discomfort scale, there was a large mean difference between older males and females (13-17 years). Older females had a significantly lower mean score than older males, indicating that they experienced poorer health-related quality of life due to bodily pain and discomfort (Table 6.2).

Table 6.1

Home-Based Care: Mean (\pm SD) CHQ-PF50 Scores

| CHQ Scales ^a | Total Sample (n = 325) | Males n = 175 | Females n = 150 | Younger n = 201 | Older n = 124 | Gender <i>F</i> | Age Group <i>F</i> |
|---|---------------------------|-------------------|--------------------|--------------------|-------------------|--------------------|-----------------------|
| Physical and General Health | | | | | | | |
| Global health | 82.65 \pm 19.47 | 84.77 \pm 15.52 | 80.17 \pm 20.31 | 82.59 \pm 18.98 | 82.74 \pm 20.32 | 6.11* | 0.05 |
| General health perceptions | 71.52 \pm 17.40 | 72.77 \pm 17.44 | 70.06 \pm 17.30 | 71.11 \pm 17.70 | 72.19 \pm 16.94 | 1.83 | 0.21 |
| Bodily pain and discomfort | 82.50 \pm 21.31 | 85.00 \pm 21.86 | 79.53 \pm 20.32 | 83.78 \pm 20.73 | 80.41 \pm 22.15 | 9.27** | 3.39 |
| Physical functioning | 91.08 \pm 21.12 | 91.85 \pm 18.97 | 90.19 \pm 23.42 | 90.66 \pm 20.79 | 91.78 \pm 21.72 | 0.61 | 0.14 |
| Limitations due to physical health problems | 87.79 \pm 26.67 | 84.29 \pm 30.36 | 91.89 \pm 20.95 | 88.94 \pm 24.12 | 85.91 \pm 30.41 | 5.21* | 0.89 |
| Mental Health | | | | | | | |
| Global behaviour | 53.82 \pm 33.49 | 53.74 \pm 32.72 | 53.90 \pm 34.49 | 52.10 \pm 33.96 | 56.63 \pm 32.66 | 0.03 | 1.13 |
| General behaviour | 57.87 \pm 25.25 | 57.14 \pm 24.18 | 58.72 \pm 26.51 | 55.66 \pm 25.00 | 61.50 \pm 25.35 | 0.24 | 3.95* |
| Mental health | 75.37 \pm 16.08 | 76.86 \pm 16.49 | 73.63 \pm 15.46 | 75.04 \pm 15.23 | 75.89 \pm 17.43 | 4.15* | 0.06 |
| Self-esteem | 70.05 \pm 21.76 | 72.65 \pm 20.27 | 67.02 \pm 23.06 | 72.43 \pm 21.33 | 66.03 \pm 21.96 | 6.97** | 7.77** |
| Limitations due to emotional/behavioural difficulties | 74.18 \pm 35.26 | 69.03 \pm 38.98 | 80.15 \pm 29.40 | 73.60 \pm 35.39 | 75.14 \pm 35.17 | 5.36* | 0.11 |
| Family | | | | | | | |
| Family activities | 64.76 \pm 28.76 | 63.14 \pm 28.72 | 66.64 \pm 28.78 | 63.24 \pm 28.97 | 67.24 \pm 28.36 | 0.60 | 1.27 |
| Family cohesion | 70.48 \pm 24.96 | 70.23 \pm 25.26 | 70.77 \pm 24.68 | 70.89 \pm 25.24 | 69.80 \pm 24.57 | 0.38 | 0.04 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

Table 6.2

Home-Based Care: Mean (\pm SD) CHQ-PF50 Scores: Age Group x Gender

| | Younger (6-12 years) | | Older (13-17 years) | | Gender x Age Group <i>F</i> |
|---|-------------------------|-------------------|------------------------|-------------------|--------------------------------------|
| | Males n = 104 | Females n = 97 | Males n = 71 | Females n = 53 | |
| Physical and General Health | | | | | |
| Global health | 83.45 \pm 18.98 | 81.67 \pm 19.02 | 86.69 \pm 17.79 | 77.45 \pm 22.37 | 2.80 |
| General health perceptions | 72.32 \pm 18.52 | 69.80 \pm 16.76 | 73.44 \pm 15.78 | 70.53 \pm 18.39 | 0.01 |
| Bodily pain and discomfort | 84.10 \pm 22.73 | 83.44 \pm 18.40 | 86.34 \pm 20.58 | 72.31 \pm 21.84 | 7.68** |
| Physical functioning | 91.03 \pm 19.14 | 90.26 \pm 22.52 | 93.10 \pm 18.76 | 90.04 \pm 25.19 | 0.221 |
| Limitations due to physical health problems | 84.60 \pm 28.56 | 93.64 \pm 17.09 | 83.81 \pm 33.09 | 88.68 \pm 26.51 | 0.47 |
| Mental Health | | | | | |
| Global behaviour | 50.38 \pm 33.52 | 53.97 \pm 34.50 | 58.79 \pm 31.04 | 53.77 \pm 34.78 | 1.24 |
| General behaviour | 54.13 \pm 23.89 | 57.30 \pm 26.16 | 61.64 \pm 24.07 | 61.32 \pm 27.19 | 0.36 |
| Mental health | 75.75 \pm 16.04 | 74.28 \pm 14.34 | 78.50 \pm 17.12 | 72.45 \pm 17.39 | 1.53 |
| Self-esteem | 74.44 \pm 20.28 | 70.26 \pm 22.31 | 69.89 \pm 20.09 | 60.98 \pm 23.44 | 0.91 |
| Limitations due to emotional/behavioural difficulties | 65.50 \pm 40.03 | 82.36 \pm 27.16 | 74.40 \pm 36.96 | 76.10 \pm 33.00 | 3.57 |
| Family | | | | | |
| Family activities | 59.84 \pm 29.66 | 66.92 \pm 27.88 | 68.10 \pm 26.70 | 66.12 \pm 30.63 | 1.88 |
| Family cohesion | 72.48 \pm 25.43 | 69.18 \pm 25.06 | 66.86 \pm 24.81 | 73.68 \pm 23.94 | 3.11 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.2 Comparison of Health-Related Quality of Life as Reported by Caregivers/Parents on the CHQ-PF50:

HOME-BASED CARE VS GENERAL COMMUNITY

A series of 2 Group (Home-Based Care vs General Community) x 2 Gender (Males vs Females) x 2 Age Group (6-12 years vs 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. Main effects and interaction effects that did not include “Group” were not included, as the principal research interest was to describe the health-related quality of life of children and adolescents in home-based care, and to make comparisons with the mental health of children and adolescents in the general community. The results of these analyses are discussed in detail below. The statistical significance of results did not differ when factorial ANCOVAs were used to adjust for the different prevalence of single parents and indigenous children in the two groups (i.e., in home-based care and the general community).

6.2.1 CHQ-PF50 Main Scores: Mean Effect of Group

There was a significant main effect of Group on all CHQ-PF50 scales. Children and adolescents in home-based care had consistently lower mean scores on all CHQ-PF50 scales than children and adolescents in the general community (Table 6.3). The size of the mean differences between groups varied for different scales. On scales pertaining to health and physical functioning (i.e., Global Health, General Health Perceptions, Bodily Pain and Discomfort, Physical Functioning, Limitations due to Physical health Problems) and on the Family Cohesion scale, the differences were in the range defined as a small effect size (Cohen’s *d* ranged from 0.22 to 0.37). However, on scales pertaining to behaviour and mental health (i.e., Global Behaviour, General Behaviour, Mental Health and Self-Esteem, Limitations due to Emotional/Behavioural Difficulties), as well as the Family Activities

scales, the size of differences were in the medium to large range (Cohen's d ranged from 0.56 to 1.15).

These results showed that differences between children and adolescents in home-based care and the general community were smaller on those scales pertaining to health and physical functioning, but larger on those scales pertaining to behaviour, mental health, and family activities. Compared to children in the general community, foster children had particularly poor HRQL because of their own behavioural and mental health problems, and experience greater disruption in their day-to-day family activities and functioning.

Table 6.3

Home-Based Care vs General Community: Mean (\pm SD) CHQ-PF50 scores

| CHQ Scales ^a | Home-Based Care n = 325 | General Community n = 3254 | Group <i>F</i> |
|---|-------------------------------|----------------------------------|-------------------|
| Physical and General Health | | | |
| Global health | 82.65 \pm 19.47 | 86.57 \pm 16.27 | 16.91*** |
| General health perceptions | 71.52 \pm 17.40 | 76.85 \pm 16.01 | 31.12*** |
| Bodily pain and discomfort | 82.50 \pm 21.31 | 87.14 \pm 17.39 | 25.52*** |
| Physical functioning | 91.08 \pm 21.12 | 95.14 \pm 15.03 | 18.23*** |
| Limitations due to physical health problems | 87.79 \pm 26.67 | 95.80 \pm 15.53 | 64.33*** |
| Mental Health | | | |
| Global behaviour | 53.82 \pm 33.49 | 81.50 \pm 21.33 | 412.01*** |
| General behaviour | 57.87 \pm 25.25 | 82.19 \pm 15.83 | 561.19*** |
| Mental health | 75.37 \pm 16.08 | 84.46 \pm 11.47 | 169.73*** |
| Self-esteem | 70.05 \pm 21.76 | 81.31 \pm 17.76 | 122.16*** |
| Limitations due to emotional/behavioural difficulties | 74.18 \pm 35.26 | 94.61 \pm 16.87 | 300.80*** |
| Family | | | |
| Family activities | 64.76 \pm 28.76 | 87.29 \pm 17.87 | 375.38*** |
| Family cohesion | 70.48 \pm 24.96 | 76.09 \pm 20.61 | 17.37*** |

^a Scales are grouped under headings created by the author of this thesis. * p <.05; ** p <.01; *** p <.001

The same pattern of results was observed when comparisons were made for males (see Table 6.4) and females (see Table 6.5) separately. On all CHQ scales, there was a consistent pattern for the mean scores describing males and females in home-based care to be lower than the mean scores describing their gender counterparts in the general community. Amongst males, independent-samples t-tests showed that the differences on all CHQ scales, except the Global Health and Bodily Pain and Discomfort scales, were statistically significant. The sizes of the differences were in the small range on the General Health Perceptions, Self-Esteem, Physical Functioning, and Family Cohesion scales (Cohen's d ranged from 0.19 to 0.42), and in the medium to large range on the remaining scales (Cohen's d ranged from 0.47 to 1.11). Amongst females, independent-samples t-tests showed that those in home-based care had significantly lower mean scores than those in the general community on all CHQ scales. The size of these differences were in the small range on those scales pertaining to general and physical health (i.e., Global Health, General Health Perceptions, Bodily Pain and Discomfort, Physical Functioning, Limitations due to Physical Health Problems) as well as on the Family Cohesion scale (Cohen's d ranged from 0.22 to 0.41), but medium to large on the remaining scales (i.e., those referring to behaviour and mental health, as well as the Family Activities scale) (Cohen's d ranged from 0.65 to 1.19). The results showed that differences between children and adolescents in home-based care and those in the general community were largest on those scales pertaining to behaviour and mental health, as well as on the Family Activities scale.

Table 6.4

Home-Based Care vs General Community: Mean (\pm SD) CHQ-PF50 Scores for Males

| CHQ-PF50 Scales | Home-Based Care n = 175 | General Community n = 1632 | <i>t</i> |
|---|-------------------------------|----------------------------------|----------|
| Physical and General Health | | | |
| Global health | 84.77 \pm 15.52 | 86.27 \pm 16.99 | 1.09 |
| General health perceptions | 72.77 \pm 17.44 | 76.87 \pm 16.17 | 3.16** |
| Bodily pain and discomfort | 85.00 \pm 21.86 | 88.20 \pm 17.29 | 1.88 |
| Physical functioning | 91.85 \pm 18.97 | 95.13 \pm 15.05 | 12.36*** |
| Limitations due to physical health problems | 84.29 \pm 30.36 | 95.66 \pm 15.74 | 4.89*** |
| Mental Health | | | |
| Global behaviour | 53.74 \pm 32.72 | 78.66 \pm 23.08 | 9.82*** |
| General behaviour | 57.14 \pm 24.18 | 80.31 \pm 16.81 | 12.36*** |
| Mental health | 76.86 \pm 16.49 | 84.94 \pm 11.65 | 6.30*** |
| Self-esteem | 72.65 \pm 20.27 | 80.80 \pm 18.70 | 5.06*** |
| Limitations due to emotional/behavioural difficulties | 69.03 \pm 38.98 | 93.86 \pm 18.07 | 8.31*** |
| Family | | | |
| Family activities | 63.14 \pm 28.72 | 86.14 \pm 18.91 | 10.35*** |
| Family cohesion | 70.23 \pm 25.26 | 75.30 \pm 20.89 | 2.56* |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

Table 6.5

Home-Based Care vs General Community: Mean (\pm SD) CHQ-PF50 Scores for Females

| CHQ-PF50 Scales | Home-Based Care n = 150 | General Community n = 1622 | <i>t</i> |
|---|-------------------------------|----------------------------------|----------|
| Physical and General Health | | | |
| Global health | 80.17 \pm 20.31 | 86.88 \pm 15.51 | 3.92*** |
| General health perceptions | 70.06 \pm 17.30 | 76.82 \pm 15.84 | 4.96*** |
| Bodily pain and discomfort | 79.53 \pm 20.32 | 86.07 \pm 17.44 | 3.79*** |
| Physical functioning | 90.19 \pm 23.42 | 95.15 \pm 15.02 | 2.55* |
| Limitations due to physical health problems | 91.89 \pm 20.95 | 95.94 \pm 15.32 | 2.31* |
| Mental Health | | | |
| Global behaviour | 53.90 \pm 34.49 | 84.37 \pm 18.98 | 10.67*** |
| General behaviour | 58.72 \pm 26.51 | 84.08 \pm 14.54 | 11.55*** |
| Mental health | 73.63 \pm 15.46 | 83.97 \pm 11.27 | 8.00*** |
| Self-esteem | 67.02 \pm 23.06 | 81.82 \pm 16.75 | 7.65*** |
| Limitations due to emotional/behavioural difficulties | 80.15 \pm 29.40 | 95.37 \pm 15.53 | 6.26*** |
| Family | | | |
| Family activities | 66.64 \pm 28.78 | 88.47 \pm 16.67 | 9.15*** |
| Family cohesion | 70.77 \pm 24.68 | 76.89 \pm 20.30 | 2.95** |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.2.2 CHQ-PF50 Mean Scores: Group x Gender

There was a significant Group x Gender interaction for 6 scales – Global Health, Bodily Pain and Discomfort, Role/Social Limitations due to Physical Health Problems, Global Behaviour, Self-Esteem, and Role/Social Limitations due to Emotional/Behavioural Difficulties (see Table 6.6). To interpret these interactions, separate group comparisons were conducted for each level of gender (i.e., male and female). These simple effect analyses showed that on the Global Health and Bodily Pain and Discomfort scales, mean differences across groups were significant for girls but not boys. That is, females in the foster care sample had significantly lower mean scores than females in the general community on the Global Health and Bodily Pain and Discomfort scales, indicating poorer HRQL in these domains. On the Self Esteem scale, there was a significant group difference irrespective of gender, but the

mean difference was much larger for females, indicating that females in foster care had disproportionately poorer self esteem than females in the general community.

On the Role/Social Limitations due to Physical Health Problems and Role/Social Limitations due to Emotional and Behavioural Difficulties scales, there were significant mean differences across groups irrespective of gender, but the mean differences were much larger for males. That is, males in the foster care sample had disproportionately lower scores than those in the community, indicating that they were experiencing greater limitations in their daily functioning as a result of their physical and mental health problems.

Table 6.6

Mean (\pm SD) CHQ-PF50 Scores: Group x Gender

| CHQ Scales ^a | Home-Based Care | | General Community | | Group x Gender <i>F</i> |
|---|-------------------|--------------------|-------------------|---------------------|-------------------------------|
| | Males n = 175 | Females n = 150 | Males n = 1632 | Females n = 1622 | |
| Physical & General | | | | | |
| Health | | | | | |
| Global health | 84.77 \pm 15.52 | 80.17 \pm 20.31 | 86.27 \pm 16.99 | 86.88 \pm 15.51 | 8.59*** |
| General health perceptions | 72.77 \pm 17.44 | 70.06 \pm 17.30 | 76.87 \pm 16.17 | 76.82 \pm 15.84 | 1.78 |
| Bodily pain and discomfort | 85.00 \pm 21.86 | 79.53 \pm 20.32 | 88.20 \pm 17.29 | 86.07 \pm 17.44 | 5.19* |
| Physical functioning | 91.85 \pm 18.97 | 90.19 \pm 23.42 | 95.13 \pm 15.05 | 95.15 \pm 15.02 | 0.86 |
| Limitations due to physical health problems | 84.29 \pm 30.36 | 91.89 \pm 20.95 | 95.66 \pm 15.74 | 95.94 \pm 15.32 | 11.36** |
| Mental Health | | | | | |
| Global behaviour | 53.74 \pm 32.72 | 53.90 \pm 34.49 | 78.66 \pm 23.08 | 84.37 \pm 18.98 | 5.39* |
| General behaviour | 57.14 \pm 24.18 | 58.72 \pm 26.51 | 80.31 \pm 16.81 | 84.08 \pm 14.54 | 1.20 |
| Mental health | 76.86 \pm 16.49 | 73.63 \pm 15.46 | 84.94 \pm 11.65 | 83.97 \pm 11.27 | 3.01 |
| Self-esteem | 72.65 \pm 20.27 | 67.02 \pm 23.06 | 80.80 \pm 18.70 | 81.82 \pm 16.75 | 11.12** |
| Limitations due to emotional/behavioural difficulties | 69.03 \pm 38.98 | 80.15 \pm 29.40 | 93.86 \pm 18.07 | 95.37 \pm 15.53 | 11.88** |
| Family | | | | | |
| Family activities | 63.14 \pm 28.72 | 66.64 \pm 28.78 | 86.14 \pm 18.91 | 88.47 \pm 16.67 | 0.08 |
| Family cohesion | 70.23 \pm 25.26 | 70.77 \pm 24.68 | 75.30 \pm 20.89 | 76.89 \pm 20.30 | 0.01 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.2.3 CHQ-PF50 Mean Scores: Group x Age Group

There were no significant Group x Age Group interactions, indicating that group differences did not differ for younger (6-12 years) or older (13-17 years) children.

Table 6.7

Mean (\pm SD) CHQ-PF50 Scores: Group x Age Group

| | Home-Based Care | | General Community | | Group x Age <i>F</i> |
|---|--------------------|-------------------|---------------------|-------------------|----------------------------|
| | Younger n = 201 | Older n = 124 | Younger n = 1933 | Older n = 1321 | |
| CHQ Scales^a | | | | | |
| Physical and General Health | | | | | |
| Global health | 82.59 \pm 18.98 | 82.74 \pm 20.32 | 87.23 \pm 15.75 | 85.62 \pm 16.95 | 0.32 |
| General health perceptions | 71.11 \pm 17.70 | 72.19 \pm 16.94 | 76.40 \pm 16.14 | 77.49 \pm 15.80 | 0.01 |
| Bodily pain and discomfort | 83.78 \pm 20.73 | 80.41 \pm 22.15 | 88.17 \pm 16.70 | 85.66 \pm 18.25 | 0.86 |
| Physical functioning | 90.66 \pm 20.79 | 91.78 \pm 21.72 | 95.17 \pm 15.12 | 95.10 \pm 14.90 | 0.27 |
| Limitations due to physical health problems | 88.94 \pm 24.12 | 85.91 \pm 30.41 | 95.78 \pm 15.46 | 95.83 \pm 15.65 | 2.08 |
| Mental Health | | | | | |
| Global behaviour | 52.10 \pm 33.96 | 56.63 \pm 32.66 | 80.34 \pm 21.43 | 83.18 \pm 21.08 | 0.26 |
| General behaviour | 55.66 \pm 25.00 | 61.50 \pm 25.35 | 80.87 \pm 15.97 | 84.10 \pm 15.44 | 1.68 |
| Mental health | 75.04 \pm 15.23 | 75.89 \pm 17.43 | 83.88 \pm 11.29 | 85.30 \pm 11.68 | 0.48 |
| Self-esteem | 72.43 \pm 21.33 | 66.03 \pm 21.96 | 82.95 \pm 17.47 | 78.93 \pm 17.92 | 1.76 |
| Limitations due to emotional/behavioural difficulties | 73.60 \pm 35.39 | 75.14 \pm 35.17 | 94.39 \pm 17.06 | 94.92 \pm 16.59 | 0.12 |
| Family | | | | | |
| Family activities | 63.24 \pm 28.97 | 67.24 \pm 28.36 | 86.46 \pm 18.21 | 88.51 \pm 17.29 | 0.56 |
| Family cohesion | 70.89 \pm 25.24 | 69.80 \pm 24.57 | 77.34 \pm 19.83 | 74.28 \pm 21.57 | 1.01 |

^a Scales are grouped under headings created by the author of this thesis. * p <.05; ** p <.01; *** p <.001

6.2.4 CHQ-PF50 Mean Scores: Group x Gender x Age Group

The series of 2 Group x 2 Gender x 2 Age Group factorial ANOVAs revealed significant 3-way interactions for the Bodily Pain and Discomfort, Role/Social Limitations due to Emotional and Behavioural Difficulties, and Family Cohesion scales.

In the first stage of the analyses, separate Group x Age Group interactions were conducted for each level of gender (i.e., for males and females separately). For the Role/Social Limitations due to Emotional and Behavioural Difficulties Scales, there was a significant Group x Age Group interaction for males. Further simple main effects analyses applied to this result involved Group comparisons conducted for each Age Group separately. These analyses revealed significant group differences at both age levels ($p < .001$), but highlighted a relatively larger difference for the 6-12 year olds. In other words, 6-12 year old males in foster care experienced particularly greater limitations in their daily functioning.

For the Bodily Pain and Discomfort and Family Cohesion scales, there was a significant Group x Age Group interaction for females. Further simple main effects analyses applied to this result involved Group comparisons conducted for each Age Group separately. For the Bodily Pain and Discomfort scale, there was a significant group difference at both age levels ($p < .05$), but a relatively larger difference for the 13-17 year olds. In other words, 13-17 year old females in foster care had particularly poor HRQL because of physical pain and discomfort. For the Family Cohesion scale, there was a significant group difference for the younger females (6-12 years) ($p < .01$), indicating that younger females in foster care experience less family cohesion.

Table 6.8

Mean (\pm SD) CHQ-PF50 Scores: Group x Gender x Age Group

| | Younger (6-12 yrs) | | | | Older (13-17 yrs) | | | | Group x Gender x Age <i>F</i> |
|---|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|--|
| | Home-Based Care | | General Community | | Home-Based Care | | General Community | | |
| | Males n = 104 | Females n = 97 | Males n = 984 | Females n = 949 | Males n = 71 | Females n = 53 | Males n = 648 | Females n = 673 | |
| Physical & General Health | | | | | | | | | |
| Global health | 83.45 \pm 18.98 | 81.67 \pm 19.02 | 86.36 \pm 16.99 | 88.13 \pm 14.32 | 86.69 \pm 17.79 | 77.45 \pm 22.37 | 86.14 \pm 16.98 | 85.11 \pm 16.91 | 1.35 |
| General health perceptions | 72.32 \pm 18.52 | 69.80 \pm 16.76 | 76.31 \pm 16.62 | 76.51 \pm 15.63 | 73.44 \pm 15.78 | 70.53 \pm 18.39 | 77.71 \pm 15.45 | 77.27 \pm 16.13 | 0.004 |
| Bodily pain and discomfort | 84.10 \pm 22.73 | 83.44 \pm 18.40 | 88.32 \pm 17.30 | 88.00 \pm 16.07 | 86.34 \pm 20.58 | 72.31 \pm 21.84 | 88.02 \pm 17.28 | 83.37 \pm 18.86 | 4.49* |
| Physical functioning | 91.03 \pm 19.14 | 90.26 \pm 22.52 | 94.77 \pm 15.65 | 95.57 \pm 15.56 | 93.10 \pm 18.76 | 90.04 \pm 25.19 | 95.67 \pm 14.09 | 94.55 \pm 15.64 | 0.01 |
| Limitations due to physical health problems | 84.60 \pm 28.56 | 93.64 \pm 17.09 | 95.31 \pm 16.32 | 96.27 \pm 14.49 | 83.81 \pm 33.09 | 88.68 \pm 26.51 | 96.20 \pm 14.82 | 95.47 \pm 16.41 | 0.37 |
| Mental Health | | | | | | | | | |
| Global behaviour | 50.38 \pm 33.52 | 53.97 \pm 34.50 | 77.42 \pm 23.51 | 88.40 \pm 18.54 | 58.79 \pm 31.04 | 53.77 \pm 34.78 | 80.54 \pm 22.30 | 85.73 \pm 19.52 | 2.07 |
| General behaviour | 54.13 \pm 23.89 | 57.30 \pm 26.16 | 78.91 \pm 16.93 | 82.92 \pm 14.62 | 61.64 \pm 24.07 | 61.32 \pm 27.19 | 82.43 \pm 16.41 | 85.69 \pm 14.29 | 0.46 |
| Mental health | 75.75 \pm 16.04 | 74.28 \pm 14.34 | 83.76 \pm 12.05 | 84.00 \pm 10.46 | 78.50 \pm 17.12 | 72.45 \pm 17.39 | 86.72 \pm 10.80 | 83.94 \pm 12.31 | 0.29 |
| Self-esteem | 74.44 \pm 20.28 | 70.26 \pm 22.31 | 81.62 \pm 18.81 | 84.33 \pm 15.86 | 69.89 \pm 20.09 | 60.98 \pm 23.44 | 79.57 \pm 18.48 | 78.32 \pm 17.34 | 0.03 |
| Limitations due to emotional / behavioural difficulties | 65.50 \pm 40.03 | 82.36 \pm 27.16 | 93.22 \pm 18.86 | 95.61 \pm 14.87 | 74.40 \pm 36.96 | 76.10 \pm 33.00 | 94.81 \pm 16.78 | 95.03 \pm 16.41 | 7.86** |
| Family | | | | | | | | | |
| Family activities | 59.84 \pm 29.66 | 66.92 \pm 27.88 | 85.06 \pm 19.40 | 87.91 \pm 16.77 | 68.10 \pm 26.70 | 66.12 \pm 30.63 | 87.75 \pm 18.05 | 89.25 \pm 16.51 | 2.82 |
| Family cohesion | 72.48 \pm 25.43 | 69.18 \pm 25.06 | 76.16 \pm 20.53 | 78.58 \pm 19.01 | 66.86 \pm 24.81 | 73.68 \pm 23.94 | 74.02 \pm 21.37 | 74.52 \pm 21.78 | 5.66* |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.3 Health-Related Quality of Life of Adolescents as Self-Reported on the

CHQ-CF87: HOME-BASED CARE

CHQ-CF87 mean scores describing adolescents in home-based care can be seen in Table 6.9. Mean scores describing males and females were very similar, and independent-samples t-tests revealed no significant differences.

