CHILD, FAMILY AND COMMUNITY FACTORS ASSOCIATED WITH
CHILD EMOTIONAL AND BEHAVIOURAL PROBLEMS

Vicky Coughlan-Ward
BA, BSW, GradDip Psych, BSc (Honours)

Submitted in partial fulfilment of the requirements for the degree of
Master of Philosophy

School of Psychological Sciences
Faculty of Medicine, Nursing and Health Sciences
Monash University
Clayton Campus
Melbourne, Victoria
Australia

December 2014
Copyright Notices

Notice 1

Under the Copyright Act 1968, this thesis must be used only under the normal conditions of scholarly fair dealing. In particular no results or conclusions should be extracted from it, nor should it be copied or closely paraphrased in whole or in part without the written consent of the author. Proper written acknowledgement should be made for any assistance obtained from this thesis.

Notice 2

I certify that I have made all reasonable efforts to secure copyright permissions for third-party content included in this thesis and have not knowingly added copyright content to my work without the owner’s permission.
# Table of Contents

**List of Tables** ........................................................................................................... iv

**Abstract** ..................................................................................................................... vii

**Candidate Declaration** ............................................................................................. viii

**Acknowledgements** ................................................................................................... ix

**Section 1. Introduction** .............................................................................................. 1

  - Literature Overview ................................................................................................ 1

  - Ecological Factors Influencing Mental Health ......................................................... 4

  - The Effects of Low-income on the Mental Health of Families .............................. 6

  - The Effects of Persistent ‘Poverty’ or ‘Low-income’ on the Mental Health of Families ........................................ 10

  - Child Characteristics Associated with the Mental Health of Children ............. 12

  - Caregiver and Family Characteristics Associated with the Mental Health of Children .................................................. 14

    - Employment (Mothers) ....................................................................................... 16

    - Marital Status .................................................................................................... 17

  - Housing .................................................................................................................... 17

  - Absence of Risk Factors ......................................................................................... 18

  - Social/Community Factors Associated with the Mental Health of Children ........ 19

  - Summary of Factors Associated with the Mental Health of Children ............... 23

  - The Current Study .................................................................................................. 23

    - Research Questions .............................................................................................. 23

    - Hypotheses ........................................................................................................... 24
Section 2. Method .......................................................................................................................... 25

Participants .................................................................................................................................. 25

Procedure ..................................................................................................................................... 26

Data Collection at Salvation Army Community Centres ............................................................... 26

Data Collection at Catholic Schools ........................................................................................... 27

Measures ....................................................................................................................................... 28

Family and Community Questionnaire ....................................................................................... 28

Achenbach Adult Self-Report/18-59 (ASR) ................................................................................. 31

QualityMetric's Short Form 36 Health Survey Version 2 (SF-36v2) ............................................ 32

Achenbach Child Behaviour Checklist/6-18 (CBCL/6-18) ......................................................... 33

Achenbach Youth Self Report/11-18 (YSR) ................................................................................ 34

Child Health Questionnaire – Parent Form 50 (CHQ-PF50) ...................................................... 35

School Connectedness Profile ...................................................................................................... 36

Section 3. Results .......................................................................................................................... 37

Data Screening ............................................................................................................................... 37

Sample Size and Statistical Analyses ......................................................................................... 38

Characteristics of Participants and Groups ................................................................................ 38

Participant Age ............................................................................................................................. 39

Family Circumstances .................................................................................................................. 41

Children’s Health ......................................................................................................................... 43

Caregivers’ Health ......................................................................................................................... 51

Predicting Internalising, Externalising and Total Problems in children .................................. 54
Child, Family and Community/Social Variables associated with the CBCL Internalising, Externalising and Total Problem scores .................................. 54

Caregiver, Family and Community/Social Variables associated with the CBCL Internalising, Externalising and Total Problem scores .................................. 64

Child, Caregiver, Family and Community/Social Variables associated with the CBCL Internalising, Externalising and Total Problem scores .................................. 73

Section 4. Discussion ........................................................................................................... 75

Limitations ......................................................................................................................... 85

Implications ......................................................................................................................... 88

Conclusions ......................................................................................................................... 89

References .......................................................................................................................... 90

Notification – Change of Thesis Title .................................................................................. 103

Appendices .......................................................................................................................... 104

Appendix A – Monash University Ethics Clearance and Approval Letters ...................... 104

Appendix B – Letter to Salvation Army Centre Managers and School Principals .......... 108

Appendix C – Salvation Army Project Advertisement, Explanatory Statements and Consent Forms ......................................................................................... 118

Appendix D – Catholic Schools Project Advertisement, Plain Language Statements, Explanatory Statements and Consent Forms ............................................ 129

Appendix E – Family and Community Questionnaire ....................................................... 143