Table 6.9

Home-Based Care: Mean (\pm SD) CHQ-CF87 Scores

| | Total Sample n=91 | Males n = 53 | Females n = 38 | Males vs Females <i>t</i> |
|---|----------------------|-------------------|-------------------|---------------------------------|
| Physical & General | | | | |
| Health | | | | |
| Global Health | 74.18 \pm 23.06 | 76.79 \pm 22.06 | 70.53 \pm 24.21 | 0.20 |
| General health perceptions | 65.48 \pm 17.15 | 67.48 \pm 14.05 | 62.68 \pm 20.60 | 0.22 |
| Bodily pain and discomfort | 81.89 \pm 21.46 | 85.00 \pm 20.05 | 77.63 \pm 22.83 | 0.11 |
| Physical functioning | 93.55 \pm 10.86 | 94.03 \pm 10.21 | 92.89 \pm 11.82 | 0.62 |
| Limitations due to physical health problems | 92.13 \pm 20.87 | 90.20 \pm 24.10 | 94.74 \pm 15.44 | 0.31 |
| Mental Health | | | | |
| Global behaviour | 62.87 \pm 27.37 | 61.27 \pm 25.88 | 65.00 \pm 29.48 | 0.53 |
| General Behaviour | 74.43 \pm 15.92 | 74.24 \pm 16.32 | 74.69 \pm 15.55 | 0.90 |
| Mental health | 73.01 \pm 16.26 | 74.08 \pm 13.59 | 71.51 \pm 19.49 | 0.46 |
| Self-esteem | 69.46 \pm 18.20 | 69.44 \pm 18.07 | 69.48 \pm 18.62 | 0.99 |
| Limitations due to emotional difficulties | 81.98 \pm 25.13 | 82.27 \pm 24.82 | 81.58 \pm 25.87 | 0.90 |
| Limitations due to behavioural difficulties | 85.43 \pm 25.73 | 85.68 \pm 25.02 | 85.09 \pm 27.00 | 0.91 |
| Family | | | | |
| Family activities | 71.35 \pm 24.68 | 70.46 \pm 24.69 | 72.59 \pm 24.94 | 0.69 |
| Family cohesion | 70.00 \pm 28.08 | 68.08 \pm 28.41 | 72.63 \pm 27.80 | 0.45 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.4 Comparison of Health-Related Quality as Self-Reported on the CHQ-CF87:

HOME-BASED CARE VS GENERAL COMMUNITY

A series of 2 Group (Home-Based Care vs General Community) x 2 Gender (Males vs Females) factorial ANOVAs were conducted to test for main effects (excluding gender) and interactions involving these factors on the CHQ-CF87 scales. Results of these analyses are described below. When factorial ANCOVAs were used to adjust for the different prevalence of single parents and indigenous children in the two groups, results varied little.

6.4.1 CHQ-CF87 Mean Scores: Main Effect of Group

There was a consistent pattern for adolescents in home-based care to score lower than adolescents in the general community on all CHQ scales, except on the Bodily Pain and Discomfort scale (see Table 6.10). The series of factorial ANOVAs conducted, revealed a significant main effect of Group for all CHQ-CF87 scales, except the Global Health, Physical Functioning and Family Cohesion scales. The magnitudes of these differences were in the small to medium range (Cohen's d ranged from 0.26 to 0.68), with the largest differences being on the Global Behaviour, General Behaviour, and Family Activities scales.

Consistent with caregiver/parent reports, there were smaller differences on those scales pertaining to general and physical health and larger differences on those scales pertaining to behaviour and mental health well-being. Also consistent with caregiver/parent reports, there was little difference between scores on the Family Cohesion scale, but a large difference between scores on the Family Activities scale.

Table 6.10

Home-Based Care vs General Community: Mean (\pm SD) CHQ-CF87 Scores

| | Home-Based Care n=91 | General Community n=1272 | Group <i>F</i> |
|---|----------------------------|--------------------------------|-------------------|
| Physical and General Health | | | |
| Global Health | 74.18 \pm 23.06 | 74.43 \pm 22.71 | 0.24 |
| General health perceptions | 65.48 \pm 17.15 | 70.50 \pm 16.21 | 5.62* |
| Bodily pain and discomfort | 81.89 \pm 21.46 | 78.40 \pm 21.85 | 4.45* |
| Physical functioning | 93.55 \pm 10.86 | 95.42 \pm 9.27 | 3.47 |
| Limitations due to physical health problems | 92.13 \pm 20.87 | 96.49 \pm 12.48 | 6.47* |
| Mental Health | | | |
| Global behaviour | 62.87 \pm 27.37 | 77.09 \pm 21.08 | 43.34*** |
| General Behaviour | 74.43 \pm 15.92 | 84.09 \pm 12.21 | 61.61*** |
| Mental health | 73.01 \pm 16.26 | 78.81 \pm 15.58 | 10.13** |
| Self-esteem | 69.46 \pm 18.20 | 76.66 \pm 17.31 | 5.13* |
| Limitations due to emotional difficulties | 81.98 \pm 25.13 | 90.85 \pm 18.63 | 11.74** |
| Limitations due to behavioural difficulties | 85.43 \pm 25.73 | 94.07 \pm 15.19 | 19.04*** |
| Family | | | |
| Family activities | 71.35 \pm 24.68 | 83.22 \pm 19.61 | 51.59*** |
| Family cohesion | 70.00 \pm 28.08 | 72.20 \pm 25.23 | 0.11 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

The same pattern of results was observed when comparisons were made for males and females separately (Table 6.11 and 6.12). Mean scores describing males in home-based care were lower than mean scores describing males in the general community on all CHQ scales except the Bodily Pain and Discomfort scale. Independent samples t-tests showed that the mean differences between scores were statistically significant for the scores on the General Health Perceptions, Global Behaviour, General Behaviour, Mental Health, Self Esteem, Role/Social Limitations due to Emotional Difficulties, Role/Social Limitations due to Behavioural Difficulties, and Family Activities scales. The sizes of these mean differences were in the small to medium range (Cohen's d ranged from 0.35 to 0.66).

Table 6.11

Home-Based Care vs General Community: CHQ-CF87 Mean (\pm SD) Scores for Males

| CHQ-CF87 Scales | Home-Based Care n = 53 | General Community n = 610 | <i>t</i> |
|---|------------------------------|---------------------------------|----------|
| General and Physical Health | | | |
| Global Health | 76.79 \pm 22.06 | 78.32 \pm 21.10 | 0.50 |
| General health perceptions | 67.48 \pm 14.05 | 73.55 \pm 15.68 | 2.72** |
| Bodily pain and discomfort | 85.00 \pm 20.05 | 81.13 \pm 21.02 | 1.28 |
| Physical functioning | 94.03 \pm 10.21 | 96.14 \pm 9.51 | 1.54 |
| Limitations due to physical health problems | 90.20 \pm 24.10 | 96.58 \pm 12.96 | 1.87 |
| Mental Health | | | |
| Global behaviour | 61.27 \pm 25.88 | 73.75 \pm 22.23 | 3.77*** |
| General Behaviour | 74.24 \pm 16.32 | 84.78 \pm 11.82 | 4.60*** |
| Mental health | 74.08 \pm 13.59 | 81.95 \pm 13.58 | 4.05*** |
| Self-esteem | 69.44 \pm 18.07 | 79.20 \pm 16.42 | 4.12*** |
| Limitations due to emotional difficulties | 82.27 \pm 24.82 | 91.63 \pm 18.38 | 2.66* |
| Limitations due to behavioural difficulties | 85.68 \pm 25.02 | 93.13 \pm 16.65 | 2.11* |
| Limitations in Daily Activities | | | |
| Family | | | |
| Family activities | 70.46 \pm 24.69 | 83.44 \pm 19.86 | 3.72*** |
| Family cohesion | 68.08 \pm 28.41 | 73.76 \pm 23.85 | 1.62 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

Although some differences were only small, there was a consistent pattern for mean scores describing females in home-based care to be lower than mean scores describing females in the general community on all CHQ scales except the Family Cohesion scale. Independent-samples t-tests showed that the mean differences were statistically significant on the Global Behaviour, General Behaviour, Role/Social Limitations due to Behavioural Difficulties, and Family Activities scales. The sizes of these differences were in the small to medium range (Cohen's d ranged from 0.22 to 0.62).

Table 6.12

Home-Based Care vs General Community: CHQ-CF87 Mean (\pm SD) Scores for Females

| CHQ-CF87 Scales | Home-Based Care n = 38 | General Community n = 662 | <i>t</i> |
|---|------------------------------|---------------------------------|----------|
| General and Physical Health | | | |
| Global Health | 70.53 \pm 24.21 | 70.86 \pm 23.54 | 0.08 |
| General health perceptions | 62.68 \pm 20.60 | 67.72 \pm 16.19 | 1.84 |
| Bodily pain and discomfort | 77.63 \pm 22.83 | 75.91 \pm 22.31 | 0.46 |
| Physical functioning | 92.89 \pm 11.82 | 94.76 \pm 9.00 | 0.96 |
| Limitations due to physical health problems | 94.74 \pm 15.44 | 96.41 \pm 12.04 | 0.82 |
| Mental Health | | | |
| Global behaviour | 65.00 \pm 29.48 | 79.94 \pm 19.61 | 3.08** |
| General Behaviour | 74.69 \pm 15.55 | 83.46 \pm 12.53 | 3.42** |
| Mental health | 71.51 \pm 19.49 | 75.93 \pm 16.71 | 1.57 |
| Self-esteem | 69.48 \pm 18.62 | 74.32 \pm 17.78 | 1.63 |
| Limitations due to emotional difficulties | 81.58 \pm 25.87 | 90.14 \pm 18.84 | 2.01 |
| Limitations due to behavioural difficulties | 85.09 \pm 27.00 | 94.93 \pm 13.66 | 2.23* |
| Family | | | |
| Family activities | 72.59 \pm 24.94 | 83.00 \pm 19.40 | 2.53* |
| Family cohesion | 72.63 \pm 27.80 | 70.77 \pm 26.36 | 0.42 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.4.2 CHQ-CF87 Mean Scores: Group x Gender

There were no significant Group x Gender interactions for any of the CHQ-CF87 scales as can be seen in Table 6.13, indicating that group differences did not differ for males or females. These results are somewhat different to the results reported by caregivers/parents on the CHQ-PF50, where there were significant Gender x Group interactions on 6 scales.

Table 6.13

Mean (\pm SD) CHQ-CF87 Scores: Group \times Gender

| | Home-Based Care | | General Community | | Group \times Gender <i>F</i> |
|---|-------------------|-------------------|-------------------|--------------------|---|
| | Males n = 53 | Females n = 38 | Males n = 610 | Females n = 662 | |
| CHQ-CF87 Scales | | | | | |
| General & Physical Health | | | | | |
| Global Health | 76.79 \pm 22.06 | 70.53 \pm 24.21 | 78.32 \pm 21.10 | 70.86 \pm 23.54 | 1.25 |
| General health perceptions | 67.48 \pm 14.05 | 62.68 \pm 20.60 | 73.55 \pm 15.68 | 67.72 \pm 16.19 | 2.64 |
| Bodily pain and discomfort | 85.00 \pm 20.05 | 77.63 \pm 22.83 | 81.13 \pm 21.02 | 75.91 \pm 22.31 | 0.001 |
| Physical functioning | 94.03 \pm 10.21 | 92.89 \pm 11.82 | 96.14 \pm 9.51 | 94.76 \pm 9.00 | 0.64 |
| Limitations due to physical health problems | 90.20 \pm 24.10 | 94.74 \pm 15.44 | 96.58 \pm 12.96 | 96.41 \pm 12.04 | 1.33 |
| Mental Health | | | | | |
| Global behaviour | 61.27 \pm 25.88 | 65.00 \pm 29.48 | 73.75 \pm 22.23 | 79.94 \pm 19.61 | 0.42 |
| General Behaviour | 74.24 \pm 16.32 | 74.69 \pm 15.55 | 84.78 \pm 11.82 | 83.46 \pm 12.53 | 0.01 |
| Mental health | 74.08 \pm 13.59 | 71.51 \pm 19.49 | 81.95 \pm 13.58 | 75.93 \pm 16.71 | 1.52 |
| Self-esteem | 69.44 \pm 18.07 | 69.48 \pm 18.62 | 79.20 \pm 16.42 | 74.32 \pm 17.78 | 1.94 |
| Limitations due to emotional difficulties | 82.27 \pm 24.82 | 81.58 \pm 25.87 | 91.63 \pm 18.38 | 90.14 \pm 18.84 | 0.04 |
| Limitations due to behavioural difficulties | 85.68 \pm 25.02 | 85.09 \pm 27.00 | 93.13 \pm 16.65 | 94.93 \pm 13.66 | 0.01 |
| Limitations in Daily Activities | | | | | |
| Family | | | | | |
| Family activities | 70.46 \pm 24.69 | 72.59 \pm 24.94 | 83.44 \pm 19.86 | 83.00 \pm 19.40 | 2.55 |
| Family cohesion | 68.08 \pm 28.41 | 72.63 \pm 27.80 | 73.76 \pm 23.85 | 70.77 \pm 26.36 | 2.17 |

^a Scales are grouped under headings created by the author of this thesis. * $p < .05$; ** $p < .01$; *** $p < .001$

6.5 Summary: The Health-Related Quality of Life of Children and Adolescents in Home-Based Care

Home-Based Care

The results from this study showed that children and adolescents in home-based care experience poor health-related quality of life across all domains. In fact, CHQ scores describing children in home-based care were comparable to those reported for children with Conduct Disorder, Depressive Disorder, and Attention-Deficit/Hyperactivity Disorder in the Australian National Survey of Child and Adolescent Mental Health and Wellbeing (Sawyer et al., 2002). These results suggest that children in home-based care have HRQL that is similar to that of children with diagnosed mental health disorders.

Adolescent self-report data on the CHQ-CF87 showed that mean scores were similar for all adolescents regardless of gender. Caregiver reported data on the CHQ-PF50, however, revealed some gender and age group differences. Firstly, although the sizes were small, males had significantly higher mean scores than females on the Global Health, Bodily Pain and Discomfort, Mental Health and Self-Esteem scales, whereas females had significantly higher mean scores than males on the Role/Social Limitations due to Physical Health Problems and Role/Social Limitations due to Emotional/Behavioural Problems. These results suggest that, whereas males experience somewhat better health-related quality of life than females in the areas of physical and mental health, their problems have greater impact upon their daily functioning. In other words, even though females experience significantly poorer HRQL than males in the areas of physical and mental health, they experience less limitation than males in their ability to fulfil their social and academic roles. Secondly, compared to older children (13-17 years), younger children experienced better self-esteem but exhibited poorer general behaviour. Gender differences did not vary for younger or older children, except that whereas younger males and females experienced similar levels of Bodily Pain and Discomfort, older

females experienced significantly greater bodily pain and discomfort than older males. This may be partly attributable to the commencement of menstruation and associated bodily pain amongst female teenagers.

Home-Based Care vs General Community

Across a wide range of different domains, the health-related quality of life of children in home-based foster care was poorer than that of other children in the general community, regardless of age and gender. The mean scores on all of the CHQ scales were significantly lower, indicating poorer HRQL, for children in home-based care than for children in the general community, as reported by caregivers/parents. Although the size of the differences between mean scores as reported by adolescents was consistently smaller than that reported for all children and adolescents by caregivers/parents, the pattern of results was the same and all differences, but one, were statistically significant. As compared to children in the community, children in home-based care had poorer general health and experienced greater bodily pain and discomfort. They also more frequently experienced behaviour problems, mental health problems, and poorer self esteem than other children in the community. Children in home-based care experienced more limitations in daily activities due to both emotional and behavioural problems, and physical health problems. They also experienced greater disruption to their family activities and poorer family cohesion (in their foster homes) than children in the general community. The size of the differences between CHQ scores describing children in home-based care and other children in the community was substantial in several areas. This was particularly evident for scores describing children's mental health. In these areas, the differences between CHQ scores describing children in the two groups, as reported by caregivers/parents, were often in the range described as a large effect size (Cohen, 1988)

Differences between the health-related quality of life of children and adolescents in home-based care and the general community did not differ by age group or gender. However, as reported by caregivers/parents, there was some gender-related variation in the magnitudes of some of the group differences. Females in home-based care had disproportionately poorer HRQL in areas of Global Health, Bodily Pain and Discomfort, and Self-Esteem, whereas males in home-based care experienced disproportionately greater limitations on their Role and Social Functioning as a result of both physical health problems and emotional and behavioural difficulties. Further analyses showed that it was the younger males (6-12 years) in particular, who experienced disproportionately greater limitations in their daily functioning due to emotional and behavioural problems. Taken together these results suggest that whereas females in home-based care experience disproportionately poorer health-related quality life in a number of domains, it is the males, particularly younger males, who experience greater limitations on their role and social functioning as a result of their problems.

Taken together, these results suggest that foster children have substantially poorer HRQL than their peers in the general community across all domains. In fact, their HRQL is comparable to a sample of children in the Australian community with diagnosed mental health disorders such as Conduct Disorder, Depressive Disorder, and Attention-Deficit/Hyperactivity Disorder (Sawyer et al., 2002). The self-reported HRQL of adolescents in foster care, is also comparable to a sample of children and adolescents aged 10 to 16 years with one of three chronic health conditions – Asthma, Diabetes, or Cystic Fibrosis (Sawyer et al., 2004).

Chapter Seven

Health-Risk Behaviours of Adolescents in Home-Based Care

This chapter describes rates of health-risk behaviours (i.e., suicidal ideation and behaviour, body weight and dietary behaviours, tobacco use, alcohol use, marijuana and other drug use) of adolescents in home-based care as self-reported on the Youth Risk Behaviour Surveillance Survey (YRBS). Comparisons were also made between the rates of health-risk behaviours of adolescents in home-based care and those reported by adolescents in the general community.

To date, very little is known about the rates in which young people in care engage in health-risk behaviours. As discussed, this is a significant omission given evidence that young people with mental health problems are more likely than young people without mental health problems to engage in health-risk behaviours such as suicidal ideation, smoking, drinking, and marijuana use (Sawyer et al. 2001).

7.1 Adolescent Suicide Ideation and Behaviour as Self-Reported on the YRBS:

HOME-BASED CARE

Rates of suicide ideation and behaviour of adolescents in home-based care, as self-reported on the YRBS, can be seen in Table 7.1. A sizeable proportion of adolescents reported suicidal ideation in the past 12 months, with 10% reporting an attempt during this time. Of those who attempted suicide, the majority (67%) required medical attention for an associated injury, poisoning, or overdose.

All adolescents who reported a suicide attempt in the past 12 months had mental health problems in the clinical range (i.e., T score > 63) on the Total Problems scale of the CBCL as reported by caregivers. According to adolescent self-reports, however, only 67% of those who reported a suicide attempt had mental health problems in the clinical range on the Total Problems scale of the YSR. The same 67% of adolescents who reported a suicide attempt also scored above the cut-off on the CES-D suggesting that they were experiencing mild to severe depression.

Gender differences in suicidal ideation and behaviour were examined. Although differences across gender were not large, there was a consistent pattern for more females than males to engage in suicidal ideation and behaviour. In the past 12 months, a greater proportion of females than males had seriously considered suicide, had made a suicide plan, and attempted suicide (Table 7.1). Of those who attempted suicide, all of the females but only one-quarter of the males required medical treatment for an associated injury, poisoning, or overdose. These results suggest that suicide attempts made by females may have been more serious and life-threatening than attempts made by males. Despite these differences, chi-square tests for independence showed that the rates of suicide ideation and behaviour were not significantly different for males and females in home-based care.

Table 7.1

Home-Based Care: Rates (%) of Suicide Ideation and Behaviour of Adolescents

| | Total Sample | Males | Females | Males vs Females χ^2 (df=1) |
|---|-----------------|--------|---------|--|
| Ever seriously considered attempting suicide during past 12 months | n = 90 | n = 53 | n = 37 | |
| Yes | 14.4 | 11.3 | 18.9 | 0.50 |
| Ever made a suicide plan during past 12 months | n = 90 | n = 53 | n = 37 | |
| Yes | 13.3 | 11.3 | 16.2 | 0.13 |
| Suicide attempted in past 12 months | n = 90 | n = 53 | n = 37 | |
| Yes | 10.0 | 7.5 | 13.5 | 0.33 |
| Any attempt result in a need for medical treatment (of those who attempted suicide in past 12 months) | n = 9 | n = 4 | n = 5 | |
| Yes | 66.7 | 25.0 | 100.0 | 2.76 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.2 Adolescent Suicide Ideation and Behaviour as Self-Reported on the YRBS:

HOME-BASED CARE VS GENERAL COMMUNITY

7.2.1 Suicide Ideation and Behaviour: Home-Based vs General Community

Table 7.2 shows the suicidal ideation and behaviour of adolescents in home-based care and the general community, as self-reported on the YRBS. In the past 12 months, a greater proportion of adolescents in home-based care than those in the general community reported that they had seriously considered attempting suicide (14% versus 12%), and had made a suicide plan (13% and 9%). Chi-square tests for independence showed that these differences were not statistically significant.

More than twice as many adolescents in home-based care than in the general community had attempted suicide at least once in the past 12 months (10% versus 4%). The majority of adolescents in home-based care who attempted suicide required medical treatment for a resulting injury, poisoning or overdose, whereas the majority of those in the general community who attempted suicide did not require medical treatment. Chi-square tests for independence showed that both of these differences were statistically significant (see Table 7.2).

Table 7.2

Home-Based Care vs General Community: Rates (%) of Suicide Ideation and Behaviour of Adolescents

| | Home-Based Care | General Community | χ^2 (df=1) |
|--|--------------------|----------------------|-----------------|
| Ever seriously considered attempting suicide during past 12 months | n = 90 | n = 1263 | |
| Yes | 14.4 | 11.7 | 0.36 |
| Ever made a suicide plan during past 12 months | n = 90 | n = 1257 | |
| Yes | 13.3 | 8.7 | 1.70 |
| Suicide attempted in the past 12 months | n = 90 | n = 1264 | |
| Yes | 10.0 | 4.3 | 4.99* |
| Any attempt result in a need for medical treatment (of those who attempted suicide in past 12 months) | n = 9 | n = 52 | |
| Yes | 66.7 | 21.2 | 5.80* |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.2.2 *Suicide Ideation and Behaviour by Group and Gender*

Rates of suicidal ideation and behaviour were compared across groups (i.e., home-based care and general community) by gender. Amongst males, there was a consistent pattern for a larger proportion of those in home-based care than in the general community to report suicidal ideation and behaviour. Chi-square tests for independence showed that none of these differences were statistically significant; however the small sample of males in home-based care may have limited power to detect statistically significant differences.

The same pattern of results was found for females, except that the differences were somewhat larger than those observed for males. Females in home-based care had consistently higher rates of suicidal ideation and behaviour than those in the general community. Most notably, of those who reported a suicide attempt in the past 12 months, all females in home-based care compared to only a minority in the general community reported that at least one

attempt resulted in an injury, poisoning or overdose that required medical treatment. Although chi-square tests for independence showed that only this difference was significant, the reasonably small sample size of females in home-based care may have limited power to detect other statistically significant differences. Furthermore, given the small sample of females in home-based care, results describing the proportion who required medical treatment for a suicide attempt should be interpreted with some caution (see Table 7.3).

Table 7.3

Rates (%) of Suicide Ideation and Behaviour of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males χ^2 (df=1) | Females vs Females χ^2 (df=1) |
|--|-----------------|---------|-------------------|---------|---|---|
| | Males | Females | Males | Females | | |
| Ever seriously considered attempting suicide during past 12 months | n = 53 | n = 37 | n = 604 | n = 659 | | |
| Yes | 11.3 | 18.9 | 9.4 | 13.8 | 0.04 | 0.39 |
| Ever made a suicide plan during past 12 months | n = 53 | n = 37 | n = 598 | n = 659 | | |
| Yes | 11.3 | 16.2 | 6.9 | 10.3 | 0.86 | 0.74 |
| Suicide attempted in the past 12 months | n = 53 | n = 37 | n = 602 | n = 662 | | |
| Yes | 7.5 | 13.5 | 2.5 | 5.9 | 2.81 | 2.28 |
| Any attempt result in a need for medical treatment (of those who attempted suicide in past 12 months) | n = 4 | n = 5 | n = 14 | n = 38 | | |
| Yes | 25.0 | 100.0 | 21.4 | 21.1 | 0.00 | 9.58** |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.3 Adolescent Body Weight Perceptions and Dieting Behaviour as Self-Reported on the YRBS: HOME-BASED CARE

Data describing body weight perceptions and dieting behaviours of adolescents in home-based care can be seen in Table 7.4. There were considerable gender differences in body weight perceptions and dieting behaviours. For example, a greater proportion of females than males reported that they were overweight (40% versus 14%). Whereas a greater proportion of females than males were trying to lose weight (53% versus 19%), a smaller proportion of females than males were not trying to do anything about their weight (18% versus 32%), were trying to stay the same weight (26% versus 30%) or were trying to gain weight (3% versus 19%). Chi-square tests for independence showed that there were statistically significant differences between the body weight perceptions and attempts to change body weight of males and females (Table 7.4).

A greater proportion of females than males were attempting to lose weight or keep from gaining weight by exercising (55% versus 23%), dieting (37% versus 6%), vomiting or using laxatives (5% versus 0%), or using diet pills (3% versus 0%). Chi-square tests for independence showed that the first two differences were statistically significant (Table 7.4).

These results suggest that a greater proportion of females than males had poor body image and were attempting to lose weight or keep from gaining weight.

Table 7.4

Home-Based Care: Body Weight Perceptions and Dieting Behaviours of Adolescents

| | Total Sample | Males | Females | Males vs Females |
|---|-----------------|--------|---------|---------------------|
| Personal weight description | n = 91 | n = 53 | n = 38 | χ^2 (df=2) |
| Underweight | 14.4 | 19.2 | 7.9 | 8.81* |
| About the right weight | 61.1 | 67.3 | 52.6 | |
| Overweight | 24.4 | 13.5 | 39.5 | |
| Action being taken about weight | n = 91 | n = 53 | n = 38 | χ^2 (df=3) |
| Trying to lose weight | 33.0 | 18.9 | 52.6 | 14.16** |
| Trying to gain weight | 12.1 | 18.9 | 2.6 | |
| Trying to stay about the same weight | 28.6 | 30.2 | 26.3 | |
| Not trying to do anything about weight | 26.4 | 32.1 | 18.4 | |
| Whether dieted to lose or keep from gaining weight in past 30 days | n = 91 | n = 53 | n = 38 | χ^2 (df=1) |
| Yes | 18.7 | 5.7 | 36.8 | 12.19*** |
| Whether exercised to lose or keep from gaining weight in past 30 days | n = 91 | n = 53 | n = 38 | |
| Yes | 36.3 | 22.6 | 55.3 | 8.83** |
| Whether vomiting or laxatives were used to lose or keep from gaining weight in past 30 days | n = 91 | n = 53 | n = 38 | |
| Yes | 2.2 | 0.0 | 5.3 | 0.93 |
| Whether diet pills were taken to lose or keep from gaining weight in past 30 days | n = 91 | n = 53 | n = 38 | |
| Yes | 1.1 | 0.0 | 2.6 | 0.03 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.4 Adolescent Body Weight Perceptions and Dieting Behaviour as Self-Reported on the YRBS: HOME-BASED CARE VS GENERAL COMMUNITY

7.4.1 Body Weight Perceptions and Dieting Behaviour: Home-Based Care vs General Community

The body weight perceptions and dieting behaviours of adolescents in home-based care were compared with those of adolescents in the general community (Table 7.5). Results were similar across groups. Over half of the adolescents in both home-based care and the general community perceived themselves as being ‘about the right weight’ (61% and 56% respectively), approximately one quarter thought they were overweight (24% and 28% respectively), and the remaining thought they were underweight (14% and 16%). About one third of the adolescents in both home-based care and the general community were trying to lose weight (33% and 32%), about one tenth were trying to gain weight (12% and 9% respectively), and over one fifth were trying to stay the same weight (27% and 20% respectively).

About one third of the adolescents in home-based care and in the general community were exercising to lose weight or keep from gaining weight (36% and 32% respectively), while 19% in home-based care and 16% in the general community were dieting to lose weight or keep from gaining weight (in the past 30 days). Only 2% of adolescents in both home-based care and the general community reported use of vomiting, laxatives or diet pills to lose weight or keep from gaining weight (in the past 30 days). Chi-square tests for independence showed that there were no significant differences between the body weight perceptions and dieting behaviours of adolescents in home-based care and those in the general community (Table 7.5).

Table 7.5

Home-Based Care vs General Community: Body Weight Perceptions and Dieting Behaviours of Adolescents

| | Home- Based Care | General Community | |
|--|---------------------|----------------------|-----------------|
| Personal weight description | n = 90 | n = 1264 | χ^2 (df=2) |
| Underweight | 14.4 | 16.1 | 0.87 |
| About the right weight | 61.1 | 56.1 | |
| Overweight | 24.4 | 27.8 | |
| Action being taken about weight | n = 91 | n = 1263 | χ^2 (df=3) |
| Trying to lose weight | 33.0 | 31.5 | 7.21 |
| Trying to gain weight | 12.1 | 9.3 | |
| Trying to stay about the same weight | 28.6 | 20.2 | |
| Not trying to do anything about weight | 26.4 | 39.0 | |
| Whether dieted to lose or keep from gaining weight in past 30 days | n = 91 | n = 1259 | χ^2 (df=1) |
| Yes | 18.7 | 16.1 | 0.24 |
| Whether exercised to lose or keep from gaining weight in past 30 days | n = 91 | n = 1259 | |
| Yes | 36.3 | 32.0 | 0.52 |
| Whether vomiting or laxatives were used to lose or keep from gaining weight in past 30 days | n = 91 | n = 1259 | |
| Yes | 2.2 | 1.7 | 0.00 |
| Whether diet pills were taken to lose or keep from gaining weight in past 30 days | n = 91 | n = 1259 | |
| Yes | 1.1 | 0.6 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$ *7.4.2 Body Weight Perceptions and Dieting Behaviours by Group and Gender*

Body weight perceptions and dieting behaviours were compared across groups (i.e., home-based care and the general community) by gender (Table 7.6). Results describing males in home-based care were similar to results describing males in the general community.

Likewise, results describing females in home-based care were similar to results describing females in the general community.

Amongst males, approximately two-thirds of those in home-based care and the general community perceived themselves as being about the right weight (67% and 62% respectively), about one-fifth thought they were underweight (19% and 20%) and the remaining thought they were overweight (14% and 18%). The majority of males in both groups were not trying to do anything about their weight or they were trying to stay about the same weight, while 19% in home-based care and 15% in the general community were trying to lose weight, and 19% in home-based care and 16% in the general community were trying to gain weight. Chi-square tests for independence showed that there were no significant differences in the body weight perceptions and dieting behaviours of adolescent males in home-based care and those in the general community.

Only about half of the adolescent females in home-based care and the general community thought they were about the right weight (53% and 51% respectively), over one-third thought they were overweight (40% and 37%), and a small percentage thought they were underweight (8% and 13%). Compared with only a small proportion of the males, about one half of adolescent females in both home-based care and the general community were trying to lose weight. Large proportions of females in both groups (53% in home-based care and 43% in the general community) were exercising or dieting to lose weight or keep from gaining weight, while very small proportions were vomiting or using laxatives or diet pills to lose weight or keep from gaining weight (in the past 30 days). Chi-square tests for independence showed that there were no significant differences in the body weight perceptions and dieting behaviours of adolescent females in home-based care and those in the general community.

These results show that, for each gender, body weight perceptions and dieting behaviours were similar across groups. Results describing males in home-based care and the general community were similar, as were results describing females in home-based care and the general community. These results do show, however, that the differences in body weight perceptions and dieting behaviours found between males and females in home-based care, also exist between males and females in the general community. It appears that females in both home-based care and the general community experience poorer body image and engage in more dieting behaviours than their male counterparts.

Table 7.6

Body Weight Perceptions and Dieting Behaviours of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males | Females vs Females |
|---|-----------------|---------|----------------------|---------|----------------------|--------------------------|
| | Males | Females | Males | Females | | |
| Personal weight description | n = 53 | n = 38 | n = 605 | n = 659 | χ^2 (df=2) | χ^2 (df=2) |
| Underweight | 19.2 | 7.9 | 19.7 | 12.7 | 0.81 | 0.78 |
| About the right weight | 67.3 | 52.6 | 62.1 | 50.5 | | |
| Overweight | 13.5 | 39.5 | 18.2 | 36.7 | | |
| Action being taken about weight | n = 53 | n = 38 | n = 605 | n = 658 | χ^2 (df=3) | χ^2 (df=3) |
| Trying to lose weight | 18.9 | 52.6 | 14.9 | 46.8 | 5.32 | 2.94 |
| Trying to gain weight | 18.9 | 2.6 | 16.0 | 3.0 | | |
| Trying to stay about the same weight | 30.2 | 26.3 | 21.0 | 19.5 | | |
| Not trying to do anything about weight | 32.1 | 18.4 | 48.1 | 30.7 | | |
| Whether dieted to lose or keep from gaining weight in past 30 days | n = 53 | n = 38 | n = 603 | n = 656 | χ^2 (df=1) | χ^2 (df=1) |
| Yes | 5.7 | 36.8 | 6.6 | 24.8 | 0.00 | 2.13 |
| Whether exercised to lose or keep from gaining weight in past 30 days | n = 53 | n = 38 | n = 603 | n = 656 | | |
| Yes | 22.6 | 53.3 | 20.1 | 43.0 | 0.07 | 1.73 |
| Whether vomiting or laxatives were used to lose or keep from gaining weight in past 30 days | n = 53 | n = 38 | n = 603 | n = 656 | | |
| Yes | 0.0 | 5.3 | 0.5 | 2.9 | 0.00 | 0.12 |
| Whether diet pills were taken to lose or keep from gaining weight in past 30 days | n = 53 | n = 38 | n = 603 | n = 656 | | |
| Yes | 0.0 | 2.6 | 0.2 | 0.9 | 0.00 | 0.04 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.5 Adolescent Tobacco Use as Self-Reported on the YRBS:

HOME-BASED CARE

Rates of lifetime and current tobacco use of adolescents in home-based care, as self-reported on the YRBS, can be seen in Table 7.7. About half of the adolescents had tried tobacco smoking at least once in their life. The majority of adolescents who had smoked a whole cigarette had done so by the age of 14 years.

Of those who had tried smoking, about half reported an attempt to quit smoking. Less than one-fifth of adolescents in home-based care reported that they were currently smoking. Of those who reported smoking, over half reported that they smoked 6 or more cigarettes daily.

The proportions of males and females who had engaged in smoking behaviours at some stage during their life were similar (Table 7.7). There was however, a higher proportion of males than females who were currently smoking (21% vs 16%), and of the smokers, a higher proportion of males than females were heavy smokers (i.e., smoked 6 or more cigarettes per day) (64% vs 33%). However, chi-square tests for independence showed that none of these differences were statistically significant. These results should be interpreted with some caution however, due to the reasonably small number of males and females. The small number of participants in the gender groups may limit power to detect statistically significant differences, especially for results describing the number of cigarettes smoked per day which were reported by a very small number of current smokers (i.e., 11 males and 6 females).

Table 7.7

Home-Based Care: Rates (%) of Tobacco Use of Adolescents

| | Total Sample | Males | Females | Males vs Females |
|---|-----------------|--------|---------|---------------------|
| Lifetime Smoking | | | | |
| Age when whole cigarette 1 st smoked | n = 91 | n = 53 | n = 38 | $\chi^2(df=2)$ |
| Never smoked a whole cigarette | 60.4 | 58.5 | 63.2 | 0.21 |
| 14 years or younger | 34.1 | 35.8 | 31.6 | |
| 15 years or older | 5.5 | 5.7 | 5.3 | |
| Ever tried smoking (inc. 1 or 2 puffs) | n = 91 | n = 53 | n = 38 | $\chi^2(df=1)$ |
| Yes | 48.4 | 49.1 | 47.4 | 0.00 |
| Ever attempted to quit smoking (of those who had ever tried smoking) | n = 43 | n = 26 | n = 17 | |
| Yes | 48.8 | 42.3 | 58.8 | 0.56 |
| Current Smoking (past 30 days) | | | | |
| Currently smoking | n = 91 | n = 53 | n = 38 | |
| Yes | 18.7 | 20.8 | 15.8 | 0.11 |
| No. of cigarettes smoked per day (of those currently smoking) | n = 17 | n = 11 | n = 6 | |
| Half a cigarette to 5 a day | 47.1 | 36.4 | 66.7 | 0.47 |
| 6 or more a day | 52.9 | 63.6 | 33.3 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.6 Adolescent Tobacco Use as Self-Reported on the YRBS:

HOME-BASED CARE VS GENERAL COMMUNITY

7.6.1 Tobacco Use: Home-Based Care vs General Community

Table 7.8 compares rates of lifetime and current smoking, as self-reported by adolescents on the YRBS, in the home-based care and general community groups. Overall, similar proportions of adolescents in home-based care and the general community engaged in lifetime and current smoking behaviours. Of the current smokers however, a greater proportion of adolescents in home-based care than in the general community (53% vs 34%) smoked heavily (i.e., 6 or more cigarettes a day). Chi-square tests for independence showed that there were no statistically significant differences in the proportion of adolescents in home-based care and the proportion in the general community who engaged in any smoking behaviours.

Table 7.8

Home-Based Care vs General Community: Rates (%) of Tobacco Use of Adolescents

| | Home-Based Care | General Community | |
|---|--------------------|----------------------|-----------------|
| Lifetime Smoking | | | |
| Age when whole cigarette 1st smoked | n = 91 | n = 1273 | χ^2 (df=2) |
| Never smoked a whole cigarette | 60.4 | 56.3 | 0.67 |
| 14 years or younger | 34.1 | 36.8 | |
| 15 years or older | 5.5 | 6.9 | |
| Ever tried smoking (inc. 1 or 2 puffs) | n = 91 | n = 1275 | χ^2 (df=1) |
| Yes | 48.4 | 57.5 | 2.53 |
| Ever attempted to quit smoking (of those who had ever tried smoking) | n = 43 | n = 662 | |
| Yes | 48.8 | 46.4 | 0.02 |
| Current Smoking (past 30 days) | | | |
| Currently smoking | n = 91 | n = 1275 | |
| Yes | 18.7 | 21.8 | 0.32 |
| No. of cigarettes smoked per day (of those currently smoking) | n = 17 | n = 267 | |
| Half a cigarette to 5 a day | 47.1 | 66.3 | 1.83 |
| 6 or more a day | 52.9 | 33.7 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.6.2 Tobacco Use by Group and Gender

Rates of lifetime and current smoking behaviour were compared across groups (i.e., home-based care and general community) by gender. As can be seen in Table 7.9, rates of lifetime and current smoking were reasonably similar for males in home-based care and males in the general community. Amongst the males currently smoking however, a higher proportion of those in home-based care (64%) than in the general community (41%) were heavy smokers (i.e., smoked 6 or more cigarettes a day). Chi-square tests for independence showed that there were no statistically significant differences between the proportion of males in home-based care and the proportion in the general community who engaged in these

smoking-related behaviours. However, the small sample of males in home-based care may have limited the power to detect statistically significant differences. Thus, these results should be interpreted with some caution.

Amongst females, a slightly higher proportion of those in the general community than in home-based care had tried smoking, and had smoked a whole cigarette at some stage in their life. Of those who had tried smoking however, a higher proportion of those in home-based care than the general community had tried to quit smoking (59% vs 47%). Current smoking rates were higher amongst females in the general community than in home-based care (25% vs 16%), although a slightly higher proportion of smokers in home-based care than in the general community were heavy smokers (i.e., smoked 6 or more cigarettes a day) (33% vs 29%). Chi-square tests for independence showed that none of these differences were statistically significant. Once again however, given the small sample of females in home-based care, these results should be interpreted with some caution.

Table 7.9

Rates (%) of Tobacco Use of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males | Females vs Females |
|---|-----------------|---------|----------------------|---------|----------------------|--------------------------|
| | Males | Females | Males | Females | | |
| Lifetime Smoking | | | | | | |
| Age when whole cigarette 1 st smoked | | | | | | |
| | n = 53 | n = 38 | n = 610 | n = 663 | χ^2 (df=2) | χ^2 (df=2) |
| Never smoked a whole cigarette | 58.5 | 63.2 | 56.9 | 55.8 | 0.05 | 0.87 |
| 14 years or younger | 35.8 | 31.6 | 37.0 | 36.5 | | |
| 15 years or older | 5.7 | 5.3 | 6.1 | 7.7 | | |
| Ever tried smoking (inc. 1 or 2 puffs) | | | | | | |
| | n = 53 | n = 38 | n = 611 | n = 664 | χ^2 (df=1) | χ^2 (df=1) |
| Yes | 49.1 | 47.4 | 57.8 | 57.2 | 1.18 | 1.05 |
| Ever attempted to quit smoking (of those who had ever tried smoking) | | | | | | |
| | n = 26 | n = 17 | n = 317 | n = 345 | | |
| Yes | 42.3 | 58.8 | 45.4 | 47.2 | 0.01 | .47 |
| Current Smoking (past 30 days) | | | | | | |
| Currently smoking | | | | | | |
| | n = 53 | n = 38 | n = 611 | n = 664 | | |
| Yes | 20.8 | 15.8 | 18.8 | 24.5 | 0.03 | 1.07 |
| No. of cigarettes smoked per day (of those currently smoking) | | | | | | |
| | n = 11 | n = 6 | n = 111 | n = 156 | | |
| Half a cigarette to 5 a day | 36.4 | 66.7 | 59.5 | 71.2 | 1.34 | 0.00 |
| 6 or more a day | 63.6 | 33.3 | 40.5 | 28.8 | | |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.7 Adolescent Alcohol Use as Self-Reported on the YRBS:

HOME-BASED CARE

Rates of alcohol use as self-reported by adolescents in home-based care on the YRBS are shown in Table 7.10. Over half the adolescents in home-based care had consumed a full alcoholic beverage at least once in their life, with the majority having consumed their first beverage at 14 years of age or younger. One quarter of the adolescents were currently drinking, and of these, over half had engaged in binge drinking (i.e., consumed more than 5 drinks in a row) at least once in the past month.

A similar proportion of males and females had consumed a full alcoholic beverage at least once in their life, however a higher proportion of males than females were currently drinking (29% vs 19%). Furthermore, of the drinkers, a larger proportion of males than females had engaged in binge drinking in the past month. Chi-square tests for independence showed that there were no statistically significant differences between the proportion of males and females in home-based care engaging in these drinking behaviours. Once again, results should be interpreted with some caution due to the small samples of males and females in home-based care that may limit power to detect statistically significant differences. This is especially the case for results describing rates of binge drinking which were reported by a very small number of current drinkers.

Table 7.10

Home-Based Care: Rates (%) of Alcohol Use of Adolescents

| | Total Sample | Males | Females | Males vs Females |
|--|--------------|--------|---------|---------------------|
| Lifetime Drinking | | | | |
| Age when first full alcoholic drink consumed | | | | |
| | n = 89 | n = 52 | n = 37 | χ^2 (df=2) |
| Never | 39.3 | 40.4 | 37.8 | 0.95 |
| 14 years or younger | 46.1 | 48.1 | 43.2 | |
| 15 years or older | 14.6 | 11.5 | 18.9 | |
| Current Drinking (past 30 days) | | | | |
| Currently drinking | | | | |
| | n = 89 | n = 52 | n = 37 | χ^2 (df=1) |
| Yes | 24.7 | 28.8 | 18.9 | 0.67 |
| Currently binge drinking: 5+ drinks in a row (of those currently drinking) | | | | |
| | n = 22 | n = 15 | n = 7 | |
| Yes | 54.5 | 60.0 | 42.9 | 0.09 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.8 Adolescent Alcohol Use as Self-Reported on the YRBS:

HOME-BASED CARE VS GENERAL COMMUNITY

7.8.1 Alcohol Use: Home-Based Care vs General Community

Comparisons were made between the drinking behaviours of adolescents in home-based care and adolescents in the general community. Across the groups, similar proportions of adolescents engaged in drinking behaviours. For example, just over 60% of adolescents in home-based care and the general community had consumed a full alcoholic beverage at some stage in their life, with the majority (46% in home-based care and 48% in the general community) having consumed their first full alcoholic beverage at 14 years or younger. There was however, a slightly higher proportion of adolescents in the general community than in home-based care who reported current alcohol consumption. Of the drinkers, similar proportions in each group had engaged in binge drinking in the past month. Chi-square tests for independence showed that there were no statistically significant differences between the proportion of adolescents in home-based care and the general community who engaged in these alcohol consumption behaviours, as shown in Table 7.11.

Table 7.11

Home-Based Care vs General Community: Rates (%) of Alcohol Use of Adolescents

| | Home-Based Care | General Community | |
|--|--------------------|----------------------|-----------------|
| Lifetime Drinking | | | |
| Age when first full alcoholic drink consumed | n = 89 | n = 1245 | χ^2 (df=2) |
| Never | 39.3 | 34.0 | 1.26 |
| 14 years or younger | 46.1 | 48.2 | |
| 15 years or older | 14.6 | 17.8 | |
| Current Drinking (past 30 days) | | | |
| Currently drinking | n = 89 | n = 1242 | χ^2 (df=1) |
| Yes | 24.7 | 34.9 | 3.41 |
| Currently binge drinking: 5 + drinks in a row (of those currently drinking) | n = 22 | n = 431 | |
| Yes | 54.5 | 53.1 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$ *7.8.2 Alcohol Use by Group and Gender*

The proportion of adolescents who engaged in alcohol use was compared across groups by gender. Amongst males, the proportion in home-based care and the general community who engaged in alcohol consumption behaviours was very similar, and chi-square tests for independence showed no statistically significant differences.

Amongst females, similar proportions across groups had consumed a full alcoholic beverage at some stage in their life, but a higher proportion of those in the general community than in home-based care (37% vs 19%) reported that they were currently drinking. Furthermore, of the drinkers, a slightly higher proportion in the general community than in home-based care had engaged in binge drinking at least once in the past month. Chi-square tests for independence showed that only one group difference was statistically significant – a significantly higher proportion of females in the general community than in home-based care reported current alcohol consumption (see Table 7.12).

Table 7.12

Rates (%) of Alcohol Use by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males | Females vs Females |
|---|--------------------------|----------------|----------------------|-----------------|-------------------------|--------------------------|
| | Males | Females | Males | Females | | |
| | Lifetime Drinking | | | | | |
| Age when first full alcoholic drink consumed | | | | | | |
| Never | n = 52 40.4 | n = 37 37.8 | n = 591 32.3 | n = 654 35.5 | χ^2 (df=2) 2.18 | χ^2 (df=2) 0.18 |
| 14 years or younger | 48.1 | 43.2 | 49.7 | 46.8 | | |
| 15 years or older | 11.5 | 18.9 | 17.9 | 17.7 | | |
| Current Drinking (past 30 days) | | | | | | |
| Currently drinking | n = 52 | n = 37 | n = 589 | n = 653 | χ^2 (df=1) | χ^2 (df=1) |
| Yes | 28.8 | 18.9 | 32.8 | 36.9 | 0.18 | 4.17* |
| Currently binge drinking: 5 + drinks in a row (of those currently drinking) | | | | | | |
| Yes | n = 15 60.0 | n = 7 42.9 | n = 192 55.7 | n = 239 51.0 | 0.003 | 0.002 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.9 Adolescent Marijuana Use Self-Reported on the YRBS:

HOME-BASED CARE

Rates of lifetime and current marijuana use of adolescents in home-based care, as self-reported on the YRBS, can be seen in Table 7.13. Almost one-third of adolescents reported that they had used marijuana at some stage in their life. Of these, the vast majority had tried marijuana for the first time at 14 years of age or younger. Almost 16% of adolescents reported that they were currently using marijuana.

When comparisons were made between male and female adolescents in home-based care, results showed that a slightly higher proportion of males than females had tried marijuana (33% vs 29%), and a higher proportion were currently using marijuana (19% vs 11%). Chi-square tests for independence showed that these differences were not statistically significant.

Table 7.13

Home-Based Care: Rates (%) of Marijuana Use of Adolescents

| | Home- | Males | Females | Males vs Females |
|---|------------|--------|---------|---------------------|
| | Based Care | | | |
| Age when first used marijuana | n = 90 | n = 52 | n = 38 | χ^2 (df=2) |
| Never | 68.9 | 67.3 | 71.1 | 0.15 |
| 14 years or younger | 25.6 | 26.9 | 23.7 | |
| 15 years or older | 5.6 | 5.8 | 5.3 | |
| Currently using marijuana (in past 30 days) | n = 90 | n = 52 | n = 38 | χ^2 (df=1) |
| Yes | 15.6 | 19.2 | 10.5 | 0.69 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.10 Adolescent Marijuana Use as Self-Reported on the YRBS:

HOME-BASED CARE VS GENERAL COMMUNITY

7.10.1 Marijuana Use: Home-Based Care vs General Community

Comparisons were made between the marijuana use of adolescents in home-based care and the general community. As shown in Table 7.14, a higher proportion of adolescents in home-based care than the general community had tried marijuana at some stage during their life (31% vs 25%). A higher proportion of adolescents in home-based care than in the general community were also currently using marijuana (16% vs 10%). However, chi-square tests for independence showed that these differences were not statistically significant.

Table 7.14

Home-Based Care vs General Community: Rates (%) of Marijuana Use of Adolescents

| | Home- Based Care % | General Community % | |
|---|--------------------------|---------------------------|----------------|
| Age when first used marijuana | n = 90 | n = 1257 | $\chi^2(df=2)$ |
| Never | 68.9 | 74.7 | 3.45 |
| 14 years or younger | 25.6 | 17.9 | |
| 15 years or older | 5.6 | 7.4 | |
| Currently using marijuana (in past 30 days) | n = 90 | n = 1257 | $\chi^2(df=1)$ |
| Yes | 15.6 | 10.4 | 1.80 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.10.2 Marijuana Use by Group and Gender

Rates of lifetime and current marijuana use were compared across groups (i.e., home-based care and general community) by gender (see Table 7.15). Amongst males, a higher proportion in home-based care (33%) than in the general community (25%) had used marijuana at some stage in their life, with the vast majority in both groups having used marijuana for the first time at 14 years of age or younger. A higher proportion of males in

home-based care (19%) than in the general community (11%) were also currently using marijuana. Chi-square tests for independence showed that these differences were not statistically significant.

The rates of marijuana use were more similar for girls in home-based care and the general community, than they were for males. Just over a quarter of female adolescents in both home-based care (29%) and in the general community (26%) had used marijuana at least once during their life, with the majority having used it for the first time at 14 years or younger. Just over 10% of females in both groups were currently using marijuana. Chi-square tests for independence showed that there were no statistically significant differences between the rates of marijuana use for females in home-based care and females in the general community.

Table 7.15

Rates (%) of Marijuana Use of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | | |
|---|-----------------|---------|-------------------|---------|----------------|--------------------|
| | | | Males | | Females | |
| | Males | Females | Males | Females | Males vs Males | Females vs Females |
| Age when first used marijuana | n = 52 | n = 38 | n = 599 | n = 658 | $\chi^2(df=2)$ | $\chi^2(df=2)$ |
| Never | 67.3 | 71.1 | 75.5 | 74.0 | 2.28 | 1.27 |
| 14 years or younger | 26.9 | 23.7 | 18.4 | 17.5 | | |
| 15 years or older | 5.8 | 5.3 | 6.2 | 8.5 | | |
| Currently using marijuana (in past 30 days) | n = 52 | n = 38 | n = 599 | n = 658 | $\chi^2(df=1)$ | $\chi^2(df=1)$ |
| Yes | 19.2 | 10.5 | 10.7 | 10.2 | 2.67 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.11 Adolescent Amphetamine and Hallucinogenic Drug Use as Self-Reported on the

YRBS: HOME-BASED CARE

Rates of lifetime and current amphetamine and hallucinogenic drug use of adolescents in home-based care are shown in Table 7.16. Almost 8% of adolescents reported that they had used an amphetamine drug at some stage during their life, and 2% reported current use. Although the YRBS questionnaire is designed to measure illicit drug use, there is a small possibility that some adolescents who have used or were currently using prescription amphetamines (e.g., Ritalin) for medical purposes may have responded positively to items asking about amphetamine use. Almost 6% of adolescents reported that they had used a hallucinogenic drug at some stage during their life, and 1% reported current use.

Rates of amphetamine and hallucinogenic drug use were similar for males and females in home-based care (see Table 7.16). Although a slightly higher proportion of females than males reported current amphetamine and hallucinogenic drug use, chi-square tests for independence showed these differences were not statistically significant.

Table 7.16

Home-Based Care: Rates (%) of Amphetamine and Hallucinogenic Drug Use of Adolescents

| | Home- Based Care | Males | Females | Males vs Females χ^2 (df=1) |
|---|---------------------|--------|---------|--|
| Amphetamines | | | | |
| Ever used amphetamines | n = 90 | n = 52 | n = 38 | |
| Yes | 7.8 | 7.7 | 7.9 | 0.00 |
| Currently using amphetamines (in past 30 days) | n = 90 | n = 52 | n = 38 | |
| Yes | 2.2 | 1.9 | 2.6 | 0.00 |
| Hallucinogenic Drugs | | | | |
| Ever used a hallucinogenic drug | n = 90 | n = 52 | n = 38 | |
| Yes | 5.6 | 5.8 | 5.3 | 0.00 |
| Currently using hallucinogenic drugs (in past 30 days) | n = 90 | n = 52 | n = 38 | |
| Yes | 1.1 | 0.0 | 2.6 | 0.03 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.12 Adolescent Amphetamine and Hallucinogenic Drug Use as Self-Reported on the

YRBS: HOME-BASED CARE VS GENERAL COMMUNITY

7.12.1 Amphetamine and Hallucinogenic Drug Use: Home-Based Care vs

General Community

Comparisons were made between rates of amphetamine and hallucinogenic drug use of adolescents in home-based care and adolescents in the general community (Table 7.17). More than twice as many adolescents in home-based care than in the general community (8% vs 3%) reported using an amphetamine at some stage in their life. Similarly, although the rates were very low, twice as many adolescents in home-based care than in the general community (2% vs 1%) reported current use of amphetamines (i.e., in the past 30 days). Chi-square tests for independence showed that only the difference regarding lifetime use was statistically significant (Table 7.17).