Appendix F – School Connectedness Profile .................................................................... 174

Appendix G – Additional Results Tables .......................................................................... 181
List of Tables

Table 1  Mean Age (in years) of Children by Gender and Group ...........................................40
Table 2  Mean Age (in years) of Caregivers by Gender and Group ...........................................41
Table 3  CBCL Clinical Problem Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .............................................44
Table 4  CBCL Syndrome Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .............................................46
Table 5  CHQ-PF-50 Summary Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .............................................47
Table 6  School Connectedness Profile Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .............................................50
Table 7  ASR Clinical Scores for Caregivers from the Low Income group (N= 28) .................................................................53
Table 8  Pearson’s Correlations between Health Care Card, Child Age, Child Sex, CHQ Child Physical Health, School Connectedness and CBCL Internalising, Externalising and Total Problem scores ........................................55
Table 9.1 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Child Age and Child Sex as the Independent Variables .........57
Table 9.2 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Child Physical Health and School Connectedness as the Independent Variables ...........................................................................59
Table 9.3 Hierarchical Regression Analysis for Variables Predicting Internalising Problem Score ..................................................................................61
Table 9.4 Hierarchical Regression Analysis for Variables Predicting Externalising Problem Score ..................................................................................62
Table 9.5 Hierarchical Regression Analysis for Variables Predicting Total Problem Score ..................................................................................63
Table 10 Pearson’s Correlations between Health Care Card, Caregiver Age, Caregiver Sex, Caregiver Education, Caregiver Physical Health, Caregiver Mental Health, Single Parent Household, Stable Housing and CBCL Internalising, Externalising and Total Problem scores .................................................................66

Table 11.1 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Age and Caregiver Sex as the Independent Variables ...........................................................................................................68

Table 11.2 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Education and Single Parent Household as the Independent Variables ..............................................................................................................69

Table 11.3 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health and Caregiver Physical Health as the Independent Variables ........................................................................................................70

Table 11.4 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health and Stable Housing as the Independent Variables ........................................................................................................72

Table 12 Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health, Child Physical Health and School Connectedness as the Independent Variables .................................................................74

Table G1 Parent Role and Family Structure Information for High Income (N= 22) and Low Income (N= 28) families .................................................................................................................................182

Table G2 Frequency of Financial Difficulties experienced in the past 12 months for High Income (N= 22) and Low Income (N= 28) families .................................................................................................................183

Table G3 Assistance Required for Financial Difficulties experienced in the past 12 months for High Income (N= 22) and Low Income (N= 28) families .................................................................................................................184
Table G4  Education, Employment and Housing Information reported by Caregivers for High Income (N= 22) and Low Income (N= 28) families .................................................................185

Table G5  YSR Clinical Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .....................................................................................186

Table G6  YSR Syndrome Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .................................................................187

Table G7  CHQ-PF-50 Caregiver Perception of Child’s Overall Health and Change Over Time Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families .................188

Table G8  CHQ-PF-50 Child Health & Limitations Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families ........................................................................189

Table G9  CHQ-PF-50 Impact on Parent & Family Limitations Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families ........................................................................190

Table G10 Self-Reported Ratings of Caregivers’ Physical Health for High Income (N= 22) and Low Income (N= 28) families .................................................................191

Table G11 Self-Reported Ratings of Caregivers’ Mental Health for High Income (N= 22) and Low Income (N= 28) families .................................................................192

Table G12  SF-36v2 Norm-Based Scores for Caregivers from the Low Income group (N= 28) ....................................................................................................................193
Abstract

During childhood and adolescence the family and social environments in which children live converge to increase the likelihood of income-related risk factors and the development of emotional and behavioural problems that continue into adulthood. The current study examined the associations among child and caregiver demographics including age and sex, physical and mental health of caregiver, physical health of child, family circumstances including high- or low-income and housing, and the experience of child mental health problems such as depression and rule-breaking behaviours and simultaneously sought to evaluate whether connectedness to school served as a protective factor between low-income and child mental health problems. Participants in the current small cross-sectional study were 56 children aged 11-17 years and their caregivers recruited from 3 Catholic schools and 6 Salvation Army Community Centres in Melbourne. Results showed that there was a strong association between low-income, poor child physical health, poor caregiver mental health and child emotional and behavioural problems; and that high level of school connectedness was associated with decreases in symptoms. These results suggest that children from low-income families are particularly vulnerable to mental health problems and are discussed in the context of positive development of children and adolescents.
Candidate Declaration

I certify that the thesis entitled

**Child, Family and Community Factors Associated with Child Emotional and Behavioural Problems**

submitted for the degree of *Master of Philosophy (Psychology)* is the result of my own work. To the best of my knowledge the thesis contains no material previously published or written by another person. Where reference is made to the work of others in the thesis, due acknowledgement is given.