Twice as many adolescents in home-based care than in the general community (6% vs 3%) reported using a hallucinogenic drug at some stage during their life, but very small proportions across both groups reported current use. Chi-square tests for independence showed that there were no statistically significant differences in the rates of hallucinogenic drug use for adolescents in home-based care and those in the general community.

Table 7.17

Home-Based Care vs General Community: Rates (%) of Amphetamine and Hallucinogenic Drug Use of Adolescents

| | Home-Based Care | General Community | χ^2 (df=1) |
|---|--------------------|----------------------|-----------------|
| Amphetamines | | | |
| Ever used amphetamines | n = 90 | n = 1257 | |
| Yes | 7.8 | 2.8 | 5.38* |
| Currently using amphetamines (in past 30 days) | n = 90 | n = 1257 | |
| Yes | 2.2 | 1.0 | 0.27 |
| Hallucinogenic Drugs | | | |
| Ever used a hallucinogenic drug | n = 90 | n = 1263 | |
| Yes | 5.6 | 3.3 | 0.67 |
| Currently using hallucinogenic drugs (in past 30 days) | n = 90 | n = 1263 | |
| Yes | 1.1 | 0.6 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.12.2 Amphetamine and Hallucinogenic Drug Use by Group and Gender

Rates of lifetime and current amphetamine and hallucinogenic drug use were compared across groups (i.e., home-based care and general community) by gender. Amongst males, although the rates of usage were very low, more than twice as many in home-based care (8%) than in the general community (3%) reported using an amphetamine at some stage in their life, and almost four times as many in home-based care (2%) than in the general community (0.5%) reporting using an amphetamine in the past 30 days. Chi-square tests for independence showed none of these differences were statistically significant.

A larger proportion of male adolescents in home-based care (6%) than in the general community (4%) reported having used a hallucinogenic drug during their life, however none of those in home-based care and only 0.5% of those in the general community reported using

in the past 30 days. Chi-square tests for independence showed that there were no statistically significant differences in the rates of use between groups.

As with the males, more than twice as many females in home-based care (8%) than in the general community (3%) reported having used an amphetamine at some stage in their life. Similarly, a larger proportion of females in home-based care than in the general community reported current use of amphetamines (3% versus 2%). Chi-square tests for independence showed none of these differences to be statistically significant.

A larger proportion of females in home-based care than in the general community had used a hallucinogenic drug at some stage in their life (5% versus 3% respectively), and were currently using hallucinogenics (i.e., in the past 30 days) (3% versus 1% respectively). Despite this, the rates of hallucinogenic drug use were very low for females in both groups, and chi-square tests for independence showed that none of the differences were statistically significant.

Table 7.18

Rates (%) of Amphetamine and Hallucinogenic Drug Use by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males χ^2 (df=1) | Females vs Females χ^2 (df=1) |
|---|-----------------|---------|----------------------|---------|---|---|
| | Males | Females | Males | Females | | |
| Amphetamines | | | | | | |
| Ever used amphetamines | n = 52 | n = 38 | n = 599 | n = 658 | | |
| Yes | 7.7 | 7.9 | 2.8 | 2.7 | 2.22 | 1.74 |
| Currently using amphetamines (in past 30 days) | n = 52 | n = 38 | n = 599 | n = 658 | | |
| Yes | 1.9 | 2.6 | 0.5 | 1.5 | 0.11 | 0.00 |
| Hallucinogenic Drugs | | | | | | |
| Ever used a hallucinogenic drug | n = 52 | n = 38 | n = 606 | n = 657 | | |
| Yes | 5.8 | 5.3 | 3.8 | 2.9 | 0.11 | 0.12 |
| Currently using hallucinogenic drugs (in past 30 days) | n = 52 | n = 38 | n = 606 | n = 657 | | |
| Yes | 0.0 | 2.6 | 0.5 | 0.6 | 0.00 | 0.2 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.13 Other Illicit Drug Use of Adolescents as Self-Reported on the YRBS:

HOME-BASED CARE

Rates of other illicit drug use of adolescents in home-based care, as self-reported on the YRBS, can be seen in Table 7.19. It was not possible to make meaningful comparisons between the rates of designer drug, cocaine and heroin use of males and females due to the very low rates reported. However, there was a general pattern for more females than males to illicitly use pharmaceutical and inhalant drugs. Firstly, a larger proportion of females than males had used 'over-the-counter' pharmaceutical drugs (24% vs 4%) and prescription drugs (13% vs 2%) for non-medical purposes. Similarly, a larger proportion of females than males (13% vs 4%) had sniffed glue or inhaled paints, sprays or the contents of aerosol cans. Chi-square tests for independence showed that only the difference for 'over-the-counter' drugs was statistically significant. However, the reasonably small sample sizes (of males and females) may have limited power to detect statistically significant differences.

Table 7.19

Home-Based Care: Rates (%) of Other Illicit Drug Use of Adolescents

| | Total Sample | Males | Females | Males vs Females χ^2 (df=1) |
|--|-----------------|--------|---------|---|
| Pharmaceutical Drugs | | | | |
| Ever used 'over the counter' pain-killers for non-medical purposes | n = 89 | n = 51 | n = 38 | |
| Yes | 12.4 | 3.9 | 23.7 | 6.13* |
| Ever used prescription drugs (e.g., Ritalin, Valium) for non-medical purposes | n = 91 | n = 53 | n = 38 | |
| Yes | 6.6 | 1.9 | 13.2 | 2.92 |
| Inhalant Drugs | | | | |
| Ever sniffed glue, inhaled paints, sprays or contents of aerosol cans | n = 90 | n = 52 | n = 38 | |
| Yes | 7.8 | 3.8 | 13.2 | 1.52 |
| Ever inhaled any other substance (e.g., nitrous) for non-medical purposes | n = 90 | n = 52 | n = 38 | |
| Yes | 0.0 | 0.0 | 0.0 | n/a |
| Designer Drugs, Cocaine, & Heroin | | | | |
| Ever used any 'designer' drug (ecstasy, fantasy) | n = 91 | n = 53 | n = 38 | |
| Yes | 3.3 | 3.8 | 2.6 | 0.00 |
| Ever used cocaine | n = 91 | n = 53 | n = 38 | |
| Yes | 1.1 | 0.0 | 2.6 | 0.03 |
| Ever used heroin | n = 91 | n = 53 | n = 38 | |
| Yes | 0.0 | 0.0 | 0.0 | n/a |
| Ever used a needle to inject an illegal drug | n = 91 | n = 53 | n = 38 | |
| Yes | 1.1 | 0.0 | 2.6 | 0.03 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.14 Other Illicit Drug Use of Adolescents as Self-Reported on the YRBS:

HOME-BASED CARE VS GENERAL COMMUNITY

7.14.1 Other Illicit Drug Use: Home-Based Care vs General Community

Comparisons were made between the illicit drug use of adolescents in home-based care with the use of adolescents in the general community, as self-reported on the YRBS. Generally, rates of drug use were low (particularly the use of designer drugs, cocaine, and heroin) and there were only small differences between the use of adolescents in home-based care and those in the general community. Chi-square tests for independence showed that there were no statistically significant differences between the proportion of adolescents in home-based care and the general community who used any of the drugs described in Table 7.20.

Table 7.20

Home-Based Care vs General Community: Rates (%) of Other Illicit Drug Use of Adolescents

| | Home- Based Care | General Community | χ^2 (df=1) |
|---|---------------------|----------------------|-----------------|
| Pharmaceutical Drugs | | | |
| Ever used 'over the counter' pain-killers for non-medical purposes | n = 89 | n = 1260 | |
| Yes | 12.4 | 7.8 | 1.77 |
| Ever used prescription drugs (e.g., Ritalin, Valium) for non-medical purposes | n = 91 | n = 1260 | |
| Yes | 6.6 | 4.1 | 0.73 |
| Inhalant Drugs | | | |
| Ever sniffed glue, inhaled paints, sprays or contents of aerosol cans | n = 90 | n = 1257 | |
| Yes | 7.8 | 8.2 | 0.00 |
| Ever inhaled any other substance (e.g., nitrous) for non-medical purposes | n = 90 | n = 1257 | |
| Yes | 0.0 | 2.5 | 1.31 |
| Designer Drugs, Cocaine, & Heroin | | | |
| Ever used any 'designer' drug (e.g., ecstasy or fantasy) | n = 91 | n = 1259 | |
| Yes | 3.3 | 1.3 | 1.26 |
| Ever used cocaine | n = 91 | n = 1254 | |
| Yes | 1.1 | 3.3 | .70 |
| Ever used heroin | n = 91 | n = 1261 | |
| Yes | 0.0 | 0.9 | .08 |
| Ever used a needle to inject an illegal drug | n = 91 | n = 1261 | |
| Yes | 1.1 | 0.5 | 0.002 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.14.2 Other Illicit Drug Use by Group and Gender

Rates of lifetime and current illicit drug use were compared across groups (i.e., home-based care and general community) by gender (see Table 7.21). When comparisons were made between males in home-based care and males in the general community, the pattern of results was a little different to the pattern of results observed for the entire sample, in that a

smaller proportion of males in home-based care than in the general community reported using over-the-counter and prescribed pharmaceutical drugs for non-medical purposes. These differences, however, were small and chi-square tests for independence showed that they were not statistically significant.

A larger proportion of females in home-based care than in the general community had used pharmaceutical drugs (both prescription and 'over-the-counter') for non-medical purposes during their life, and sniffed glue or inhaled paints, sprays, or the contents of aerosol cans. Chi-square tests for independence showed that the differences between groups in use of prescription and 'over-the-counter' drugs for non-medical reasons were statistically significant (Table 7.21).

Table 7.21

Rates (%) of Other Illicit Drug Use of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males χ^2 (df=1) | Females vs Females χ^2 (df=1) |
|---|-----------------|---------|-------------------|---------|---|---|
| | Males | Females | Males | Females | | |
| Pharmaceutical Drugs | | | | | | |
| Ever used 'over the counter' pain-killers for non-medical purposes | n = 51 | n = 38 | n = 601 | n = 659 | | |
| Yes | 3.9 | 23.7 | 5.8 | 9.6 | 0.06 | 6.3* |
| Ever used prescription drugs (e.g., Ritalin, Valium) for non-medical purposes | n = 53 | n = 38 | n = 601 | n = 659 | | |
| Yes | 1.9 | 13.2 | 3.7 | 4.6 | 0.08 | 3.9* |
| Inhalant Drugs | | | | | | |
| Ever sniffed glue, inhaled paints, sprays or contents of aerosol cans | n = 52 | n = 38 | n = 598 | n = 659 | | |
| Yes | 3.8 | 13.2 | 7.0 | 9.3 | .35 | 0.26 |
| Ever inhaled any other substance (e.g., nitrous) for non-medical purposes | n = 52 | n = 38 | n = 599 | n = 658 | | |
| Yes | 0.0 | 0.0 | 2.7 | 2.3 | 0.53 | 0.13 |
| Designer Drugs, Cocaine, Heroin | | | | | | |
| Ever used any 'designer' drug (e.g., ecstasy, fantasy) | n = 53 | n = 38 | n = 600 | n = 659 | | |
| Yes | 3.8 | 2.6 | 1.2 | 1.4 | 0.90 | 0.00 |
| Ever used cocaine | n = 53 | n = 38 | n = 598 | n = 656 | | |
| Yes | 0.0 | 2.6 | 3.0 | 3.5 | 0.71 | 0.00 |
| Ever used heroin | n = 53 | n = 38 | n = 601 | n = 660 | | |
| Yes | 0.0 | 0.0 | 0.8 | 0.9 | 0.00 | 0.00 |
| Ever used a needle to inject an illegal drug | n = 53 | n = 38 | n = 601 | n = 660 | | |
| Yes | 0.0 | 2.6 | 0.5 | 0.5 | 0.00 | 0.39 |

* $p < .05$; ** $p < .01$; *** $p < .001$

7.15 Summary: The Health-Risk Behaviours of Adolescents in Home-Based Care

7.15.1 Suicide Ideation and Behaviour

Home-Based Care

A sizeable proportion of adolescents in home-based care reported that they had engaged in suicidal ideation (14%) and attempted suicide (10%) at least once in the past 12 months. Rates of suicidal ideation and behaviour did not differ by gender. As reported by caregivers, all adolescents who reported a suicide attempt had mental health problems in the clinical range of the CBCL. As reported by adolescents however, 67% had mental health problems in the clinical range of the YSR.

Home-Based Care vs General Community

Rates of suicide attempts within a 12 month period were 2.5 times higher for adolescents in home-based care than those in the general community (10% vs 4%). Furthermore, of those that attempted suicide, the majority in home-based care (67%) required medical treatment for a resulting injury, poisoning or overdose, whereas only a small proportion of adolescents in the general community (21%) required treatment. These results suggest that the suicide attempts made by young people in care were generally more serious in nature than those made by young people in the general community.

Given the very limited data available describing rates of suicidal ideation and behaviour amongst children in foster care, it is difficult to determine the extent to which rates identified in the present study are generalisable to other populations of young people in care. A recent audit of children and young people in home-based care services in Victoria in 2002 reported that 14% of young people had threatened suicide. Similarly, in a study of 775 children aged 3-18 years who had a routine health examination within five days of entry to foster care in the United States, Chernoff et al. (1994) found that 15% admitted to or were

suspect for suicidal ideation as determined by an assessing paediatric nurse practitioner. These results are consistent with the 14% of young people in the current study who reported that they had seriously considered attempting suicide during the past 12 months.

Rates of suicide ideation and attempts identified for adolescents in home-based care in the present study however, were somewhat lower than those reported by Pilowsky and Wu (2006) in their study of 64 12-17 year old adolescents in the US with a history of involvement with foster care. In Pilowsky and Wu's (2006) study, 27% reported suicidal ideation (compared to 14% in the present study) and 15% (compared to 10% in the present study) reported a suicide attempt in the past 12 months.

Despite this, results of the current study showed that rates of suicide attempts were much higher amongst foster youth than youth in the general community. This is particularly disturbing given that most foster youth were in relatively stable, long-term placements. It should also be noted that rates of suicidal ideation and behaviour were reported for a reasonably short period of time (i.e., 12 months), and are likely to have been higher if reported over a longer period of time.

Overall, the results suggest that children in alternative care should be considered a high-risk group for suicidal ideation and attempts. This is, perhaps, not surprising given that suicidal behaviour among young people has been linked to a number of adversities that are commonly experienced by foster children including maltreatment, social disadvantage, parental loss, dysfunctional family backgrounds, parental mental health problems and substance abuse, and mental health problems in the adolescents themselves (Vinnerljung, Hjern & Linblad, 2006). There is also evidence (e.g., Vinnerljung et al., 2006; Hjern, Vinnerlung, & Lindblad, 2004) to suggest that elevated rates of suicidal ideation and behaviour continue into adulthood for former child welfare clients. In fact, research shows

that young adults who experienced foster care during childhood are at elevated risk for premature death, mainly due to more frequent unnatural deaths such as suicides (Vinnerljung & Ribe, 2001).

7.15.2 Body Weight Perceptions and Dieting Behaviour

Home-Based Care

Only 61% of adolescents in home-based care reported that they were about the right weight, with 33% trying to lose weight and 12% trying to gain weight. There were large differences between the body weight and dieting behaviours of males and females in home-based care. A much larger proportion of females than males felt that they were overweight (40% vs 14%) and were trying to lose weight (53% vs 19%). More females than males reported dieting or exercising to lose or keep from gaining weight in the past 30 days.

Home-Based Care vs General Community

The results of this study showed that there were no significant differences between the body weight perceptions and dieting behaviours of adolescents in home-based care and those in the general community. The same pattern of results was found when comparisons were made by gender - females in home-based care and the general community had similar body weight perceptions and dieting behaviours, as did the males in home-based care and the general community. These results suggest that adolescents in home-based care are no more likely than their gender-matched peers in the general community, to perceive themselves as having unhealthy body weights or to engage in behaviours to lose weight. Clearly however, females in both home-based care and the general community experience poorer body image and engage in more dieting behaviours than their male counterparts. These results are consistent with previous research of adolescents in the general community, showing that females are more likely than males to feel that they are 'fatter', to want to become thinner and

to engage in behaviours (e.g., dieting, exercising) aimed at reducing weight (Brook & Tepper, 1996; Tremblay & Lariviere, 2009;).

7.15.3 Tobacco, Alcohol and Drug Use

Home-Based Care

Almost half the adolescents in home-based care reported that they had tried smoking at some stage in their life, with 19% reporting that they were currently smoking. Over 60% had consumed a full alcoholic beverage at some stage in their life, and one-quarter reported that they were currently drinking. The most popular drug amongst adolescents in home-based care was marijuana, with 16% reporting current use. This was followed by ‘over the counter’ pain-killers for non-medical purposes (12%), inhalant drugs (i.e., sniffing glue, or inhaling paints, sprays or contents of aerosol cans) (8%), and prescription drugs (e.g., Ritalin) for non-medical purposes (7%). Only a small number of adolescents reported lifetime or current use of amphetamines or hallucinogenic drugs. Similarly, a very small number of adolescents reported that they had ever used designer drugs such as ecstasy or cocaine, none reported that they had ever used heroin, and only one reported that they had ever used a needle to inject an illegal drug. Nonetheless, it was considered important to include these results given the dearth of information available about the rates of drug use amongst young people in alternative care. Results showed that there were no significant gender differences in the lifetime or current rates of tobacco, alcohol or drug use with one exception. A significantly higher proportion of females than males used ‘over the counter’ pain-killers for non-medical purposes. These results suggest that regardless of gender, adolescents in home-based care engage in very similar lifetime and current rates of tobacco use, alcohol consumption, and drug experimentation and use.

Home-Based Care vs General Community

Adolescents in home-based care engaged in similar rates of smoking, alcohol use, and drug experimentation and use as their peers in the general community. There were no differences between groups, except that twice as many adolescents in home-based care than in the general community (8% vs 3%) had used an amphetamine at some stage during their life. When group comparisons were made by gender, the pattern of results was similar, except that a significantly higher proportion of female adolescents in the general community than in home-based care reported that they were currently drinking, and a significantly higher proportion in home-based care than in the general community reported using 'over the counter' painkillers and prescription drugs (e.g., Ritalin, Valium) for non-medical purposes.

Despite these few conflicting group differences, on the whole, the results suggest that adolescents in home-based care are no more likely than their peers in the general community, to engage in the health-risk behaviours of cigarette smoking, alcohol use, and drug use. These findings are somewhat surprising for two main reasons. First, adolescents in care typically lack protective factors (such as stable family lives and good quality parent-child relationships) and present with risk factors (such as past maltreatment and adversities, mental health problems, poverty, and parental dysfunction and substance abuse) that have been shown to increase vulnerability for engagement in health-risk behaviours such as smoking, drinking and drug use (James, Montgomery, Leslie, & Zhang, 2009). Second, results from the current study showed that a significantly higher proportion of adolescents in home-based care than in the general community had clinically significant mental health problems, and Australian research has shown that young people with mental health problems are more likely than their peers without mental health problems to engage in health-risk behaviours such as drug use (Sawyer et al., 2001).

Despite obvious vulnerabilities, there is very limited research examining the prevalence of health-risk behaviours amongst foster youth (James et al., 2009; Pilowsky & Wu, 2006). The rates of alcohol and drug use identified in the present sample however, were somewhat inconsistent with findings from the only other study that has reported rates of alcohol and drug use behaviours amongst *adolescents currently in care*. In their review of the casefiles of 25 foster children aged 11 to 18 years in Ireland, Fleming et al. (2005) identified ‘concerns’ that 24% of the youths were misusing alcohol and 28% were using drugs. Although it is unclear how the authors defined ‘misusing alcohol’, it seems that their rate of 24% was considerably higher than the 13% of adolescents who reported engaging in binge drinking in the current study. Furthermore, while Fleming et al. (2005) reported that 28% of their sample was using drugs, only 16% of adolescents in foster care in the current study reported using drugs. These inconsistencies between results may be explained by a number of factors. In the present study, the results were obtained from adolescents who were asked to provide information about their experimentation with and use of alcohol and drugs. Thus, it is possible that adolescents responded according to social desirability, thereby concealing their true rates of these health-risk behaviours. Although young people in the current study were assured of the confidentiality of their responses, it is possible that many were concerned that the information they provided could be accessed by their caseworkers or foster parents. The study by Fleming et al. (2005) may provide more accurate data about the use of alcohol and drugs, as data were obtained by retrospectively reviewing casefiles rather than relying on adolescent self-reports. However, caution must be exercised in interpreting the results of Fleming et al.’s. (2005) study because the sample comprised of only 25 children residing in a semi-rural area (of Northern Ireland).

Although the rates of tobacco and alcohol use identified in the present study were somewhat consistent with rates identified in the audit of home-based care services in Victoria, Australia (Department of Human Services, 2002), the rates of drug use were considerably

higher in the present study. Caution must be exercised in making comparisons between the results of these studies however. Whereas the rates of health-risk behaviours identified in the present study were calculated for a sample of foster youth aged 13 to 17 years as self-reported on the YRBSS, the rates of risk behaviours identified in the Victorian audit were calculated for a sample of foster children aged 1 to 18 years as reported by their caseworkers. As pre-adolescent children are less likely to engage in health-risk behaviours, the rates identified in the Victorian audit may have underestimated the true extent of health-risk behaviours for that population.

A recent study by Pilowsky and Wu (2006), which analysed data from the 2000 National Household on Drug Abuse Survey in the US, found elevated rates of substance use amongst youths (aged 12-17 years) who reported that they had spent some time in foster care during their life compared to youths with no history of foster care. The results showed that a significantly higher proportion of youths with a foster care history than those without (40% vs 33%) reported using alcohol in the past 12 months. Similarly, a significantly higher proportion of adolescents with a foster care history than those without (34% vs 18%) reported using a drug of some kind in the past 12 months. Unfortunately, it is difficult to make direct comparisons between these results and those in the current study for two reasons. First, the time-frame during which substance use was reported varied between studies. Whereas adolescents in the study by Pilowsky and Wu (2006) reported substance use over the past 12 months, adolescents in the current study reported their lifetime and/or current use (in the past 30 days) of substances. Second, the foster care group in Pilowsky and Wu's (2006) study comprised of children who had 'ever spent some time in foster care' and may not have been residing in foster care at the time they participated in the survey or during the period for which they were reporting. Nonetheless, Pilowsky and Wu's (2006) main finding - that rates of alcohol and drug use were higher amongst adolescents involved with foster care than those in the general community - is inconsistent with results from the current study.

In the absence of comparable data, it is difficult to determine whether the rates of smoking, drinking, and drug use amongst adolescents in care identified in the present study are underestimates or accurate reflections. There are a number of reasons as to why the rates of smoking, drinking and drug use found amongst foster youth may be lower than expected. First, adolescents in home-based care are likely to lack the financial resources with which to obtain cigarettes, alcohol and drugs. Second, they may feel that they are under constant 'surveillance' from their foster parents and social workers, and therefore lack opportunities to engage in these health-risk behaviours. Lastly, foster children are more likely to be somewhat isolated from their peers, particularly if they have been re-located to a new neighbourhood and school as a result of entry to foster care or placement changes. Isolation from peers may reduce exposure to cigarettes, alcohol and drugs, as well as minimise peer group pressure to experiment or use these substances.

Chapter Eight

Perceived Problems, Need for Help, and Service Use

This chapter describes whether, in the past six months, children and adolescents in home-based care were perceived to have emotional or behavioural problems and physical health problems, whether a need for professional help with these problems was identified, and whether help was received, as reported by caregivers and adolescents themselves. In addition, this chapter describes the barriers to service use as reported by adolescents. In all of these areas, comparisons were made between reports describing adolescents in home-based care with those describing adolescents in the general community.

8.1 Caregiver Perceived Emotional and Behavioural Problems, Need for Help, and Service Use of Children and Adolescents: HOME-BASED CARE

The vast majority of children and adolescents in home-based care were perceived by their caregivers to have experienced emotional or behavioural problems in the past six months (Table 8.1). Of those identified as having problems, 81% were considered to have problems greater than their age and gender matched peers, and 77% were considered to need professional help for these problems. Of those identified as needing help, only about half of the children and adolescents received it.

Comparisons were made by gender and age group (Table 8.1). The only notable difference between males and females was that of those identified as needing help for emotional or behavioural problems, a greater proportion of males than females had received

help (63% vs 41%). A chi-square test for independence showed that this difference was statistically significant (Table 8.1).

Comparisons were also made between younger children (6-12 years) and older children (13-17 years). The only notable difference between younger and older children, was that among those identified as having emotional or behavioural problems, a significantly higher proportion of 6-12 year olds than 13-17 year olds were identified as needing professional help with these problems (Table 8.1).

Table 8.1

Home-Based Care: Caregiver Perceived Emotional and Behavioural Problems, Need for Help, and Service Use of Children and Adolescents

| | Total Sample % | Males % | Females % | Males vs Females $\chi^2(df=1)$ | Younger (6-12yrs) % | Older (13-17yrs) % | Younger vs Older $\chi^2(df=1)$ |
|-----------------------------------|----------------------|-----------------|-----------------|---------------------------------------|---------------------------|--------------------------|---------------------------------------|
| Emotional or behavioural probs | n = 323 70.0 | n = 174 73.0 | n = 149 66.4 | 1.34 | n = 201 72.1 | n = 122 66.4 | 0.94 |
| Problems > peers | n = 224 80.8 | n = 126 79.4 | n = 98 82.7 | 0.20 | n = 144 84.7 | n = 80 73.8 | 3.32 |
| Help needed | n = 224 77.2 | n = 126 75.4 | n = 98 79.6 | 0.34 | n = 144 82.6 | n = 80 67.5 | 5.87* |
| Help received | n = 173 53.2 | n = 95 63.2 | n = 78 41.0 | 7.56** | n = 119 52.9 | n = 54 53.7 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

Comparisons were also made for each age group by gender (Table 8.2). Amongst the younger children (6-12 years), a higher proportion of males than females were perceived to have emotional or behavioural problems in the past six months (77% versus 67%). The same proportion of males and females (83%) were identified as needing help for their problems, but a higher proportion of males than females (65% versus 38%) received it. Chi-square tests for

independence revealed that this latter difference was significant (Table 8.2). Amongst the older children (13-17 years), similar proportions of males and females were perceived to have emotional or behavioural problems (67% versus 65%), but as with the younger children, of those identified as needing help with these problems, a greater proportion of males than females (59% versus 48%) received it. Chi-square tests for independence revealed however, that this difference was not statistically significant. It is possible, however, that the relatively small group of older males and females may have limited power to detect a statistically significant difference.