I also certify that this thesis has not been submitted for an award of any other degree or diploma in any university or other institution.

Full Name: Vicky Coughlan-Ward

Signed:

Date:
Acknowledgments

Many people have assisted me along the way and have helped me in my journey to the production of my thesis. Firstly, I acknowledge and thank my thesis supervisors Dr Marie Yap and Prof Kim Cornish who were kind enough to step in the 11th hour and see me through to completion. They were both very generous with their time and provided me with endless support and inspiration to see me over the line. Many thanks are extended to Dr Katrina Simpson who assisted with my statistical analyses and continuously encouraged me to continue even when the tasks ahead seemed insurmountable. This high level of support was also provided by the research and administrative staff and I thank them for their time, knowledge and information.

I acknowledge and especially thank my initial thesis supervisor, Dr Vickii Jenvey, who trusted me to pursue my interests with a high degree of autonomy; who was my biggest advocate; who consistently followed my progress; and was immediately responsive to my needs when family and health circumstances changed and especially when I was personally and deeply affected by the cyclonic flooding of 2011.

I owe many thanks to the families who gave of their time to participate in the study and complete the myriad of questionnaires and surveys. Just as important were the many people who facilitated the data collection process, including Centre Managers, School Principals, teachers, students, social workers, caseworkers and case managers.

I want to acknowledge my family, close friends, fellow students and work colleagues for their warmth, support and encouragement, who understood the pressures well and helped out in so many ways both personally and academically.

Lastly, I thank my husband, Chris, and my children, Connor and Kayla, for their love and patience and my loyal border collie, Wally, who spent countless hours by my side throughout the day at night whilst I worked on my thesis. I dedicate this work to them.
Literature Overview

With more and more of government budgets, being spent on health care, recently estimated to be $147.4 billion in 2012-13 (Australian Institute of Health and Welfare (AIHW), 2014), the health and well-being of Australia’s young people has become a national priority for the government (Daley, McGannon & Savage, 2013). The health of young people affects not only their immediate quality of life but also shapes their own future health and that of the nation (Australian Medical Association (AMA), 2013; Eckersley 2008). When young people are in good health they are more likely to achieve better educational outcomes, successfully transition to full-time work and develop healthy adult lifestyles (Muir et al., 2009). An adult with the absence of mental health problems can work productively and is able to make a contribution to the social, human and economic capital of society, thereby being of benefit not only to themselves and their families, but also to society in general (Eckersley 2008; Funk et al., 2010; World Health Organisation (WHO), 2003). While in contrast, an individual with mental health problems, often in personal distress and who may be socially isolated and discriminated against, may generate a social and financial strain on their families and society in general (Funk et al., 2010). For example, in Australia, over $7.2 billion was spent on mental health-related services in Australia during 2011-12 (AIHW, 2013) and the most recently available figures from the Australian Bureau of Statistics (ABS) estimate the annual cost of treating mental health problems to be approximately $20 billion, including the cost of loss productivity and labour force participation, signifying that poor mental health not only puts a strain on the national budget but also on health care services generally (ABS, 2007c). For these reasons and because studies have shown that many of the factors that determine adult health and well-being often originate in childhood and adolescence (AIHW, 2008; AIHW, 2011) our attention needs to turn to the health of young people.
In 2011, using the World Health Organisation’s (WHO) International Classification of Functioning, Disability and Health (ICF), the Australian Institute of Health and Welfare estimated that approximately 8% of young people aged 15–24 years had some form of disability which affected their body function or structure and limited their activities (62% with a physical disability and 39% with a mental disability). According to the figures from the most recent National Survey of Mental Health and Wellbeing, the ABS (2007b) reported that 26% of all young people (aged 16-24) had a mental health problem in the previous year that met the International Classification of Diseases (ICD-10) criteria for a clinical diagnosis of a lifetime mental disorder. The most common mental health problems were Anxiety Disorders (15%) including Post Traumatic Stress Disorder; Substance Use Disorders (13%) predominantly the harmful use of alcohol; and Affective disorders (6%) including bipolar and depression (ABS, 2007b). Using the 11-item Sheehan Disability Scale, approximately 17% of these young people reported that their mental health problems affected them severely in areas such as appearance; mood; sleep; irritability; disruptive or aggressive behaviour whilst the remainder reported having a mild or moderate level of impairment (ABS, 2007b).