Table 8.2

Home-Based Care: Caregiver Perceived Emotional and Behavioural Problems, Need for Help, and Service Use of Children Adolescents by Age Group and Gender

| | Younger (6-12 years) | | | Older (13-17 years) | | |
|------------------------------------|----------------------|----------------|---------------------------------------|---------------------|----------------|---------------------------------------|
| | Males % | Females % | Males vs Females $\chi^2(df=1)$ | Males % | Females % | Males vs Females $\chi^2(df=1)$ |
| Emotional or behavioural probs. | n = 104 76.9 | n = 97 67.0 | 1.99 | n = 70 67.1 | n = 52 65.4 | 0.00 |
| Problems > peers | n = 80 86.3 | n = 64 82.8 | 0.11 | n = 46 67.4 | n = 34 82.4 | 1.55 |
| Help needed | n = 80 82.5 | n = 64 82.8 | 0.00 | n = 46 63.0 | n = 34 73.5 | 0.56 |
| Help received | n = 66 65.2 | n = 53 37.7 | 7.80* | n = 29 58.6 | n = 25 48.0 | 0.26 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.2 Caregiver Perceived Emotional and Behavioural Problems, Need for Help and

Service Use of Children and Adolescents:

HOME-BASED CARE VS GENERAL COMMUNITY

8.2.1 Caregiver Perceived Emotional and Behavioural Problems, Need for Help and

Service Use: Home-Based Care vs General Community

The caregiver perceived emotional and behavioural problems of children and adolescents in home-based care were compared with the parental perceived emotional and behavioural problems of children and adolescents in the general community. As shown in Table 8.3, the majority of children and adolescents in home-based care compared with about one-quarter of those in the general community were perceived by their caregivers/parents to have emotional or behavioural problems in the last six months. Of those considered to have emotional or behavioural problems, a greater proportion in home-based care than in the general community were perceived to have more emotional or behavioural problems than other children of the same age and gender, and were identified as needing professional help with their emotional or behavioural problems. Chi-square tests for independence showed that all of these differences were statistically significant. Of those identified as needing help with their problems a slightly higher proportion in home-based care than in the general community received it. This difference was not, however, significant (Table 8.3).

Table 8.3

Home-Based Care vs General Community: Caregiver Perceived Emotional and Behavioural Problems, Need for Help, and Service Use of Children and Adolescents

| | Home-Based Care | General Community | $\chi^2(df=1)$ |
|--------------------------------|-----------------|-------------------|----------------|
| | % | % | |
| Emotional or behavioural probs | n = 323 70.0 | n = 3259 24.3 | 299.03*** |
| Problems > peers | n = 224 80.8 | n = 764 49.6 | 67.39*** |
| Help needed | n = 224 77.2 | n = 755 40.7 | 90.99*** |
| Help received | n = 173 53.2 | n = 304 48.0 | 0.97 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.2.2 Caregiver Perceived Emotional and Behavioural Problems, Need for Help and Service Use by Group and Gender

The rates of caregiver/parent perceived emotional and behavioural problems were compared across groups (i.e., home-based care and general community) by gender. Group differences for males were consistent with results for the entire sample (i.e., a higher proportion of males in home-based care than in the general community were reported as having emotional and behavioural problems, needing professional help with these problems, and receiving this help). Chi-square tests for independence showed all of these differences were statistically significant.

Group differences for females were also consistent with results for the entire sample, except when it came to receiving professional help. Amongst females identified as needing help for emotional or behavioural problems, a slightly higher proportion of those in the

general community (47%) than in home-based care (41%) received this help. Chi-square tests for independence showed that group differences, except this latter difference, were statistically significant (see Table 8.4).

Table 8.4

Caregiver Perceived Emotional and Behavioural Problems, Need for Help, and Service Use of Children and Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs | Females vs |
|--------------------------------|-----------------|-----------------|-------------------|------------------|--------------------------|----------------------------|
| | Males % | Females % | Males % | Females % | Males χ^2 (df=1) | Females χ^2 (df=1) |
| Emotional or behavioural probs | n = 174 73.0 | n = 149 66.4 | n = 1640 27.3 | n = 1619 21.2 | 149.46*** | 146.02*** |
| Problems > peers | n = 126 79.4 | n = 98 82.7 | n = 428 51.9 | n = 336 46.7 | 29.12*** | 38.11*** |
| Help needed | n = 126 75.4 | n = 98 79.6 | n = 425 45.2 | n = 330 34.8 | 34.37*** | 59.30*** |
| Help received | n = 95 63.2 | n = 78 41.0 | n = 190 48.4 | n = 114 47.4 | 4.95* | .52 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.2.3 Caregiver Perceived Emotional and Behavioural Problems, Need for Help and

Service Use of Children and Adolescents by Group and Age Group

The rates of caregiver/parent perceived emotional and behavioural problems were compared across groups (i.e., home-based care and general community) by age group (i.e., younger (6-12 years) and older (13-17 years)). Group differences for younger children and for older children were consistent with results for the entire sample (i.e., a higher proportion of children in home-based care than in the general community were reported as having emotional and behavioural problems, needing professional help with these problems, and receiving this help). For both the younger children and older children, chi-square tests for independence showed that all group differences were statistically significant except the difference in rates of help received (see Table 8.5).

Table 8.5

Caregiver Perceived Emotional and Behavioural Problems, Need for Help and Service Use of Children and Adolescents by Group and Age Group

| | Home-Based Care | | General Community | | Younger vs Younger χ^2 (df=1) | Older vs Older χ^2 (df=1) |
|-----------------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--|--------------------------------------|
| | Younger (6-12yrs) % | Older (13-17yrs) % | Younger (6-12yrs) % | Older (13-17yrs) % | | |
| Emotional or behavioural probs | n = 201 72.1 | n = 122 66.4 | n = 1928 24.8 | n = 1331 23.6 | 194.85*** | 101.28*** |
| Problems > peers | n = 144 84.7 | n = 80 73.8 | n = 457 53.8 | n = 307 43.3 | 42.73*** | 22.30*** |
| Help needed | n = 144 82.6 | n = 80 67.5 | n = 452 40.7 | n = 303 40.6 | 75.16*** | 17.37*** |
| Help received | n = 119 52.9 | n = 54 53.7 | n = 181 49.2 | n = 123 46.3 | 0.27 | 0.55 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.2.4 *Caregiver Perceived Emotional and Behavioural Problems, Need for Help and*

Service Use by Group, Gender & Age Group

Table 8.6 shows rates of caregiver perceived emotional or behavioural problems across groups (i.e., home-based care and general community) by age group and gender. Regardless of age group and gender, a consistently higher proportion of those in home-based care than in the general community were perceived by their caregivers to have emotional or behavioural problems. Of those identified as having problems, a consistently higher proportion of those in home-based care than in the general community were perceived as having problems greater than their age and gender matched peers, and as needing professional help for these problems. Chi-square tests for independence showed that all of these differences were statistically significant, with the exception of one group difference (identified a need for professional help) between 13-17 year old males.

Of those identified as needing professional help for their problems, group differences were more varied. Amongst both the younger and older males, a higher proportion in home-based care than in the general community received the help they were identified as needing (65% vs 52% for younger males; 58% vs 43% for older males). Amongst the younger and older females however, the results were reversed, with a lower proportion in home-based care than in the general community receiving the help they were identified as needing (38% vs 44% for younger females; 48% vs 51% for older females). Chi-square tests for independence showed, however, that none of these differences were statistically significant.

Table 8.6

Caregiver Perceived Emotional and Behavioural Problem, Need for Help, and Service Use of Adolescents by Group, Gender, and Age Group

| | Younger (6-12 years) | | | | | | Older (13-17 years) | | | | | |
|-----------------------------------|----------------------|----------------|-------------------|-----------------|--|--|---------------------|----------------|-------------------|-----------------|--|--|
| | Home-Based Care | | General Community | | | | Home-Based Care | | General Community | | | |
| | Males % | Females % | Males % | Females % | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ | Males % | Females % | Males % | Females % | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ |
| Emotional or behavioural probs | n = 104 76.9 | n = 97 67.0 | n = 984 29.2 | n = 944 20.2 | 93.84*** | 101.28*** | n = 70 67.1 | n = 52 65.4 | n = 656 24.5 | n = 675 22.7 | 54.09*** | 43.91*** |
| Problems > peers | n = 80 86.3 | n = 64 82.8 | n = 271 55.0 | n = 186 52.2 | 24.35*** | 17.40*** | n = 46 67.4 | n = 34 82.4 | n = 157 46.5 | n = 150 40.0 | 5.41* | 18.26*** |
| Help needed | n = 80 82.5 | n = 64 82.8 | n = 270 44.4 | n = 182 35.2 | 34.38*** | 41.21*** | n = 46 63.0 | n = 34 73.5 | n = 155 46.5 | n = 148 34.5 | 3.27 | 15.78*** |
| Help received | n = 66 65.2 | n = 53 37.7 | n = 118 51.7 | n = 63 44.4 | 2.60 | 0.29 | n = 29 58.6 | n = 25 48.0 | n = 72 43.1 | n = 51 51.0 | 1.43 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.3 Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents: HOME-BASED CARE

About one-quarter of children and adolescents in home-based care were perceived by their caregivers to have experienced physical health problems in the past six months (Table 8.7). Of those identified as having problems, over half were considered to have problems greater than their age and gender matched peers, and 88% were identified as needing professional help with these problems. Of those identified as needing help, the majority (85%) received it.

Comparisons were made by gender and age group (Table 8.7). Similar proportions of males and females (24% versus 26%) were perceived to have physical health problems in the last six months. Of these however, a higher proportion of males than females were perceived to have more problems than their peers (63% versus 50%) and were identified as needing professional help (95% versus 79%). Of those identified as needing help however, a higher proportion of females (93%) than males (78%) received it. Although chi-square tests for independence showed none of these differences to be statistically significant, it should be noted that the latter difference was the opposite of results describing emotional and behavioural problems. Whereas there was a trend for a higher proportion of females than males to receive the help they were identified as needing for physical health problems, a significantly higher proportion of males than females received the help they were identified as needing for emotional or behavioural problems. Taken together, these results suggest that whereas males are more likely than females to receive needed help for emotional or behavioural problems, females may be more likely than males to receive needed help for physical health problems.

Comparisons by age group showed that results describing younger children (6-12 years) and older children (13-17 years) were very similar. Chi-square tests for independence showed that there were no statistically significant differences between younger and older children (Table 8.7).

Table 8.7

Home-Based Care: Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents

| | Total Sample % | Males % | Females % | Males vs Females $\chi^2(df=1)$ | Younger (6-12yrs) % | Older (13-17yrs) % | Younger vs Older $\chi^2(df=1)$ |
|-----------------------------|----------------------|-----------------|-----------------|---------------------------------------|---------------------------|--------------------------|---------------------------------------|
| Physical health problems | n = 325 24.9 | n = 176 24.4 | n = 149 25.5 | 0.01 | n = 201 26.9 | n = 124 21.8 | 0.81 |
| Problems > peers | n = 81 56.8 | n = 43 62.8 | n = 38 50.0 | 0.87 | n = 54 59.3 | n = 27 51.9 | 0.16 |
| Help needed | n = 81 87.7 | n = 43 95.3 | n = 38 78.9 | 3.61 | n = 54 88.9 | n = 27 85.2 | 0.01 |
| Help received | n = 71 84.5 | n = 41 78.0 | n = 30 93.3 | 2.03 | n = 48 85.4 | n = 23 82.6 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

Comparisons were also made for each age group (i.e., 6-12 years and 13-17 years) by gender (Table 8.8). Amongst the younger children, rates of perceived physical health problems were very similar for males and females. Of those with physical health problems, a greater proportion of males than females were identified as needing help for these problems. Of those identified as needing help however, a larger proportion of females than males received it. The same pattern of results was also found for the older children. These results are opposite to those found for caregiver perceived emotional and behavioural problems, where males identified as needing help with emotional or behavioural problems were more likely to

receive help than females identified as needing help with these problems. As can be seen in Table 8.8 however, chi-square tests for independence showed that none of the gender differences for younger children (6-12 years) or for older children (13-17 years) were statistically significant on the physical health problem items.

Table 8.8

Home-Based Care: Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents by Age Group and Gender

| | Younger (6-12 years) | | | Older (13-17 years) | | |
|-----------------------------|----------------------|----------------|---------------------------------------|---------------------|----------------|---------------------------------------|
| | Males % | Females % | Males vs Females $\chi^2(df=1)$ | Males % | Females % | Males vs Females $\chi^2(df=1)$ |
| Physical health problems | n = 105 28.6 | n = 96 25.0 | 0.17 | n = 71 18.3 | n = 53 26.4 | 0.74 |
| Problems > peers | n= 30 60.0 | n = 24 58.3 | 0.00 | n = 13 69.2 | n = 14 35.7 | 1.84 |
| Help needed | n= 30 93.3 | n = 24 83.3 | 0.53 | n = 13 100.0 | n = 14 71.4 | 2.39 |
| Help received | n = 28 78.6 | n = 20 95.0 | 1.38 | n = 13 76.9 | n = 10 90.0 | 0.07 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.4 Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents: HOME-BASED CARE VS GENERAL COMMUNITY

8.4.1 Caregiver Perceived Physical Health Problems, Need for Help and Service Use: Home-Based Care versus General Community

The caregiver perceived physical health problems of children and adolescents in home-based care were compared with the parental perceived physical health problems of children and adolescents in the general community. As shown in Table 8.9, a larger proportion of children and adolescents in home-based care than in the general community were perceived by their caregivers/parents to have experienced physical health problems in the past six months. Of those considered to have physical health problems, a greater proportion in home-based care than in the general community were reported to have greater physical health problems than their peers (57% versus 32%), and were identified as needing help with their problems (88% versus 66%). Chi-square tests for independence showed that these differences were all statistically significant.

Whereas only about half of the children and adolescents identified as needing help for emotional/behavioural problems received this help, the vast majority of children and adolescents in both home-based care and the general community who were identified as needing help for physical health problems received it. Despite this however, a chi-square test for independence showed that a significantly higher proportion of children and adolescents in the general community (95%) than in home-based care (85%) received help for physical health problems.

Table 8.9

Home-Based Care vs General Community: Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents

| | Home-Based Care | General Community | $\chi^2(df=1)$ |
|--------------------------|-----------------|-------------------|----------------|
| | % | % | |
| Physical health problems | n = 325 24.9 | n = 3283 15.0 | 20.80*** |
| Problems > peers | n = 81 56.8 | n = 481 32.2 | 17.16*** |
| Help needed | n = 81 87.7 | n = 482 65.8 | 14.50*** |
| Help received | n = 71 84.5 | n = 316 94.6 | 7.39* |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.4.2 Caregiver Perceived Physical Health Problems, Need for Help and Service Use by Group and Gender

The rates of caregiver/parent perceived physical health problems were compared across groups (i.e., home-based care and general community) by gender. Amongst males, a higher proportion in home-based care than in the general community were perceived to have physical health problems in the past six months. Of those perceived to have physical health problems, a higher proportion of males in home-based care than in the general community were perceived to have more physical health problems than their peers, and were identified as needing professional help. Of those identified as needing help with their physical health problems, most males in the general community received it, but almost one quarter of children in home-based care went without help. Chi-square tests for independence showed that all of these differences were statistically significant.

Amongst females, group differences were generally similar to those observed for males, except not all were statistically significant (see Table 8.10). Furthermore, of females identified as needing help with physical health problems, the majority in both home-based care and the general community received it.

Table 8.10

Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs | Females vs |
|--------------------------|-----------------|-----------------|-------------------|------------------|-------------------------|---------------------------|
| | Males % | Females % | Males % | Females % | Males $\chi^2(df=1)$ | Females $\chi^2(df=1)$ |
| Physical health problems | n = 176 24.4 | n = 149 25.5 | n = 1652 14.6 | n = 1631 15.5 | 11.01** | 9.25** |
| Problems > peers | n = 43 62.8 | n = 38 50.0 | n = 234 32.5 | n = 247 32.0 | 13.02*** | 3.97* |
| Help needed | n = 43 95.3 | n = 38 78.9 | n = 236 64.4 | n = 246 67.1 | 14.91*** | 1.64 |
| Help received | n = 41 78.0 | n = 30 93.3 | n = 151 93.4 | n = 165 95.8 | 6.87* | 0.01 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.4.3 Caregiver Perceived Physical Health Problems, Need for Help and Service Use by Group and Age Group

Caregiver/parent perceived physical health problems, need for professional help, and service use of adolescents were compared across groups (i.e., home-based care and general community) by age group (Table 8.11). For both the younger children and older children, the pattern of results was similar to that found for the entire sample. That is, a higher proportion

in home-based care than in the general community was reported as having experienced physical health problems in the past six months. Of these, a higher proportion in home-based care than in the general community were reported to have physical health problems greater than their age and gender matched peers, and were identified as needing professional help with these problems. However, for both the younger children and older children, a higher proportion in the general community than in home-based care received the help they were identified as needing. Chi-square tests for independence showed that all of these group differences were statistically significant for the younger children (6-12 years), but none were statistically significant for the older children (13-17 years) (Table 8.11).

Table 8.11

Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents by Group and Age Group

| | Home-Based Care | | General Community | | Younger vs Younger χ^2 (df=1) | Older vs Older χ^2 (df=1) |
|-----------------------------|----------------------|---------------------|----------------------|---------------------|--|--------------------------------------|
| | Younger (6-12yrs) | Older (13-17yrs) | Younger (6-12yrs) | Older (13-17yrs) | | |
| Physical health problems | n = 201 26.9 | n = 124 21.8 | n = 1946 14.5 | n = 1337 15.8 | 19.99*** | 2.57 |
| Problems > peers | n = 54 59.3 | n = 27 51.9 | n = 274 28.8 | n = 207 36.7 | 17.32*** | 1.72 |
| Help needed | n = 54 88.9 | n = 27 85.2 | n = 276 62.7 | n = 206 69.9 | 12.86*** | 2.05 |
| Help received | n = 48 85.4 | n = 23 82.6 | n = 172 95.9 | n = 144 93.1 | 5.31* | 1.62 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.4.4 Caregiver Perceived Physical Health Problems, Need for Help and Service Use by Group, Gender and Age Group

Table 8.12 shows rates of caregiver perceived physical health problems across groups (i.e., home-based care and general community) by age group and gender. Regardless of age group and gender, a consistently higher proportion of those in home-based care than in the general community were perceived by caregivers to have physical health problems. Of those identified as having problems, a consistently higher proportion of those in home-based care than in the general community were perceived to have problems greater than their age and gender matched peers (except for 13-17 year old females), and to need professional help for these problems. Chi-square tests for independence showed that all of these group differences were statistically significant for younger males (6-12 years), two were statistically significant for older males (13-17 years), two were statistically significant for younger females (6-12 years), and none were statistically significant for older females (13-17 years) (see Table 8.12).

Of those identified as needing professional help for their physical health problems, group differences were more varied. Amongst both the younger and older males, a smaller proportion of those in home-based care than in the general community received the help they were identified as needing (79% vs 96% for younger males; 77% vs 91% for older males), but chi-square tests for independence showed that only the group difference for younger males (6-12 years) was significant. These results are opposite to those found for emotional and behavioural problems, where a higher proportion of males in home-based care than in the general community received the help they were identified as needing.

Amongst the younger and older females, a similar pattern was found in that a smaller proportion of those in home-based care than in the general community received the help they were identified as needing for physical health problems. These group differences were small

however, particularly for the 6-12 year old females, and chi-square tests for independence showed that neither were significant.

Table 8.12

Caregiver Perceived Physical Health Problems, Need for Help and Service Use of Children and Adolescents by Group, Gender, and Age Group

| | Younger (6-12 years) | | | | | | Older (13-17 years) | | | | | |
|--------------------------|----------------------|----------------|-------------------|-----------------|--|--|---------------------|----------------|-------------------|-----------------|--|--|
| | Home-Based Care | | General Community | | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ | Home-Based Care | | General Community | | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ |
| | Males % | Females % | Males % | Females % | | | Males % | Females % | Males % | Females % | | |
| Physical health problems | n = 105 28.6 | n = 96 25.0 | n = 994 15.1 | n = 952 14.0 | 11.64** | 7.49* | n = 71 18.3 | n = 53 26.4 | n = 658 13.8 | n = 679 17.7 | 0.72 | 1.96 |
| Problems > peers | n = 30 60.0 | n = 24 58.3 | n = 144 31.3 | n = 130 26.2 | 7.68* | 8.34** | n = 13 69.2 | n = 14 35.7 | n = 90 34.4 | n = 117 38.5 | 4.42* | 0.00 |
| Need for help | n = 30 93.3 | n = 24 83.3 | n = 146 61.0 | n = 130 64.6 | 10.30** | 2.44 | n = 13 100.0 | n = 14 71.4 | n = 90 70.0 | n = 116 69.8 | 3.85* | 0.00 |
| Help received | n = 28 78.6 | n = 20 95.0 | n = 88 95.5 | n = 84 96.4 | 5.69* | 0.00 | n = 13 76.9 | n = 10 90.0 | n = 63 90.5 | n = 81 95.1 | 0.82 | 0.00 |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.5 Self Perceived Emotional and Behavioural Problems, Need for Help and Service

Use of Adolescents: HOME-BASED CARE

Rates of self perceived emotional or behavioural problems, identification of service need, service use, and reasons for not receiving required help for adolescents (13-17 years) in home-based care are shown in Table 8.13. Less than half of the adolescents perceived themselves as having experienced emotional or behavioural problems in the past six months. Of those who identified emotional or behavioural problems, just over half perceived that their problems were greater than their gender and age matched peers and reported that they needed professional help with their problems. Of those who identified a need for help, only 65% received it. Of the 7 adolescents who reported that they did not receive the help they identified themselves as needing for emotional and behavioural problems, reasons were varied. It is difficult, however, to meaningfully interpret this latter finding due to the very small number of respondents on this item (see Table 8.13).

When comparisons were made by gender, results showed that a higher proportion of females than males (45% versus 38%) reported that they had emotional or behavioural problems in the past six months. Of those with problems, 53% of both males and females believed they had more emotional / behavioural problems than their peers, but a larger proportion of females than males (71% versus 40%) identified a need for professional help with their problems. Of those who identified a need for help however, 88% of males versus 50% of females received it. Given the small number of males and females however, these results should be interpreted with caution. Furthermore, chi-square tests for independence showed none of these differences to be statistically significant.

Table 8.13

Home-Based Care: Self Perceived Emotional and Behavioural Problems, Need for Help and Service Use of Adolescents

| | Total Sample % | Males % | Females % | Males vs Females χ^2 (df=1) |
|--|----------------------|----------------|----------------|--|
| Emotional or behavioural problems | n = 91 40.7 | n = 53 37.7 | n = 38 44.7 | 0.21 |
| Problems > peers | n = 36 52.8 | n = 19 52.6 | n = 17 52.9 | 0.00 |
| Help needed | n = 37 54.1 | n = 20 40.0 | n = 17 70.6 | 2.34 |
| Help received | n = 20 65.0 | n = 8 87.5 | n = 12 50.0 | 1.55 |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 7 | n = 1 | n = 6 | |
| Did not think anything could help | 28.6 | 0.0 | 33.3 | n/a |
| Preferred to manage themselves | 14.3 | 0.0 | 16.7 | |
| Did not know where to get help | 0.0 | 0.0 | 0.0 | |
| Services were too far away | 0.0 | 0.0 | 0.0 | |
| Had to wait too long to get help | 0.0 | 0.0 | 0.0 | |
| Afraid of what others might think or say | 14.3 | 0.0 | 16.7 | |
| Asked for help but did not get it | 28.6 | 100 | 16.7 | |
| Some other reason | 14.3 | 0.0 | 16.7 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.6 Self Perceived Emotional or Behavioural Problems, Need for Help and Service

Use of Adolescents: HOME-BASED CARE VS GENERAL COMMUNITY

A greater proportion of adolescents in home-based care than in the general community (41% versus 26%) perceived themselves to have emotional or behavioural problems in the past six months (Table 8.14). Of those with problems, a greater proportion in home-based care than the general community (54% versus 27%) reported that they needed professional help. Of these, a greater proportion of adolescents in home-based care than in the general community (65% versus 30%) reported that they received it. Chi-square tests for independence showed that these differences were statistically significant.

Of those who identified a need for help but did not receive it, the most concerning difference was that 29% in home-based care versus none in the general community reported that they asked for help but did not receive it. Given the very small number of respondents on this item in the home-based care group (n=7), however, caution must be exercised in interpreting this finding.

Table 8.14

Home-Based Care vs General Community: Self Perceived Emotional and Behavioural Problems, Need for Help and Service Use of Adolescents

| | Home-Based Care % | General Community % | χ^2 (df=1) |
|--|-------------------------|---------------------------|-----------------|
| Emotional or behavioural problems | n = 91 40.7 | n = 1243 25.7 | 8.99** |
| Problems > peers | n = 36 52.8 | n = 314 55.4 | 0.02 |
| Help needed | n = 37 54.1 | n = 316 26.6 | 10.74** |
| Help received | n = 20 65.0 | n = 83 30.1 | 6.99* |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 7 | n = 58 | |
| Did not think anything could help | 28.6 | 17.2 | n/a |
| Preferred to manage themselves | 14.3 | 34.5 | |
| Did not know where to get help | 0.0 | 13.8 | |
| Services were too far away | 0.0 | 0.0 | |
| Had to wait too long to get help | 0.0 | 0.0 | |
| Afraid of what others might think or say | 14.3 | 19.0 | |
| Asked for help but did not get it | 28.6 | 0.0 | |
| Some other reason | 14.3 | 15.5 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.6.1 Self Perceived Emotional and Behavioural Problems, Need for Help and Service Use of Adolescents by Group and Gender

The proportion of adolescents with self perceived emotional or behavioural problems was compared across groups by gender. There was a consistent pattern for more males in home-based care than in the general community to identify emotional or behavioural problems, identify a need for help with their problems, and receive help for their problems (see Table 8.15). Chi-square tests for independence showed that the difference between the proportion in home-based care and the general community who perceived themselves as having emotional or behavioural problems was significant.

The pattern of results for females was similar to that found for males. A greater proportion of females in home-based care reported that they had emotional or behavioural problems, identified a need for help, and received help (see Table 8.15). Chi-square tests for independence showed that the difference between the proportion in home-based care and the general community who identified a need for professional help was statistically significant.

Table 8.15

Self Perceived Emotional and Behavioural Problems, Need for Help and Service Use of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ |
|--|-----------------|----------------|----------------------|-----------------|--|--|
| | Males | Females | Males | Females | | |
| | % | % | % | % | | |
| Emotional or behavioural problems | n = 53 37.7 | n = 38 44.7 | n = 595 19.2 | n = 648 31.6 | 9.14** | 2.25 |
| Problems > peers | n = 19 52.6 | n = 17 52.9 | n = 111 52.3 | n = 203 57.1 | 0.00 | 0.01 |
| Help needed | n = 20 40.0 | n = 17 70.6 | n = 113 21.2 | n = 203 29.6 | 2.33 | 10.20** |
| Help received | n = 8 87.5 | n = 12 50.0 | n = 23 39.1 | n = 60 26.7 | 3.79 | 1.58 |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 1 | n = 6 | n = 14 | n = 44 | | |
| Did not think anything could help | 0.0 | 33.3 | 21.4 | 15.9 | n/a | n/a |
| Preferred to manage themselves | 0.0 | 16.7 | 35.7 | 34.1 | | |
| Did not know where to get help | 0.0 | 0.0 | 14.3 | 13.6 | | |
| Services were too far away | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Had to wait too long to get help | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Afraid of what others might think or say | 0.0 | 16.7 | 14.3 | 20.5 | | |
| Asked for help but did not get it | 100 | 16.7 | 0.0 | 0.0 | | |
| Some other reason | 0.0 | 16.7 | 14.3 | 15.9 | | |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.7 Self Perceived Physical Health Problems, Need for Help and Service Use of

Adolescents: HOME-BASED CARE

The self perceived physical health problems, identification of service need, service use, and reasons for not receiving required help for adolescents (13-17 years) in home-based care are shown in Table 8.16. Almost 17% of adolescents reported that they had experienced physical health problems in the past six months. Of those who identified themselves as having experienced problems, about one-quarter perceived their problems to be greater than their peers and almost half reported that they needed professional help with these problems. Of those identified as needing help, two-thirds received it.

Comparisons by gender showed that the self perceived physical health problems, identification of service need, and service use were similar for both males and females. The only notable difference was that of those who reported physical health problems in the past six months, a larger proportion of males than females (38% versus 14%) reported having physical health problems greater than their peers. Chi-square tests for independence showed that there were no statistically significance differences between males and females. These results must be interpreted with caution, however, given the very small sample sizes in some cells (see Table 8.16).

Table 8.16

Home-Based Care: Self Perceived Physical Health Problems, Need for Help and Service Use of Adolescents

| | Total Sample % | Males % | Females % | Males vs Females $\chi^2(df=1)$ |
|--|----------------------|----------------|----------------|---------------------------------------|
| Physical health problems | n = 91 16.5 | n = 53 15.1 | n = 38 18.4 | 0.02 |
| Problems > peers | n = 15 26.7 | n = 8 37.5 | n = 7 14.3 | 0.18 |
| Help needed | n = 14 42.9 | n = 7 42.9 | n = 7 42.9 | 0.00 |
| Help received | n = 6 66.7 | n = 3 66.7 | n = 3 66.7 | 0.00 |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 2 | n = 1 | n = 1 | |
| Did not think anything could help | 0.0 | 0.0 | 0.0 | n/a |
| Preferred to manage themselves | 0.0 | 0.0 | 0.0 | |
| Did not know where to get help | 0.0 | 0.0 | 0.0 | |
| Services were too far away | 0.0 | 0.0 | 0.0 | |
| I had to wait too long to get help | 0.0 | 0.0 | 0.0 | |
| Afraid of what others might think or say | 0.0 | 0.0 | 0.0 | |
| Asked for help but did not get it | 0.0 | 0.0 | 0.0 | |
| Some other reason | 100 | 100.0 | 100.0 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.8 Self Perceived Physical Health Problems, Need for Help and Service Use of Adolescents: HOME-BASED CARE VS GENERAL COMMUNITY

The proportion of adolescents in home-based care and the general community who reported that they had physical health problems in the past six months was very similar (17% versus 18%) (Table 8.17). Of those who reported physical health problems, a higher proportion of those in the general community than in home-based care reported having more physical health problems than their peers (50% versus 27%), and identified a need for professional help with their problems (52% versus 43%). Of those indicating that they needed help, however, a higher proportion in the general community than in home-based care (80% versus 67%) reported that they received it. These results are similar to those reported by caregivers for all children. Chi-square tests for independence showed, however, that none of the differences were statistically significant.

Table 8.17

Home-Based Care vs General Community: Self Perceived Physical Health Problems, Need for Help and Service Use of Adolescents

| | Home-Based Care % | General Community % | χ^2 (df=1) |
|--|-------------------------|---------------------------|-----------------|
| Physical health problems | n = 91 16.5 | n = 1247 17.5 | 0.01 |
| Problems > peers | n = 15 26.7 | n = 214 49.5 | 2.09 |
| Help needed | n = 14 42.9 | n = 214 52.3 | 0.17 |
| Help received | n = 6 66.7 | n = 112 80.4 | 0.09 |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 2 | n = 22 | |
| Did not think anything could help | 0.0 | 18.2 | n/a |
| Preferred to manage themselves | 0.0 | 40.9 | |
| Did not know where to get help | 0.0 | 0.0 | |
| Services were too far away | 0.0 | 0.0 | |
| I had to wait too long to get help | 0.0 | 0.0 | |
| Afraid of what others might think or say | 0.0 | 4.5 | |
| Asked for help but did not get it | 0.0 | 18.2 | |
| Some other reason | 100 | 18.2 | |

* $p < .05$; ** $p < .01$; *** $p < .001$

8.8.1 Self Perceived Physical Health Problems, Need for Help and Service Use of

Adolescents by Group and Gender

The proportion of adolescents who reported that they had experienced physical health problems, needed professional help with these problems, received help, and identified barriers to receiving help was compared across groups by gender (Table 8.18). Group differences for males and for females were very similar. Similar proportions in home-based care and the general community reported that they had experienced physical health problems in the past six months. Of those who had physical health problems, however, a greater proportion in the general community than in home-based care reported that their problems were greater than those of their age and gender matched peers. Of those who identified a need for professional help, a greater proportion of those in the general community than in home-based care reported that they received this help. Chi-square tests for independence however, showed that none of these differences were statistically significant (Table 8.18).

Table 8.18

Self Perceived Physical Health Problems, Need for Help and Service Use of Adolescents by Group and Gender

| | Home-Based Care | | General Community | | Males vs Males $\chi^2(df=1)$ | Females vs Females $\chi^2(df=1)$ |
|--|-----------------|----------------|-------------------|-----------------|-------------------------------|-----------------------------------|
| | Males % | Females % | Males % | Females % | | |
| Physical health problems | n = 53 15.1 | n = 38 18.4 | n = 593 15.2 | n = 654 19.6 | 0.00 | 0.00 |
| Problems > peers | n = 8 37.5 | n = 7 14.3 | n = 89 51.7 | n = 125 48.0 | 0.16 | 1.83 |
| Help needed | n = 7 42.9 | n = 7 42.9 | n = 89 52.8 | n = 125 52.0 | 0.01 | 0.01 |
| Help received | n = 3 66.7 | n = 3 66.7 | n = 47 80.9 | n = 65 80.0 | 0.00 | 0.00 |
| Reason for not getting help (for those who indicated they needed help, but did not receive it) | n = 1 | n = 1 | n = 9 | n = 13 | | |
| Did not think anything could help | 0.0 | 0.0 | 33.3 | 7.7 | n/a | n/a |
| Preferred to manage themselves | 0.0 | 0.0 | 44.4 | 38.5 | | |
| Did not know where to get help | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Services were too far away | 0.0 | 0.0 | 0.0 | 0.0 | | |
| I had to wait too long to get help | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Afraid of what others might think or say | 0.0 | 0.0 | 11.1 | 0.0 | | |
| Asked for help but did not get it | 0.0 | 0.0 | 11.1 | 23.1 | | |
| Some other reason | 100.0 | 100.0 | 0.0 | 30.8 | | |

8.9 Summary: Perceived Problems, Need for Help and Service Use

8.9.1 Emotional and Behavioural Problems

Home-Based Care

The vast majority (70%) of children and adolescents in home-based care were perceived by their caregivers to have experienced emotional or behavioural problems in the past six months. Of those identified as needing professional help with these problems however, caregivers reported that only about half received it.

When comparisons were broken down by gender and age group, the results showed that rates of perceived emotional or behavioural problems, need for professional help, and service use as reported by caregivers, were generally similar with two exceptions. Significantly more younger children than older children (85% vs 74%) were considered by caregivers to have greater emotional or behavioural problems than other children of the same age and gender. In addition, significantly more males than females were reported by caregivers to have received the help they were identified as needing for emotional or behavioural problems (63% vs 41%). Despite this gender difference, it is alarming that a large number of both males and females in home-based care who were identified by their caregivers as needing help for emotional or behavioural problems, had not received this help - particularly given that the children and adolescents were residing in state care and had regular contact with social workers who are able to refer to appropriate services.

Although the rates of self-reported emotional or behavioural problems and the need for help were somewhat lower for adolescents than those reported by caregivers for all children in home-based care, over half of those who identified themselves as needing help reported that they received it (65%) compared to only 30% in the general community.

Taken together, these results suggest that males in foster care with emotional and behavioural problems, are more likely to receive the help they need for these problems, than females. A possible explanation is that males generally exhibit more externalising problems than females, and as a result of the disruptive nature of these problems, may be more likely to be referred to appropriate services for help. However, given results of the present study on the CBCL and YSR, indicating that males and females in foster care experience very similar levels of externalising problems, this explanation seems less plausible. Nonetheless, these findings are consistent with those of Leslie et al. (2000) who found that attendance at mental health centres among a sample of 480 children who entered long-term foster care in San Diego County, US, was more frequent for males than females.

Home-Based Care vs General Community

Not surprisingly, significantly more children and adolescents in home-based care than in the community were perceived by caregivers as having emotional and behavioural problems and needing professional help for their problems. Despite this, however, of those identified as needing help with emotional or behavioural problems, only about half in both foster care and the general community received it. These results suggest that low rates of service use for emotional and behavioural issues are a generic problem, and not specific to children and adolescents in care.

However, although group differences did not vary by gender or age group, there was one exception. A significantly higher proportion of males in home-based care than in the general community (63% vs 48%) received the help they were identified as needing for emotional or behavioural problems, whereas similar percentages of females in home-based care and the general community (41% vs 47%) received the desired help.

Although adolescents reported somewhat lower rates of problems than their caregivers/parents did for all children, the pattern of findings was very similar to that reported by caregivers/parents. Interestingly however, a significantly higher proportion of adolescents in home-based care than in the general community (65% vs 30%) reported that they received the help they needed for emotional or behavioural problems. This pattern was observed for both males and females. The reasons given by adolescents who reported that they did not receive help needed for emotional or behavioural problems were varied. Of particular concern was that 29% of adolescents in foster care (compared to 0% in the general community), reported that they asked for help but did not receive it. This finding must be interpreted with caution however, given the very small number of adolescents in foster care (n=7) who gave reasons for not receiving required help.

Taken together, the caregiver reported results suggest that more males in foster care than in the general community receive the help they need for emotional and behavioural problems. Similarly, adolescent self-reports suggest that more adolescents in home-based care receive the help they need for emotional and behavioural problems than their counterparts in the general community. These results are consistent with Leslie et al.'s (2000) findings that rates of mental health service use were much higher for children in foster care than the estimated rates for children in community samples. They are also consistent with results of a study by Bilaver, Jaudes, Koopke, and George (1999) who found that children in foster care were significantly more likely to use all types of mental health services than low-income children who did not enter foster care and low-income children who subsequently entered foster care. In a similar vein, Farmer et al. (2001) compared mental health service need and use among three groups of children: those with a history of foster care placement, those in contact with social services but never in placement, and those from low-income families who have not been in contact with social services. Although the results showed that all three groups of children had very high rates of mental health problems, children in foster care or in

contact with social services were significantly more likely than children from low-income families to receive mental health services (Farmer et al., 2001).

The findings that children in foster care receive more mental health services than their peers in the community seem plausible for three main reasons. First, foster parents may be more likely to request services when emotional and behavioural problems arise than parents of children in the general community, because of their awareness that these problems may be arising as a result of serious and multiple earlier adversities. Second, young people in foster care have regular contact with social workers, unlike their peers in the general community. Social workers are likely to play a key role in facilitating access to mental health services. They have delegated statutory responsibility for the health needs of children in their care, may be better able than parents in the general community to identify problems that require help, and are able to refer young people to appropriate services. Lastly, the results from this study may simply reflect the fact that, in South Australia, foster children receive priority access over children in the general community to Child and Adolescent Mental Health Services (CAMHS).

It must be noted, that although more foster children than general community children received help for emotional and behavioural problems, a large proportion in both groups went without help. These results suggest that almost half of all children and adolescents in Australia who are identified as having emotional or behavioural problems that require help, are going without adequate care.

8.9.2 *Physical Health Problems*

Home-Based Care

About one-quarter of children and adolescents in home-based care were perceived by their caregivers to have experienced physical health problems in the past six months, and, according to caregivers, the majority (85%) who were identified as needing professional help with these problems, received it. The rates of caregiver perceived physical health problems, need for help and service use did not differ by gender or age group.

According to adolescent reports, 17% had experienced physical health problems in the past six months and 67% of those who identified a need for help with these problems, received it. The prevalence of adolescent perceived physical health problems, need for help, or service use did not differ by gender.

These results show that, according to caregiver reports, the majority of foster children and adolescents who needed help for physical health problems received it (85%) compared to only about half who needed help for emotional or behavioural problems. According to adolescent self-reports however, the difference was much smaller with 67% receiving needed help for physical problems compared to 65% receiving needed help for emotional problems. Taken together, however, these results suggest that foster children are more likely to receive care for physical rather than emotional problems. Despite this, a sizeable proportion of foster children still went without adequate help for their physical problems (15% of children and adolescents as reported by caregivers, and 33% of adolescents as self-reported).

These findings provide support for concerns raised by a number of researchers (e.g. Bilaver et al., 1999; Rubin et al., 2004; Schneiderman et al., 2007; Simms, Dubowitz, & Szukagyi, 2000; Vig et al., 2005), that many children in foster care go without adequate

healthcare, despite the fact they are a vulnerable ‘at risk’ group who have experienced significant maltreatment and adversities. Although limited data are available, results from the present study are somewhat consistent with findings from a 1995 report in the US which found that 32% of foster children had untreated health problems after placement (US General Accounting Office, 1995). They are also consistent with recent findings by Sullivan and van Zyl (2008) who reported that of foster and adopted children who were diagnosed with a medical need, 22% were not receiving adequate help.

Home-Based Care vs General Community

Given the adverse histories of foster children, it is not surprising that significantly more children and adolescents in home-based care than in the general community were perceived by their caregivers/parents to have physical health problems and to need professional help with their problems. Of those identified as needing help with their physical health problems though, significantly more in the general community than in home-based care (95% vs 85%) received it. Although this same pattern of results was observed when comparisons were made across groups by gender and age group, not all differences were statistically significant. Although there were no significant group differences according to adolescent self-reports, a similar trend was observed in that, of those who identified themselves as needing help with physical health problems, a greater proportion in the general community than in home-based care received it (80% vs 67%).

Taken together, these results suggest that, regardless of whether children are in foster care or living with their parents, they are more likely to receive help for physical than emotional problems. However, compared to young people in the general community, foster children are more likely to receive needed help for emotional or behavioural problems, but less likely to receive needed help for physical health problems. This latter finding is particularly concerning given that foster children are a disadvantaged population that

generally require additional treatment and services in all areas of health beyond that provided to other children in the community.

A number of reasons have been proposed as to why many foster children go without adequate health care. Chief among them has been the view that caregivers may lack the skills and medical histories needed to identify health needs amongst children in their care (Vig et al., 2005). As already discussed, however, 15% of children who were identified by their caregivers as needing help for physical health problems, and 47% who were identified by their caregivers as needing help for emotional or behavioural problems, went without this help. Thus, caregiver failure to identify problems could not explain why these children went without the healthcare they needed.

Perhaps larger barriers to adequate health care for foster children include incomplete histories and medical records (Sullivan & van Zyl, 2008), and the highly fragmented and discontinuous system of care that many receive as a result of frequent changes in placements, social workers, foster parents, and medical practitioners (Chisolm, Scribano, Purnell, & Kelleher, 2009; Lindsay & Chadwick, 1993; Simms, Dubowitz, & Szilagyi, 2000). In the US, health records or 'passports' that document the physical and emotional health of children in foster care in a centralised and accessible electronic database have been proposed as possible solutions to increase the effective coordination and communication of health care for foster children (e.g., Chisolm et al., 2009; Lindsay & Chadwick, 1993). These passports can be updated and accessed even when children move placements and have different social workers and physicians attending to their health care needs. Although the development and implementation of centralised electronic health records require substantial interagency planning and collaboration, they show promise in improving continuity of care for children in foster care (Chisolm et al., 2009; Lindsay & Chadwick, 1993). In a similar vein, Simms et al. (2000) argues that continuity of care can be increased if child welfare systems identify a clinic

or 'medical home' for each child in their care, and encourage foster carers to access this clinic to ensure children receive continuous primary health care.

When children enter foster care, responsibility for their health and welfare passes to the state. However, the results of the present study highlight that a substantial proportion of foster children in need of service support for physical or emotional and behavioural problems, are going without this help. As stated by Simms, "there is a clear need for creative and collaborative initiatives between the child welfare and health care systems to improve the health care of foster children" (p. 914). Systems that fail to provide adequate services and care to foster children create conditions that may potentially exacerbate children's health problems and compromise their wellbeing and long-term outcomes.

Chapter Nine

Caring for Children and Adolescents in Care:

Impact upon Caregivers

This chapter describes the impact upon caregivers of caring for children and adolescents in home-based care, as self-reported on the ‘Emotional Impact on Parents’ and ‘Time Impact on Parents’ scales from the CHQ-PF50. In the first instance, results describing caregivers of children and adolescents in home-based care were reported. In the second instance, comparisons were made between the impact upon caregivers of caring for foster children and adolescents, with the impact upon parents of caring for children and adolescents in the general community

9.1 Impact upon Caregivers as Reported on the CHQ-PF50 Scales:

HOME-BASED CARE

Mean scores on the Emotional Impact on Parents and Time Impact on Parents scales for foster parents are shown in Table 9.1. A series of 2 Gender (Males vs Females) x 2 Age Group (6-12 years vs 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. There were no significant main effects of Gender, but a significant main effect of Age Group on both the Emotional Impact on Parents and Time Impact on Parents scales (Table 9.1). Caregivers of younger children (6-12 years) had lower mean scores than caregivers of older children (13-17 years) on both scales. These results show that caregivers experience greater impact on their lives – both emotionally and in terms of their personal time – as a result of caring for younger children (6-12 years).

There was also a significant Gender x Age Group interaction on both the Emotional Impact and Time Impact scales. Simple main effects analyses showed that mean differences across gender were significant for younger children (6-12 years) ($p < .05$) but not older children (13-17 years). In other words, caregiver burden was significantly greater as a result of caring for younger males than younger females. Although not statistically significant, this reversed amongst the older children, with carer burden being greater as a result of caring for females than males.

Table 9.1

Home-Based Care: Mean (\pm SD) CHQ-PF50 Scores Describing Impact of Caring upon Foster Caregivers

| CHQ Scales | Total Sample n = 325 | Males n = 175 | Females n = 150 | Younger n = 201 | Older n = 124 | Gender <i>F</i> | Age Group <i>F</i> |
|------------------------|-------------------------|-------------------|--------------------|--------------------|-------------------|--------------------|-----------------------|
| Parental Impact | | | | | | | |
| Emotional impact | 63.04 \pm 24.93 | 61.30 \pm 25.44 | 65.06 \pm 24.27 | 60.70 \pm 25.42 | 66.87 \pm 23.73 | 0.76 | 4.12* |
| Time impact | 75.38 \pm 26.33 | 73.21 \pm 28.04 | 77.93 \pm 24.01 | 71.89 \pm 27.27 | 81.12 \pm 23.71 | 0.82 | 8.34** |

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 9.2

Home-Based Care: Mean (\pm SD) CHQ-PF50 Scores Describing Impact of Caring upon Foster Caregivers: Age Group x Gender

| CHQ Scales | Younger (6-12 years) | | Older (13-17 years) | | Gender x Age Group <i>F</i> |
|------------------------|----------------------|-------------------|---------------------|-------------------|--------------------------------|
| | Males n=104 | Females n = 97 | Males n = 71 | Females n = 53 | |
| Parental Impact | | | | | |
| Emotional impact | 56.41 \pm 25.29 | 65.29 \pm 24.87 | 68.57 \pm 24.04 | 64.62 \pm 23.34 | 5.13* |
| Time impact | 66.03 \pm 29.24 | 78.47 \pm 23.45 | 84.29 \pm 22.18 | 76.94 \pm 25.21 | 11.62** |

* $p < .05$; ** $p < .01$; *** $p < .001$

9.2 Impact upon Caregivers as Reported on the CHQ-PF50 Scales:

HOME-BASED CARE VS GENERAL COMMUNITY

A series of 2 Group (Home-Based Care vs General Community) x 2 Gender (Males vs Females) x 2 Age Group (6-12 years vs 13-17 years) factorial ANOVAs were conducted to test for main effects and interactions involving these factors. Main effects and interaction effects that did not include “Group” were not included, as the principal research interest was to describe the impact upon foster parents, and to make comparisons with the impact upon parents of children and adolescents in the general community. Significant results did not differ when factorial ANCOVAS were used to test for the effect of the different prevalence of single parents and indigenous children in the two groups.

9.2.1 CHQ-PF50 Mean Scale Scores: Main Effect of Group

Mean scores on the Emotional Impact on Parents and Time Impact on Parents scales were smaller for caregivers of children and adolescents in home-based care than for parents of children and adolescents in the general community (smaller scores indicate higher levels of impact) (Table 9.3). There was a significant main effect of Group for both of these scales. The sizes of these differences both fell in the range defined as a large effect size (Cohen’s $d = 0.90$ for the Emotional Impact on Parents scale and Cohen’s $d = 0.78$ for the Time Impact on Parents scale). These results suggest that caregivers experience greater impact on their lives as a result of caring for foster children, than parents experience as a result of caring for their own children.

Table 9.3

Home-Based Care vs General Community: Mean (\pm SD) CHQ-PF50 Scores Describing Impact of Caring upon Foster Caregivers and Parents

| CHQ Scales | Home-Based Care (n = 325) | General Community (n = 3254) | Group <i>F</i> |
|------------------------|---------------------------------|------------------------------------|-------------------|
| Parental Impact | | | |
| Emotional impact | 63.04 \pm 24.93 | 83.37 \pm 20.12 | 255.46*** |
| Time impact | 75.38 \pm 26.33 | 92.41 \pm 16.41 | 240.01*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

When comparisons were made separately for males and females, the same pattern of results were found (see Tables 9.4 and 9.5). On both CHQ-PF50 scales, there was a consistent pattern for the mean scores describing caregivers of males and females in home-based care to be lower than the mean scores describing caregivers of their gender counterparts in the general community. Independent-samples t-tests showed all differences were statistically significant. The magnitude of these mean differences were in the range defined as a large effect size (Males: Cohen's $d = .89$ for the Emotional Impact on Parents scale, and 0.78 for the Time Impact on Parents scale; Females: Cohen's $d = .90$ for the Emotional Impact on Parents scale, and 0.77 for the Time Impact on Parents scale). These results show that regardless of gender, caregivers experience greater burden caring for foster children, than parents experience as a result of caring for their own children.

Table 9.4

Home-Based Care vs General Community: Mean CHQ-PF50 Scores Describing Impact of Caring for Males

| CHQ Scales | Home-Based Care (n = 175) | General Community (n = 1632) | <i>t</i> |
|------------------------|---------------------------------|------------------------------------|----------|
| Parental Impact | | | |
| Emotional impact | 61.30 \pm 25.44 | 81.99 \pm 20.68 | 10.37*** |
| Time impact | 73.21 \pm 28.04 | 91.42 \pm 17.36 | 8.42*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 9.5

Home-Based Care vs General Community: Mean (\pm SD) CHQ-PF50 Scale Scores Describing Impact of Caring for Females

| CHQ Scales | Home-Based Care (n = 150) | General Community (n = 1622) | <i>t</i> |
|------------------------|------------------------------|---------------------------------|-----------|
| Parental Impact | | | |
| Emotional impact | 65.06 \pm 24.27 | 84.76 \pm 19.43 | 167.24*** |
| Time impact | 77.93 \pm 24.01 | 93.42 \pm 15.32 | 160.58*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

9.2.2 CHQ-PF50 Mean Scale Scores: Group x Gender

There were no significant Group x Gender interactions, indicating that group differences did not differ for caregivers/parents of males or females.

Table 9.6

Mean CHQ-PF50 Scores: Group x Gender

| CHQ Scales | Home-Based Care | | General Community | | Gender x Group <i>F</i> |
|------------------------|-------------------|--------------------|-------------------|---------------------|----------------------------|
| | Males n = 175 | Females n = 150 | Males n = 1632 | Females n = 1622 | |
| Parental Impact | | | | | |
| Emotional impact | 61.30 \pm 25.44 | 65.06 \pm 24.27 | 81.99 \pm 20.68 | 84.76 \pm 19.43 | 0.01 |
| Time impact | 73.21 \pm 28.04 | 77.93 \pm 24.01 | 91.42 \pm 17.36 | 93.42 \pm 15.32 | 0.13 |

* $p < .05$; ** $p < .01$; *** $p < .001$

9.2.3 CHQ-PF50 Mean Scale Scores: Group x Age Group

There was a significant Group x Age Group interaction on the Time Impact on Parents scale. To interpret this interaction, separate group comparisons were conducted for each level of age (i.e., for 6-12 year olds, and for 13-17 year olds). These simple effect analyses showed that although there were significant group differences regardless of age group ($p < .001$), the difference was much larger between caregivers and parents of younger children (see Table

9.7). These results suggest that foster parents of younger children experience disproportionately more impact upon their personal time.

Table 9.7

Mean CHQ-PF50 Scores: Group x Age Group

| CHQ Scales | Home-Based Care | | General Community | | Group x Age <i>F</i> |
|------------------------|--------------------|------------------|---------------------|-------------------|----------------------------|
| | Younger n = 201 | Older n = 124 | Younger n = 1933 | Older n = 1321 | |
| Parental Impact | | | | | |
| Emotional impact | 60.70 ± 25.42 | 66.87 ± 23.73 | 82.83 ± 20.41 | 84.17 ± 19.64 | 3.24 |
| Time impact | 71.89 ± 27.27 | 81.12 ± 23.72 | 91.59 ± 16.83 | 93.61 ± 15.71 | 9.59** |

* $p < .05$; ** $p < .01$; *** $p < .001$

9.2.4 CHQ-PF50 Mean Scale Scores: Group x Gender x Age Group

The series of 2 Group x 2 Gender x 2 Age Group factorial ANOVAs revealed significant 3 way interactions on both the Emotional Impact and Time Impact scales.

In the first stage, separate Group x Age Group interactions were conducted for each level of gender (i.e., for males and females separately). On the Emotional Impact and Time Impact scales there were significant Group x Age Group interactions for males (but not for females). Further simple main effects analyses applied to this result involved Group comparisons conducted for each Age Group separately. These analyses revealed significant group differences at both age levels ($p < .01$), but highlighted a relatively larger difference for caregivers of the 6-12 year olds. In other words, foster parents of 6-12 year old males experienced disproportionately greater emotional and time impact upon their personal lives, than other parents.

Table 9.8

Mean CHQ-PF50 Scores: Group x Gender x Age Group

| CHQ Scales | Younger (6-12 yrs) | | | | Older (13-17 yrs) | | | | Group x Gender x Age <i>F</i> |
|------------------------|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|--|
| | Home-Based Care | | General Community | | Home-Based Care | | General Community | | |
| | Males n = 104 | Females n = 97 | Males n = 984 | Females n = 949 | Males n = 71 | Females n = 53 | Males n = 648 | Females n = 673 | |
| Parental Impact | | | | | | | | | |
| Emotional impact | 56.41 ± 25.29 | 65.29 ± 24.87 | 81.45 ± 20.84 | 84.25 ± 19.88 | 68.57 ± 24.04 | 64.62 ± 23.34 | 82.79 ± 20.43 | 85.49 ± 18.78 | 6.62* |
| Time impact | 65.82 ± 29.18 | 78.47 ± 23.45 | 90.48 ± 17.85 | 92.75 ± 15.61 | 84.29 ± 22.18 | 76.94 ± 25.21 | 92.84 ± 16.51 | 94.36 ± 14.87 | 21.09*** |

* $p < .05$; ** $p < .01$; *** $p < .001$

9.3 Summary: Caring for Children and Adolescents in Care: Impact upon Caregivers

Home-Based Care

The results showed that caring for children in home-based care had a significant adverse impact on caregivers. Considerable limitations were placed on caregivers' ability to take care of their own personal needs because of their foster child's physical and mental health problems. Caregivers also reported significant levels of emotional distress and concern due to their foster children's problems. Although there were no differences in the degree of burden experienced by caregivers of male or female children/adolescents, caring for younger children (6-12 years) resulted in significantly greater time and emotional stress for caregivers than caring for older children (13-17 years). Further analyses however, showed that this was predominantly due to the time and emotional impact of caring for younger males (6-12 years).

Home-Based Care vs General Community

Compared with parents of children in the general community, foster parents reported significantly greater time and emotional stress because of the physical and mental health problems of the children in their care. In fact, the CHQ scores rating the impact of children's physical and mental health problems on caregivers were very similar to those reported in an earlier study of the impact upon parents of caring for children with diabetes, asthma and cystic fibrosis (Sawyer et al., 2005). These results show that caring for foster children has an adverse impact upon caregivers, similar to the impact experienced by parents of children with chronic illness.

In recent years, studies exploring foster carer wellbeing (e.g., Cole & Eamon, 2007; Farmer, Lipscombe, & Moyers, 2005; Wilson et al., 2000) have emerged. While carers have been

found to experience low levels of depression, most likely because of screening during recruitment and selection (Cole & Eamon, 2007), there is evidence that they experience strain as a result of stressors associated with the foster care role (Farmer et al., 2005; Wilson et al., 2000).

These, and findings from the current study, are perhaps not surprising for three main reasons. First, foster carers typically find themselves caring for children who have experienced multiple adversities and, as a result, display a range of challenging behaviours and issues. The shift from residential to home-based settings has led to foster parents being responsible for children with increasingly challenging issues (Barber & Delfabbro, 2004) including developmental and/or cognitive delays, mental health problems, and insecure attachments. Second, due to the shortage of foster carers, “many are being asked to provide care beyond the scope of their training and/or their own perceived capabilities and expectations” (Whenan, Oxlad, & Lushington, 2009, p.752). Third, because foster parents receive limited information about children’s past experiences or medical histories (to protect the confidentiality and privacy of foster children), they often have little understanding of children’s problems or their underlying causes (Whenan et al., 2009), making it difficult for them to provide adequate support.

In addition to the pressures associated with caring for children with challenging problems, foster carers often deal with many other stressful matters including family conflict, placement disruptions, difficulties accessing respite care, and allegations against them (Wilson et al., 2000; Whenan et al., 2009). Children’s visits with their families of origin may also be stressful for foster parents, possibly due to the children’s disruptive reactions to such visits (Whenan et al., 2009). Further stressors for foster parents may include difficulties working with the child welfare system and barriers to gaining access to adequate health services for children in their care (Wilson et al. 2000; Whenan et al., 2009). Caregivers have often reported that they are

dissatisfied with, what they feel is, inadequate support from child welfare departments and caseworkers (Bromfield & Osborn, 2007; Farmer et al., 2005). There is also evidence that the remuneration provided to caregivers to meet the basic costs of fostering is insufficient (Barber & Gilbertson, 2001; McHugh, 2002), and this is a source of financial stress. Standard carer subsidies have been estimated based on the needs of children living with their families, however, children in alternative care tend to have more complex needs than children in the general community (Bromfield & Osborn, 2007; McHugh, 2002).

The results of this study - which show that caregivers are under substantial strain due to the needs and problems of the children in their care - combined with emerging reports that caregivers may not be receiving adequate practical or financial support, have important implications. First, caregiver strain may compromise the quality of care provided to foster children who have already experienced considerable adversity and disadvantage. In fact, recent research by Farmer et al. (2000) suggests that strain experienced by the foster carer has a negative impact upon the quality of care they are able to provide, and may lead to higher rates of placement breakdown or disruption. Second, the significant personal impact that fostering has may impede the retention of existing carers and the recruitment of new carers. There is already a severe shortage of carers across Australia (and the Western world), and while the shrinking pool of volunteer caregivers has been attributed, at least in part, to social and demographic forces (e.g., increasing number of women in the workforce, increasing number of people caring for elderly relatives, current generation of carers approaching retirement) (Barber & Delfabbro, 2004), it is likely that the substantial burden upon carers identified in the current study is also contributing. In their review of Australian out-of-home care research, Bromfield and Osborn (2007) found that although many carers cease fostering due to a change in their personal circumstances they also stop fostering due to 'burn out' and lack of support .

It is essential that foster parents receive adequate support, training, and assistance not only to help minimise the significant personal burden that fostering has, but also to maximise the quality of care received by foster children who have already experienced significant adversity. Better support for caregivers may also contribute to improving the retention of existing caregivers, and encourage new volunteers to consider fostering.

Chapter Ten

Discussion

This is the first study to provide comprehensive information about the mental health and broader well-being of a representative sample of children and adolescents living in *home-based foster care*, which now accounts for the vast majority of alternative care placements in Western jurisdictions (Barber & Delfabbro, 2004).

Although there has been an emerging body of literature documenting the mental health of children in care, most studies have been compromised by design and/or methodological issues. For example, previous studies have often employed samples of children residing in various placements types (e.g., home-based care, residential care, emergency care, and even juvenile justice placements) (e.g., Ford et al., 2007; Glisson et al., 2000; McMillen et al., 2005), which makes it impossible to identify mental health problems specific to children and adolescents in home-based care. Other studies have employed very specific selection criteria (e.g., only children with existing behavioural and emotional problems (Clark & Prange, 1994), children without previously identified disabilities (Urquiza & Wirtz, 1994), or children entering long-term placements (McAuley & Trew, 2000)) that prohibit the generalisation of results to entire populations of children in care. Furthermore, many of the studies failed to collect and/or report full and comprehensive mental health data about children in care, largely because mental health has commonly been a secondary or side aim of these studies (e.g., Glisson et al., 2000; Leslie et al., 2000; Marcus, 1991; McAuley & Trew, 2000). Lastly, many studies have been compromised by methodological issues such as small sample sizes (e.g., Horwitz et al., 2000; Marcus, 1991;

McAuley & Trew, 2000), low response rates (e.g., Glisson et al., 2000; Keller et al., 2001; Tarren-Sweeney & Hazell, 2006), and the use of non-standardised measures (e.g., Burge, 2007; Hansen et al., 2005; Fleming et al., 2005). In addition to these limitations, most research in this field has been conducted in the United States and there are concerns about the generalisability of findings to foster children in Australia. This is not only due to the cultural differences in the Australian and US populations, but also due to significant differences in child protection policy and practice between countries (Barber & Gilbertson, 2001).

In addition to there being limited data describing the mental health of children in care, there has also been a complete absence of information about the broader well-being of children in care. This is a serious omission not only because young people in care are a vulnerable and disadvantaged population, but also because there is evidence that children with mental health problems commonly have substantial impairment in their health-related quality of life (Sawyer et al., 2002) and are more likely than children without mental health problems to engage in health-risk behaviours such as suicidal ideation and behaviour, smoking and marijuana use (Sawyer et al., 2001). This is the first study to provide information about the health-related quality of life of children and adolescents in care, and the rates in which they engage in health-risk behaviours.

This is also one of the first studies to examine the impact that foster children's problems has upon the lives of their foster parents. The pressure on home-based care services has resulted in caregivers being responsible for larger numbers of children and children with substantial physical and mental health problems who would have previously been cared for in residential facilities (Barber & Delfabbro, 2004). Despite this, the impact of caring for foster children has received limited research attention (Wilson et al., 2000).

Researchers, practitioners and policy makers working in the area of child welfare, have long been aware that children in home-based care are a vulnerable population with behavioural, emotional and health problems. Furthermore, in recent times, they have become increasingly aware of the challenges experienced by foster caregivers, and there has been concern about the frequency of caregiver 'burn out'. Despite this, there has been an absence of good quality scientific information describing these issues for children and their carers, particularly in Australia. As a result, it has not been possible to identify accurately the extent of problems and level of need amongst this population. The absence of 'scientific evidence' has also impeded attempts to advocate for adequate and appropriate resources that are necessary to address the problems experienced by foster children and their carers.

This study provides a comprehensive 'picture' of the mental health and wellbeing of young people in home-based care, and the impact that caring for these young people has on foster parents. The results from this study can be used to identify the needs of young people and their carers, to advocate for adequate resources, to help inform intervention programs, and to provide a sound foundation for future research.

10.1 Conclusions

The results of the study showed that foster children are a disadvantaged population with poor mental health and well-being. Few differences were found between the mental health and wellbeing of young people in care by gender or age group. There was, however, limited evidence that older children (13-17 years) experienced poorer mental health than younger children (6-12 years) in the areas of withdrawn and delinquent behaviour. Due to the cross-sectional design of the study, however, it is possible that age and time in care were confounded. In other words, the observed differences in functional status between younger and older children may have been partly attributable to the fact that the older children in the sample had generally spent longer periods of time in the alternative care system than younger children. Although females experienced poorer health-related quality of life in a number of domains, the problems experienced by males imposed greater limitations upon their daily functioning. There was also evidence that rates of service use for emotional and behavioural problems were higher for males than females.

Gender differences varied by age in some instances. Amongst younger children (6-12 years), males experienced moderately poorer mental health than females as evidenced by significantly higher mean scores on the Total Problems, Thought Problems and Aggressive Behaviour scales. However, this pattern reversed amongst older children (13-17 years), with females experiencing moderately poorer mental health in these areas than males. Amongst younger children, there was also evidence that more males than females needed help for emotional and behavioural problems, and that caring for males had significantly greater emotional impact upon caregivers than caring for females.

Compared to their peers in the general community, foster children experienced remarkably poorer mental health and well-being. Although the magnitude of group differences varied by gender or age group in a few instances, children and adolescents in home-based care had consistently poorer mental health and well-being than their peers in the general community. Foster children had more internalising problems (such as anxiety and depression) and externalising problems (such as attention problems, delinquent problems and social problems) that were of clinical significance. They also experienced much poorer health-related quality of life across a wide range of different domains. For example, due to their emotional, behavioural and physical health problems, foster children experienced greater limitations in their ability to fulfil their daily roles such as schooling and social events. They also experienced less family cohesion and greater disruption to family activities as a result of their own physical and emotional problems.

The results of this study also showed that a substantial proportion of children in foster care who were identified as needing help for physical or emotional and behavioural problems in the past six months, had not received this help. Compared to children in the general community, foster children were more likely to receive help for emotional and behavioural problems but less likely to receive help for physical health problems. This latter finding is concerning given that foster children are a vulnerable group who generally require more help than that provided to other children in the general community.

Amongst adolescents, the rates of suicidal attempts were significantly higher amongst foster youth than those in the general community. There was also evidence, that of suicide attempts, those made by youths in foster care were of a more serious nature. Although this study examined a sample of children in “mainstream” foster care, who were in relatively stable and

long-term placements, their problems were of a degree to warrant them being considered a special needs population.

Despite these results which highlight the vulnerabilities of foster youth, other analyses showed that adolescents in care were no more likely than their peers in the general community to engage in health-risk behaviours such as smoking, alcohol use, or drug use or experimentation, with only one exception - more females in care than in the general community reported that they used 'over-the-counter' painkillers and prescription medications (e.g., Ritalin) for non-medical purposes. As discussed, these findings are somewhat surprising given that foster youth generally lack protective factors (such as stable family lives, good quality parent-child relationships) and have many of the risk factors (including past adversities, histories of maltreatment, mental health problems, parental dysfunction and substance abuse) that would increase their vulnerability to health-risk behaviours (James et al., 2009). In the absence of comparable data, the results describing health-risk behaviours should be interpreted with some caution. While it is, of course, possible that foster youths do not engage in higher rates of health-risk behaviours than youths in the general community - perhaps due to increased surveillance of their behaviours by caseworkers and foster parents, isolation from peers, and lack of resources with which to purchase substances - it is also possible that adolescents in the present study gave socially desirable responses. That is, while adolescents were assured of the confidentiality of their responses, it is possible that they may have been concerned that the information they provided could be accessed by their caregivers and/or caseworkers.

There was also evidence that the body weight perceptions and dieting behaviours of adolescents in foster care were not different to those of their peers in the general community. Not surprisingly however, females in both home-based care and the general community were

significantly more likely than their male counterparts to report that they were overweight and that they were trying to lose weight through dieting or exercising. These results suggest that the elevated rates of dieting behaviours observed amongst females compared to males is a generic problem for young people in both foster care and the broader community.

Lastly, there was evidence that caring for children and adolescents in home-based foster care had a significant adverse impact upon foster parents. Compared with parents of young people in the general community, foster parents reported significantly more limitations in the time available for their personal needs because of the physical and mental health problems of the children in their care. They also reported experiencing much higher levels of emotional worry and concern due to children's problems in these areas.

Taken together, these results show that young people residing in home-based care are a very disadvantaged population with a wide range of emotional and physical health problems, and foster parents who are responsible for their care are experiencing significant burden and strain as a result. Clinicians and practitioners working in the child welfare sector have frequently reported that children and young people in their care have poor mental health and well being (Bromfield, Higgns, Osborn, Panozzo, & Richardson, 2005). However, until this study there was limited empirical information available describing the mental health of children in care in Australia, and almost nothing about their broader well-being.

10.2 Implications and Recommendations

The findings of this study have important implications for child protection policy and practice. When states intervene and remove children from their homes of origin, they are essentially proclaiming to protect these children and provide adequate care (Chernoff et al., 1994). However, the elevated rates of mental health problems, remarkably poor health-related quality of life, high rates of suicide ideation and behaviour, and relatively low rates of service use identified amongst children and adolescents in the current study, raises questions about the extent to which foster children's needs are currently being met. Although there is an established need for research and interventions to prevent children from entering care, there is an urgent need to address circumstances for children in care (Cashmore et al., 2006), and to find ways to improve their current health and wellbeing so as to maximise their short and longer-term outcomes.

10.2.1 Identification of Problems: Comprehensive and Routine Assessments

The results from this study strongly suggest the need for all young people entering alternative care to receive comprehensive and ongoing health screening and assessments, with a view to identifying service needs and a health plan. There is now considerable evidence that early identification of problems and early intervention is important in achieving positive outcomes (Bayer et al., 2009; Foster et al., 2006).

Currently, few child welfare agencies screen children entering care, particularly for mental health and developmental problems (Kerker & Dore, 2006). When screening does occur however, there are concerns that unless clinicians have experience working with foster children, they may fail to recognise the particular health problems in this population, particularly those arising as a consequence of abuse, neglect, attachment problems, separation and loss (Kerker &

Dore, 2006). Incomplete medical histories and absence of information such as prenatal exposure to drugs and alcohol, developmental history, previous health problems, and past treatment outcomes may also impede the quality of health screening (Schneiderman et al., 2007). For these reasons, along with the fact that most foster children have experienced early traumas that are known to have ongoing psychological and social consequences, it has been recommended that foster children receive routine screening and regular reassessments even if they appear to be functioning within acceptable norms (Kerker & Dore, 2006; Schneiderman et al., 2007).

10.2.2 Timely and Continuous Health Care

It is essential that procedures are in place to ensure that foster with health needs receive timely and continuous care (Leslie et al., 2000; Simms et al., 2000). A number of researchers (e.g., Chisolm et al., 2009; Lindsay & Chadwick, 1993; Simms et al., 2000; Leslie et al., 2005) have highlighted the many barriers to service use that exist for foster children. These barriers include poor identification of children's needs, poor communication between social workers, foster parents, and health providers, incomplete medical histories, and frequent placement changes that result in fragmented and discontinuous care (Chisolm et al., 2009; Lindsay & Chadwick, 1993; Simms et al., 2000; Leslie et al., 2005). Solutions such as electronic health passports and medical homes for foster children have been proposed in the US and show promise in increasing continuity of healthcare (Chisolm et al., 2009; Lindsay & Chadwick, 1993; Simms et al., 2000). Similar approaches could be employed in the Australian context.

10.2.3 Treatment of Problems: Effective Health Resources and Services

There is a great need to provide not only adequate, but also effective healthcare resources and services for foster children to lessen the impact of their problems on their personal, academic

and social lives. In this way, it may be possible to reduce both the current and long term personal and societal costs associated with foster children's health problems.

In recent years, there has been emerging evidence that the unmet health needs of foster children, particularly those related to emotional and behavioural problems, impose substantial and measurable costs upon alternative care systems and social services (Bromfield & Osborn 2007; Delfabbro & Barber, 2004; Minnis et al., 2006). However, these costs are not necessarily being directed towards specialised health services that can adequately address the complex nature of foster children's problems. For example, the results from a study by Minnis et al., (2006) showed that while foster children with mental health problems attract a higher level of costly service support from a wide range of agencies (e.g., social workers, general practitioners, paediatricians), they are no more likely than foster children without mental health problems to be receiving help from specialised mental health services (i.e., Child and Adolescent Mental Health Services) (Minnis et al., 2006).

Furthermore, in many Western jurisdictions where financial reimbursement to foster parents varies according to child characteristics, governments are having to pay more to obtain the same number and often, the same quality, of placements for children who are entering the system with increasingly complex and challenging problems (Delfabbro & Barber, 2006). Delfabbro and Barber (2006) found that in South Australia, where foster carers are paid 'special need loadings' (in addition to the standard payment) to care for more difficult children, the probability of a loading being applied was almost a linear function of the level of children's behavioural disturbance. Apart from causing significant personal impairment, these results suggest that foster children's behavioural problems are resulting in increased government

expenditure on services that may not be suitable or adequate to address the complex nature of these problems.

The consequences of failing to address foster children's health problems can be serious and long-lasting. Research has shown that children with a history of foster care (Courtney & Dworsky, 2006; Daining & DePanfilis, 2007), children who have experienced early adversities such as maltreatment (Gilbert et al. 2009), and children with behavioural and emotional problems (Scott et al., 2001) all have poorer long-term outcomes. Taken together, these findings suggest that foster children with mental health problems are at particularly high risk for negative long-term outcomes. Furthermore, in addition to the trauma of early adversities (from which many young people are still recovering), challenges associated with being in care, and poor mental health and well-being, youth in alternative care face an abrupt transition from dependence on state care to independent and self-sufficient living once they reach 'adulthood' at 16-18 years of age (Daining & Painfilis, 2007; Mendes et al., 2008).

Studies of youth leaving care have shown that many are not adequately prepared for independence and experience challenges in accessing necessary resources and opportunities (such as education, housing, and employment) (Daining & DePanfilis, 2007; Mendes et al., 2008), particularly as they have little, if any, direct family or community support networks (Mendes et al., 2008). Outcome studies conducted to date indicate that youth who experienced foster care and/or transitioned from foster care, have poorer long-term outcomes than their peers in the general community across a number of important dimensions. They are more likely to experience continuing mental and physical health problems, low educational attainment, underemployment, economic disadvantage, need for government assistance, homelessness, teenage parenthood, substance abuse, juvenile delinquency and adult criminality (Buehler et al., 2000; Courtney &

Dworsky, 2006; Mendes et al., 2008, Pecora et al., 2006; Vacca, 2008; Vinnerljung, Franzen, & Danielsson, 2007).

In recent times, there has also been increasing recognition of the economic and social consequences of behavioural and social problems originating in childhood (Scott et al., 2001; Foster & Jones, 2006). For example, in a study of 142 ten-year olds who were followed to adulthood in London, Scott et al. (2001) found that antisocial behaviour in childhood was a predictor of how much an individual will cost society. By the age of 28 years, costs for individuals with conduct disorder were 10 times higher than for those with no problems and 3.5 times higher than for those with conduct problems (Scott et al., 2001). In his comprehensive analysis, Cohen (1998) calculated that the behaviours and actions of high-risk young people may result in societal costs in the order of \$US2 million (current dollar value) (Foster & Jones, 2006). This value was based on the costs to society of three categories of individuals; career criminal (\$1.3-\$1.5 million), heavy drug user (\$370,000-\$970,000), and high-school dropout (\$243,000-\$388,000) (Cohen, 1998; Foster & Jones, 2006). The costs of high-risk youth are borne by many services and agencies (including health, social, criminal justice, and education services), but few of these services provide preventative measures which may be more cost effective (Scott et al., 2001). In fact, there is evidence to show that investment in intervention programs designed to improve the mental health of children can result in savings in the long-term (Bayer et al., 2009).

The need for an increased focus on the prevention of child maltreatment and early family intervention before young people enter the alternative care system has been established, but the needs of children already in the system often do not receive due attention (Cashmore, Higgins, Bromfield, & Scott, 2006). The time that young people spend in the alternative care system is opportune to deliver appropriate and effective interventions and services to address their health

needs, thereby improving their current circumstances and long-term outcomes. Although governments can be reluctant to invest in expensive interventions that do not accrue benefits until the future, as already discussed, children's emotional and behavioural problems are imposing current financial burden on public services (i.e., by increasing the costs of placements and placing pressure on public services that are not equipped to deal with foster children's complex mental health needs). Effectively addressing the emotional and behavioural problems of foster children may lead to both immediate and long-term reductions in public expenditure.

10.2.4 Quality of Home-Based Care and Other Placement Options

The significant mental and physical health problems and poor quality of life of children in foster care identified in the present study, provide further support for the view that foster children need a corrective or remedial environment in order to optimise their chances of achieving a normal or healthy standard of well-being (Barth, Green et al., 2008). As pointed out by Barth, Green et al. (2008), the main child welfare service provided to foster children, who have often experienced significant and numerous adversities such as abuse and neglect, is the care they receive in their placements. Home-based care has become the placement option of choice because it is considered to avoid problems associated with institutional care and provide 'normalcy' by modelling the family environment in which most children live (Barber & Delfabbro, 2004). Although there is some evidence to suggest that home-based care leads to improvements in psychosocial functioning for most children (e.g., Barber, Delfabbro, & Cooper, 2000; Barber & Delfabbro, 2004), the high level of clinically significant mental health problems and poor health-related quality of life identified amongst children in foster care in the present study, suggest that there is still considerable room for improvement. In recent times there has been emerging international evidence that questions the extent to which the home-based care environment is adequate for the development of maltreated and vulnerable children. For example, Orme and

Buehler (2001) found that about 80% of the home-based care environments in which children were placed were not developmentally safe. Likewise, Barth, Green, et al. (2008) found that home-based placements in the US offered foster children less cognitive stimulation than received by children in the general community. Foster parents were also more likely to be older, to have less education, and to live below the poverty level (Barth, Green, et al., 2008). Although there is little information available about the quality of home-based care placements in Australia, the majority of foster homes are located in low socio-economic areas suggesting that they may lack the resources needed to adequately meet the high level of need identified amongst many foster children in the present study. Given the association between poverty and lower levels of parental education and literacy, low-income caregivers may also be less capable of providing appropriate levels of stimulation for children (Shlonksy & Berrick, 2001). Furthermore, even after controlling for family-level characteristics, research has shown that disadvantaged neighbourhoods have adverse effects on children's mental health (Levanthal & Brooks-Gunn, 2000; Schneiders et al., 2003).

Alternative care systems across Australia currently offer a very limited number of care options (Bromfield & Osborn, 2008) none of which may be ideal for vulnerable children. In recent times, a number of researchers have identified a need for a wider range of placement options to be investigated, in order to determine whether they could provide more suitable care for children, particularly those with very serious emotional and behavioural problems who are not suited to conventional home-based care (e.g., Bromfield & Osborn, 2008; Delfabbro & Osborn, 2005; Delfabbro, Osborn, & Barber, 2005). Suggested alternative care arrangements include appropriately designed residential and group care and Therapeutic or Treatment Foster Care (TFC) (Delfabbro & Osborn, 2005). Although TFC can take different forms and names (e.g., Specialised Foster Care, Wraparound Foster Care, Multidimensional Treatment Foster Care), it

commonly refers to specialised and intensive family-based treatment for children with complex emotional and behavioural needs. TFC is provided by highly trained caregivers whose remuneration is proportionate to the difficulty of the task they are undertaking (Delfabbro & Osborn, 2005). An emerging body of literature from the US suggests that TFC can be effective at reducing behavioural problems and increasing stability for challenging foster youth (Kerker & Dore, 2006; MacDonald & Turner, 2008). In a recent study by Zerbe et al. (2009), results showed that investment in a high quality privately funded family foster care program (i.e., Casey Foster Care Program) in the US that provided longer term, more intensive, and more expensive services than public programs was associated with more positive adult educational, health and social outcomes, including reduced rates of mental disorders and substance abuse (Zerbe et al., 2009).

Most alternative care systems across Australia have implemented some form of specialised care (Bromfield & Osborn, 2008), however, there is currently a short supply of these placements for children with challenging needs. Furthermore, due to the absence of Australian evidence in this area, it is unclear to what extent the effectiveness of specialised programs identified in overseas settings (particularly the US) applies to the Australian context (Bromfield & Osborn, 2008).

10.2.5 Foster Carers as Therapeutic Agents and Advocates

Given that 61% of children and adolescents in the present study were found to have mental health problems of clinical significance, it could be argued that at least half of the 31,166 foster children in Australia are in need of specialised foster care placements. However, because of the expense and short supply of specialised placements, it is likely that they will continue to be reserved for a small number of foster children who are exhibiting the most severe emotional and behavioural problems. In other words, at least in the near future, most children and adolescents

with serious mental health problems will continue to reside in conventional home-based care placements. This challenges child welfare researchers, practitioners, and policy makers to find ways of improving the quality of care that is provided within home-based care settings. It also challenges the traditional role of home-based foster care. As stated by Bath (2000), “it appears that foster care is often being asked to do a job it was not designed for – the care, management and treatment of children with seriously challenging behaviours” (p. 13).

Although all foster carers receive some training, they receive limited training about how to manage disturbed children, and may lack the skills needed to recognise mental health problems, understand the nature of complex needs, and navigate health services (Horwitz et al., 2000; Kerker & Dore, 2006). Furthermore, as pointed out by Kerker and Dore (2006) foster parents may not be willing or able to engage in the time-consuming advocacy that is often necessary in order to access and receive services, particularly when children are in their care for a short period of time.

If the needs of foster children who are entering alternative care systems with increasingly challenging behavioural and emotional problems are to be met, then perhaps the role of the foster parent needs to be re-evaluated. Foster parents have the most contact with children placed in their homes and, given adequate training and support, may be best placed to identify, address and advocate for children’s needs as they arise. While there is much debate about whether the role of foster parents should be professionalised (Kerker & Dore, 2006), serious consideration should be given to equipping foster parents with the skills needed to serve as therapeutic agents rather than simply as substitute carers (Leslie et al., 2005).

10.2.6 Reducing Caregiver Burden: Support for Foster Carers

As already discussed, the results of this study showed that caregivers are under substantial strain due to the needs and problems of the children in their care. In fact, the results showed that the impact upon foster carers is similar to the impact upon parents who are caring for children with chronic conditions such as diabetes, asthma and cystic fibrosis (Sawyer et al., 2005). Caregiver stress may compromise the quality of care that foster parents are able to provide to children, and may also contribute to caregiver attrition. For these reasons, it is essential that foster parents receive adequate support and assistance. Recent research conducted in South Australia, has shown that foster carers' sense of self-efficacy in managing children's difficult behaviour is positively associated with foster carer well-being, satisfaction, and intention to continue providing home-based care (Whenan et al., 2009). These results suggest that standard training programs should incorporate components that focus on building parenting self-efficacy (Whenan et al., 2009). Providing foster carers with the skills and knowledge needed to appropriately handle difficult situations, manage children's problematic behaviours, and understand the underlying issues associated with these behaviours, may serve dual purposes by increasing the quality of care provided to foster children and reducing carer stress and 'burn out' (Whenan et al., 2009).

10.3 Study Strengths and Limitations

10.3.1 Strengths of the Study

This is the first study to provide comprehensive data describing the mental health and well-being of children and adolescents in home-based care. Researchers and practitioners in the child welfare sector have frequently discussed the behavioural, emotional, and mental health problems of children in home-based care (Bromfield et al., 2005), however, until now, there was limited good quality and comprehensive information available about the mental health and well-being of children in care, particularly in Australia. This is a serious omission given that over 31,000 children are currently in alternative care in Australia (the majority in home-based care), and important decisions are being made regularly that affect their lives (Cashmore et al., 2006). This study is the first to provide a comprehensive ‘snapshot’ or ‘picture’ of the health and well-being of children in home-based care in Australia. This information can be used to identify the needs of children in home-based foster care and provides a strong and necessary foundation for building a research base for children in care.

Other strengths of the study are i) its good response rate, ii) the use of two informants to assess the mental health and well-being of older participants, and iii) the availability of a comparison group.

Response Rate

Previous studies have failed to recruit representative samples of foster children (e.g., Clark & Prange, 1994; McAuley & Trew, 2000; Urquiza & Wirtz, 1994), and some have even been abandoned due to high non-response rates (e.g., the studies by Gilbertson & Barber, 2002). Good response (71%) and participation (77%) rates were achieved in the present study due to

substantial resources being committed to building a strong and co-operative research and working partnership with Families SA, the South Australian child welfare department.

Informants

Data about children and adolescents in care has most commonly been obtained by foster parents or case workers. The perspectives of young people in alternative care have rarely been included in Australian or overseas foster care research. In the present study, information was obtained from adolescents (aged 13 to 17 years) about their mental health, health-related quality of life, rates of health-risk behaviours, and use and access to health services.

Comparison Group

Few studies have compared the health status of foster children with that of a comparable sample of children in the general community (Hansen et al., 2004). This is the first study to directly compare the mental health, health-related quality of life, rates of health-risk behaviours, and service use of young people in alternative care in Australia, with a comparable group of young people living in the Australian general community, which were collected using the same methodology and measures. Although there are concerns about undertaking normative comparisons of young people in care, due to background problems that place these children at significant disadvantage (Barber & Delfabbro, 2004), normative comparisons are useful in identifying the extent of problems amongst young people in care.

10.3.2 Limitations of the Study

Limitations of the study include i) its use of a cross sectional design, ii) it was descriptive in nature, iii) that children and adolescents who were considered too distressed to participate were excluded from the study, iv) that the sample was comprised inadvertently of children and

adolescents who were generally in stable placements and v) potential differences in reporting between participants in home-based care and those in the general community.

Cross Sectional Design

The use of a cross sectional design meant that it was not possible to identify potential cause and effect relationships between variables. Longitudinal studies can provide evidence to indicate whether young people enter foster care with existing mental health problems and poor quality of life and well-being, or whether placement in home-based care causes or contributes to young people's well-being and functioning. Given that young people enter care following the experience of significant adversities, it is likely that many have existing emotional and behavioural problems and impaired quality of life and wellbeing. It is also likely however, that the process of being placed in care poses further risk for healthy functioning because of the separation from existing relationships and disruption that children experience during this time (Halfon et al., 1992). Children's experiences while in care may also impede their healthy development due to exposure to various risk factors including placement instability and breakdowns, poor quality housing in disadvantaged neighbourhoods, and insufficient access to required healthcare.

Descriptive Nature of Study

The aim of this study was to provide the best quality and most comprehensive 'picture' of the mental health and well-being of children in home-based foster care in Australia, available to date. Aside from examining age and gender effects, this study did not seek to explore relationships between other variables, as it was beyond the scope of this thesis. Nonetheless, data from the current study provide a good foundation from which to build, and from which to explore relationships between variables in the future.

Exclusion of Distressed Children and Adolescents

A number of children and adolescents in home-based foster care were excluded from the study at the request of Families SA staff, who were concerned that the children were too distressed to participate in a research project. It is likely that these distressed young people were experiencing significant mental health problems and impairment to their health-related quality of life and well-being. It is possible that the inclusion of these young people would have resulted in even bigger differences between the well-being of those in foster care and those in the comparison group.

Stable Sample

The present study sample was comprised mainly of children and adolescents who had been in care for reasonably long periods of time and who were in relatively stable placements. Attempts were made to reduce the probability of excluding children and adolescents who moved placements frequently, by employing the eligibility criterion that young people needed to have been in their current placement for only one month (or longer). It was not possible to employ a shorter time-frame than one month, because caregivers needed to know participating young people well enough to provide relevant information about their mental health and well-being. Given that the present study sample comprised of young people in stable care, it is likely that a proportion of young people in 'foster care drift' were excluded. Thus, the results of this study cannot be assumed to apply to young people who have had multiple placements over short periods of time.

If the above groups of children - those who were too distressed to participate and those who move placements frequently - had been included in the study, it is likely that the results

would have identified an even higher prevalence of mental health problems and poorer well-being and health-related quality of life for children in care.

Differences in Participant Responses

It is possible that foster carers and foster children responded differently on measures of health and well-being to parents and their children in the general community. Foster parents generally have more experience than parents in the general community in caring for emotionally disturbed children. As a result, they may either be more attentive to problem behaviours (Courtney & Zinn, 2002), or they may not perceive that a child in their care engages in a particular behaviour “often” because they are comparing the child to other troubled foster children. Similarly, foster youth may not perceive that they engage in particular behaviours “often” because they are comparing themselves to their peers who are also often troubled youth who have experienced significant adversities (Courtney & Zinn, 2002). Foster youth may also underreport problem behaviours due to concerns about the reactions they might receive from carers or caseworkers (Courtney & Zinn, 2002).

It should also be noted that a small number of foster children (n=12; 3.7% of the sample) in the present study were known to their foster parents for less than six months. Although problem items on the CBCL are typically rated “now or within the past six months”, foster carers of this group of children were asked to rate problems “now and over the total length of time they had known the child”. It is possible that this shorter reporting period resulted in an underestimation of the behavioural problems of this group of children.

10.4 Future Research

Recent reviews (e.g., Bromfield & Osborn, 2007; Cashmore et al., 2006) and audits of Australian alternative care research (i.e., Cashmore & Ainsworth, 2004) and child protection research (Higgins et al., 2005) have highlighted that there is an overall shortage of research for child protection and alternative care research in Australia, “such that it is not possible to claim an adequate evidence-base for sound policy and practice decisions, or to be able to single out particular areas as a priority for research” (Cashmore et al., 2006 p. 8). These conclusions are consistent with views of overseas researchers including Courtney (2000) who stated that,

trying to identify the important gaps in the research literature on children in out-of-home care is akin to trying to find the prettiest blooms in a field of wildflowers: There are so many there that one is hard put to choose only a few (p. 743)

There are many factors which are believed to have contributed to the lack of sound research on children in alternative care. For example, it is generally more difficult to identify and access samples of foster children for research, not only because they are dispersed in different homes throughout child welfare jurisdictions and cannot be accessed at a single location (like research with children in schools or health centres), but also because of difficulty in gaining consent from legal, ethical and child welfare officials (Berrick et al., 2000). Perhaps a bigger barrier to conducting research in this area however, has been the historical lack of funding for research on children in alternative care (Cashmore et al., 2006; Courtney, 2000). The recent Australian audits of alternative care research (i.e., Cashmore & Ainsworth, 2004) and child protection research (Higgins et al., 2005) both revealed very low levels of expenditure on research in these areas compared with the overall expenditure on services. There is growing recognition of the need for adequate funding for child protection and alternative care research,

both in Australia and internationally, so as to support larger-scale and longitudinal studies that overcome the limitations associated with cross-sectional, small and isolated projects that have more limited generalisability (Cashmore et al., 2006; Courtney, 2000).

Although there is a need for good quality research in all areas relating to children in alternative care (Bromfield & Osborn, 2007), the results of this study - that a large proportion of children currently in care have poor mental health and well-being - highlight the urgent need for research that identifies effective approaches to improve the lives and futures of these young people. This is especially the case given evidence that both foster children and those with mental health problems are at increased risk for negative long-term outcomes (Courtney & Dworsky, 2006; Scott et al., 2001). Key research areas that need to be addressed are described below.

10.4.1 Longitudinal Research

Relatively few longitudinal studies have been conducted to investigate how children are faring in foster care. Most studies, including the present study, have been cross-sectional and involve the assessment of children already in care. Results from these studies cannot provide any information about how foster care has affected children's mental health and wellbeing, whether there are identifiable child or family characteristics that are associated with better outcomes, and whether variations in foster care experiences (e.g., type of placement, number of placement changes) are associated with different outcomes. There is a need for more longitudinal research to explore associations between foster children's demographic, background, and placement characteristics and experiences, and their later mental health and well-being, particularly in Australia. Longitudinal research can provide information about cause and effect relationships, and identify characteristics that are associated with better outcomes for children in care. The growing resiliency literature has highlighted the importance of examining both vulnerability and

protective factors so as to increase knowledge that may assist in improving intervention and prevention strategies (Taussig, 2002).

The most significant longitudinal study conducted to date has been the US National Survey of Child and Adolescent Well-Being (US Department of Health & Human Services, 2005). This was a congressionally mandated project that followed over 6,000 children aged birth to 15 years who had come into contact with the child welfare system. Although the study only followed children for six years, it was the first study of its kind and yielded extensive data that can be used to inform program, policy, and practice issues (US Department of Health & Human Services, 2005). There is an urgent need for longitudinal studies of this size and magnitude in the Australian context.

10.4.2 Quality and Effectiveness of Home-Based Care and Other Placement Types

The high rate of clinically significant mental health problems and poor health-related quality of life identified amongst children and adolescents in the present study suggests that home-based care may not be an adequate intervention for many foster children. Although home-based care now accounts for the vast majority of placements across Western jurisdictions, there is relatively little information available about the quality of the care environment provided to children in these settings, particularly in Australia. Emerging international evidence suggests that foster carers may be providing inadequate environments for foster children (Barth, Green, et al., 2008), but it is unclear whether these results translate to foster homes in Australia.

Despite child welfare systems providing children with various services (e.g., foster family homes, group homes, residential centres) over many decades, we still know little about the comparative benefits or effectiveness of different placement alternatives (Courtney, 2000). There

is a need for program evaluation across the range of child welfare services (Courtney, 2000) to determine the effective components of home-based care, kinship care, residential care, group care and specialised care such as Treatment Foster Care (Bromfield & Osborn, 2008), particularly in Australia. As pointed out by Bromfield and Osborn (2008), there is also a need “to examine what types of children and young people are more likely to benefit from what types of services at what time in their care experience” (p. 30). As argued by Ainsworth and Hansen (2002), “only practice that has been subject to rigorous effectiveness research can truly claim to be ethical practice” (p. 38).

10.4.3 Development and Evaluation of Therapeutic Interventions

The high rate of clinically significant mental health problems identified in the present study suggest that, in addition to good quality placements, foster children may also require clinical or therapeutic services that are specially designed to address their problems. Currently however, there is limited information describing therapeutic treatments or their effectiveness for foster children’s mental health problems (Tarren-Sweeney, 2005; Tarren-Sweeney & Hazell, 2006). Given the prior experiences of foster children, findings from treatment outcome studies of children in the general community may not be relevant to children in care. It is unclear whether the mental health problems experienced by foster children who have experienced early adversities have similar underlying processes to the problems experienced by children in the general community (Tarren-Sweeney, 2005; Tarren-Sweeney & Hazell, 2006). As pointed out by Bromfield and Arney (2008), it is important that any interventions or services provided to children in alternative care are effective and, “at the very least, do no further harm” (p.1).

10.4.4 Cost Benefit Analyses

The development of services and interventions designed to help foster children should also be accompanied by cost-benefit analyses. While intervention and prevention programs involve known expenditures in the present, the benefits tend to be more elusive and do not accrue until the future (Cohen, 1998; Foster & Jones, 2006). As a result, governments can be reluctant or unwilling to invest in expensive intervention programs. By providing information about the benefits and cost-effectiveness of different programs designed to assist foster children, researchers can play a key role in documenting the need for diverting expenditure from problems after they occur to prevention.

Of course, economic analyses only tell part of the story. Many benefits of intervention and prevention programs involve reduced tangible or intangible costs to society that do not appear in public budgets (Foster & Jones, 2006). As pointed out by Foster and Jones (2006), however, the same applies to other government services, such as public education, health, and housing. These services create public and private benefits, some of which may never appear in public budgets, which accrue over time. Despite this, the public assumes responsibility for educating children (Foster & Jones, 2006), and providing medical treatment and housing to those in need. Public responsibility for providing vulnerable foster youth with the resources they need to succeed in life should also be a priority.

10.4.5 Translation of Research into Policy and Practice

It is important that child welfare research findings are disseminated and used effectively, and that they inform policy and practice so as to improve outcomes for children and their families (Cashmore & Ainsworth, 2003). After all, as pointed out by Cashmore et al. (2006), “unless research is to be used there is little point in doing it” (p. 10). In order to increase the effective

utilisation of research, it is important that researchers, practitioners, and policy makers work in closer collaboration to identify research priorities and determine the most suitable ways of disseminating and using the findings (Cashmore et al., 2006; Shonkoff, 2000). Researchers should ensure that their findings are available in a format that is accessible to practitioners and policy makers, not 'locked up' (p. 10) in complicated manuscripts and reports with limited distribution (Cashmore & Ainsworth, 2003).

APPENDIX A: Publications and Conference Proceedings Related to the Thesis

Carbone, J.A., Sawyer, M.G., Searle, A.K., & Robinson, P. (2007). The health-related quality of life of children and adolescents in home-based foster care. *Quality of Life Research*, 16(7), 1157-1166.

Sawyer, M.G., Carbone, J.A., Searle, A.K., & Robinson, P. (2007). The mental health of children and adolescents in home-based foster care. *Medical Journal of Australia*, 186(4), 181-184.

Carbone, J.A. & Sawyer, M.G. (2006). The mental health of children and adolescents in home-based alternative care. In B. McDermott, B. Nurcombe, S. Dean & C. Paul (Eds.), *Child and Adolescent Mental Health: Nurturing Diversity: 17th World Congress of the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP) 2006 Book of Abstracts*.

Children and Adolescents in Home-Based Care

**Study Information Sheet for Children, Youth
and Family Services Staff**

This is a collaborative study involving staff from Children, Youth and Family Services and the Women's and Children's Hospital which will provide new information about the mental health and well-being of children and adolescents living in home-based care (including community residential care) in South Australia. The aim is to measure the prevalence of emotional and behavioural problems among children and adolescents in care and the impact these problems have on their lives and those of their care-givers. The study will also investigate the extent to which children are obtaining help from professional services for emotional and behavioural problems.

The study design is based on the Child and Adolescent Component of the National Survey of Mental Health and Well-Being, funded by the Commonwealth Government. This was the first survey to describe the mental health and well-being of children and adolescents across Australia. It provided important information about the prevalence of mental health problems among Australian children and adolescents. It also provided information about the degree of disability associated with mental health problems and the extent to which children and adolescents are receiving help for their problems. However, because this was a large general community survey, the results do not provide information specifically about children and adolescents living in home-based care.

Children and adolescents aged 6-17yrs, living in home-based care in metropolitan Adelaide, and their care-givers are being asked to take part in this study. Social workers / youth workers will have the opportunity to discuss the study with children/adolescents for whom they have delegated responsibility, before the research team makes contact with families.

Care-givers will be invited to complete a questionnaire about child and adolescent problems and about the impact of these problems on care-givers. Children and adolescents aged 13 years and over will also be asked to complete a questionnaire. For those who agree to participate, interviewers from the Women's and Children's Hospital will bring the questionnaires to the care-givers and children at a time and place that is convenient to them. The formal consent of children and care-givers will be obtained before the questionnaires are completed. Although the questionnaires are designed to be self-completed, the interviewers will be available to help children/adolescents

complete their questionnaire if they want help. The questionnaires should take about 30 minutes to complete.

In order that the results truly represent all children and adolescents in home-based care, and their care-givers, it is important that as many people as possible take part in the study, *regardless of whether or not they have experienced any problems*. Even if the children/adolescents do not have any problems, we would be grateful if they and their care-givers would still participate, so that we get an accurate picture of children and adolescents in home-based care.

We would like to stress that any information provided in the study will be treated in the strictest confidence. No names will be put on any questionnaires and no information about individual children/adolescents or their care-givers will be given to anyone without their permission. The only exception to this is the legal requirement to pass on information about child abuse or neglect to CYFS. Unless they give permission, an individual child's/adolescent's results or their care-giver's will not be given to their delegated social worker/youth worker. The results of the study will be presented about the whole group of participants, not about individuals. The survey is completely voluntary and participants may withdraw at any stage.

The study has the approval of the Research Ethics Committee at the Women's and Children's Hospital (contact Ms Brenda Penny, phone: 8161 6521 if you have any concerns) and the Ethics Committee at the Department of Human Services.

For further information about the study, please contact Ms Jo Carbone or Professor Michael Sawyer (Tel. 8161 7207) at the Women's and Children's Hospital.

APPENDIX C: Sample Letter for Foster Carers



72 King William Road
North Adelaide
South Australia 5006
Telephone (08) 8161 7000
Facsimile (08) 8161 7459

Dear

We are writing to ask for your help in a study of the mental health and well-being of children and adolescents living in home-based care. The aim is to find out how many children and adolescents experience emotional and behavioural problems and the impact these have on their lives. The study will also provide information about whether children with problems are receiving adequate help. This will enable us to improve services available to them.

The study includes children and adolescents aged 6-17yrs who are living in home-based care in Adelaide. If you agree to take part we will ask you and the young person you care for (if they are aged 13 years or more) to complete a questionnaire about child and adolescent problems, and quality of life. The questionnaire takes about 30 minutes to complete. An interviewer from the Women's and Children's Hospital will bring the questionnaires to your home, or to a place convenient to you, at a time which suits you. Your social worker/ youth worker may speak with you about the study. In order that the results truly represent all children and adolescents in home-based care, and their care-givers, it is important that as many people as possible take part in the study. Even if you do not have any problems, we would be grateful if you would still participate in the study so that we get an accurate picture of children and adolescents in home-based care, and their care-givers.

The information that you provide will be treated in the strictest confidence. In particular, no information about individual children/adolescents or their care-givers will be given to anyone without their permission. The results will be written about the whole group of participants, not about individuals. The survey is completely voluntary and you can withdraw at any stage.

The study has been funded by the Australian Rotary Health Research Fund as part of their national program of research and promotion of mental health. It has been approved by the Research Ethics Committees at both the Women's and Children's Hospital, and the Department of Human Services. If you have any questions about the study please feel free to contact Professor Michael Sawyer or Jo Carbone (telephone: 81617207) at the Women's and Children's Hospital.

Yours sincerely,

Professor M. G. Sawyer
Head, Research and Evaluation Unit
Women's and Children's Hospital

Ms Nerida Saunders
Director, Children, Youth & Family Services
Department of Human Services

APPENDIX D: Sample Letter for Adolescents in Home-Based Care



72 King William Road
North Adelaide
South Australia 5006
Telephone (08) 8161 7000
Facsimile (08) 8161 7459

Dear

We are writing to ask for your help in a study about the mental health and well-being of children living in home-based care. We want to learn whether children in care have emotional and behavioural problems and how these affect their lives. The study will also tell us about whether children are getting the help they need.

The study includes children and adolescents aged 6-17yrs who are living in home-based care in Adelaide. Your social worker/ youth worker will speak with you about the study, and invite you to take part. If you agree to take part we will ask you and the person who is your main care-giver to answer some questions about children's problems. The questionnaire takes about 25 minutes to complete. A person from the Women's and Children's Hospital will bring the questionnaires to you and your care-giver. It is important that as many people as possible take part in the study. Even if you do not have any problems, it would be really helpful if you would still take part.

Your name will not be put on any of the questionnaires that you or your care-giver complete. The information will be put together with what other children and their care-givers say, so we get the whole picture of what is happening with children in care. It is completely up to you whether you take part, and you can stop taking part at any time if you wish.

Both the Women's and Children's Hospital, and Children, Youth & Family Services (formerly FAYS) say it is ok for us to do this study. If you have any questions about the study please feel free to contact Professor Michael Sawyer or Jo Carbone (telephone: 8161 7207) at the Women's and Children's Hospital.

Yours sincerely,

Professor M. G. Sawyer
Head, Research and Evaluation Unit
Services
Women's and Children's Hospital

Ms Nerida Saunders
Director, Children, Youth & Family
Services
Department of Human Services

APPENDIX E: Sample Information Sheet for Participants

Children and Adolescents in Home-Based Care

Study Information Sheet

This study will provide new information about the mental health and well-being of children and adolescents living in home-based care (including community residential care). The aim is to find out how many children and adolescents experience emotional and behavioural problems, and the impact these problems have on their lives. The study will also let us know if those with problems are receiving adequate help. This will enable us to improve services available to them.

The Child and Adolescent component of the National Survey of Mental health and Well-Being, funded by the Commonwealth Government, was the first survey to investigate the mental health and well-being of children and adolescents across Australia. The survey provided important information about the prevalence of mental health problems among Australian children and adolescents. It also provided information about the degree of disability associated with mental health problems, and the extent to which children and adolescents are receiving help for their problems. Because the living circumstances of children and adolescents in home-based care are unique, they deserve special attention. This new study is designed to gather the same information as the national survey, with particular attention to the mental health and well-being of children and adolescents living in home-based care. This will help us to better understand their needs and improve services available to them.

Children and adolescents aged 6-17yrs, in home-based care, and their care-givers are being invited to take part. Care-givers will be invited to complete a questionnaire about child and adolescent problems, including sections on quality of life and the impact of problems on care-givers. Children and adolescents aged 13 years and over will also be invited to complete a questionnaire. Interviewers from the Women's and Children's Hospital will bring the questionnaire(s) to you, at a time and place convenient to you. They will also be available to help children/adolescents complete their questionnaire if they want help. Your social worker may speak with you about the study, and invite you to take part. The questionnaires should take about 30 minutes to complete.

In order that the results truly represent all children and adolescents in home-based care, and their care-givers, it is important that as many people as possible take part in the study, *regardless of whether or not they have experienced any problems*. Even if the children/adolescents do not have any problems, we would be grateful if they and their care-givers would still participate, so that we get an accurate picture of children and adolescents in home-based care.

We would like to stress that all information provided in the study will be treated in the strictest confidence. No information about individual children/adolescents or their care-givers will be given to anyone without their permission. The only exception to this is the legal requirement to pass on information about child abuse or neglect to CYFS (formerly FAYS). Unless they give permission, an individual child's/adolescent's results or their care-giver's will not be given to their delegated social worker. The results of the study will be written about the whole group of participants, not about individuals. The survey is completely voluntary and participants may withdraw at any stage.

The study has the approval of the Research Ethics Committee at the Women's and Children's Hospital (contact Ms Brenda Penny, phone: 8161 6521 if you have any concerns) and the Ethics Committee at the Department of Human Services.

For further information about the study, please contact Ms Jo Carbone or Professor Michael Sawyer (Tel. 8161 7207) at the Women's and Children's Hospital.

APPENDIX F: Consent Form

WOMEN'S & CHILDREN'S HOSPITAL RESEARCH ETHICS COMMITTEE

I/We _____
(care-giver & /or child/adolescent)

**hereby consent to our involvement in the research project entitled:
The mental health and well-being of children and adolescents in home-based care.**

1. The nature and purpose of the research project described on the attached Information Sheet has been explained to us. I/We understand it, and agree to taking part.
2. I/We understand that we may not directly benefit by taking part in this study.
3. I/We acknowledge that the possible risks, discomforts and inconveniences, as outlined in the Information Sheet, have been explained to me.
4. I/We understand that while information gained in the study may be published, we will not be identified and information will be confidential.
5. I/We understand that we can withdraw from the study at any stage and that this will not affect care or any other aspects of our relationship with C.Y.F.S (formerly F.A.Y.S.) or the Women's and Children's Hospital.
6. I/We understand that there will be no payment for taking part in this study.
7. I/We have had the opportunity to discuss taking part in this research project with our C.Y.F.S (formerly F.A.Y.S.) worker, a family member or friend and/or have had the opportunity to have a family member or friend present whilst the research project was being explained by the researcher.
8. I/We are aware that we should retain a copy of the Consent Form, when completed, and the Information Sheet.

Signed (care-giver):..... Dated:.....

Signed (child/adolescent):.....Dated:.....

Full name of child/adolescent:

I certify that I have explained the study to the care-giver and child/adolescent and consider that they understand what is involved.

Signed:.....(Research Assistant) Dated:

NOTE:

Appendices G-I are included in the print copy of the thesis held in the University of Adelaide Library.

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