So far, we have seen that governments and organisations use a number of various definitions and diagnostic criteria to measure and report on health problems and disability. To make things simpler, we will be discussing mental health problems in the commonly used and understood Achenbach & Edelbrock (1978) terms of internalising and externalising problems where internalising problems can be seen as an over-control of emotions and are negative, problematic behaviours that are directed toward the self and can include anxiety, depression, withdrawal and where externalising problems can be seen as an under-control of emotions and are problem behaviours that are directed toward the external environment and can include difficulties with interpersonal relationships, demand for attention, rule breaking and displays of irritability, aggression and hostility (Achenbach & Edelbrock, 1978).
Given that it is generally accepted that good mental health is a cornerstone to build and maintain a good life that is shared with family and friends and with opportunities to get involved and make a contribution across all aspects of life (Mental Health Commission, 2011), then it stands to reason that good mental health must be promoted throughout childhood and adolescence. Unfortunately, there is no straightforward way or process that can bring about good mental health because often there is disagreement about what constitutes good mental health. Theorists such as Touburg and Veenhoven (2014) suggest that good mental health is caused by the satisfaction of basic, universal human needs (Guillen-Royo, Velazco & Camfield, 2013). They maintain, for example, that people can only be happy if needs such as hunger, warmth, thirst and safety are fulfilled (Guillen-Royo et al., 2013; Veenhoven 1991). In contrast, context theories emphasize that the factors that influence good mental health are variable across both time and individuals, and are dependent upon the circumstances in which people live (Diener, Suh & Oishi, 1997; Huston & Bentley, 2010; Tay & Diener, 2011). What these viewpoints fail to take into account is that they can co-exist within a holistic perspective, as in Bronfenbrenner’s (1986) ecological theory of development, where it is apparent that children’s and adults’ psychological development does not occur in isolation, but rather through the processes of progressively more complex reciprocal interactions between an individual and the persons, objects and symbols in their immediate environment (Bronfenbrenner, 1995; Huston & Bentley, 2010). This viewpoint is supported in the literature, where four domains have often been identified as critical to healthy human development: socio-demographic (including income, education; and employment); parental well-being (including physical and emotional); family functioning (including attachment; parenting practices; and family composition); and neighbourhood quality (including housing; safety; and a sense of connectedness) (Barbarin et al., 2006; Edelman, 2010; Hultman, Hemlin & Hörnquist, 2006; Smith, 2013). The way forward then,
is to focus our attention on the personal characteristics of children and adolescents and their familial and social environment as highlighted by the four interconnected domains so that risk factors for mental health can be identified and their effects ameliorated; and protective factors are recognised and enhanced. These actions will help to create healthy environments where children and adolescents have the best possible chance to grow to full potential and successfully transition into adulthood with the absence of debilitating, long-term mental health problems.

**Ecological Factors Influencing Mental Health**

It is argued that all levels of the social and physical environments have a powerful impact on the mental health of children and adults (McAllister, Wilson, Green & Baldwin, 2005). Therefore, mental health can, in part, be seen as the result of the influence of the proximal environment including the family, school and workplace, and the distal environment, often inclusive of local, national and societal factors such as living in safe neighbourhoods free from crime, violence and pollutants (Bronfenbrenner, 1986; McAllister et al., 2005; Huston & Bentley, 2010). However, it is important to remember, that human beings are widely variable in their biological and psychological characteristics and, as a result, are differentially susceptible to the external conditions and forces to which they are exposed during their lifetime. It is therefore possible two individuals can be exposed to similar environments yet that each one’s psychological development may not follow the same pathway (Bettger, 2012; Bronfenbrenner, 1995).

Such differences in development may be explained by the notion that one’s environment has the potential to either exponentially increase the harm on mental health or can offer a protective buffer by helping to build resilience in the individual (Felner, 2006). For example, a common theme that emerges in the literature is that those who cope well
despite adversity are often those who feel cared for and supported by others in their social networks such as with peers; with other adults and at school, where people feel safe, accepted, valued and secure and particularly in families where there are strong family ties often described as having positive child-parent relationships and where there is perceived support and open communication (Hazel, Oppenheimer, Technow, Young & Hankin, 2014; Kuruvilla & Jacob, 2007; McGraw, Moore, Fuller & Bates, 2008; Prelow, Bowman & Weaver, 2007; Williams & Chapman, 2012). It seems then, that a sense of belonging and connectedness with any social units, including the family, school and community, may be beneficial for mental health, because it is usually built upon a foundation of positive and close relationships where people feel safe and receive the support required to effectively deal with the stresses of life (Birditt, Antonucci & Tighe, 2012; Campos, Ullman, Bernardino, Aguilera & Schetter, 2014; Hazel et al., 2014; Williams & Chapman, 2012).

Personal strengths or weaknesses cannot always protect people from, nor can they completely undermine, the ecological risk factors on mental health and hence, there is a need to adopt an ecological perspective to mental health, where we can examine the development of internalising and externalising problems within the familial and social contexts so that we can identify the underlying and combined agents or processes most beneficial or detrimental to mental health (McAllister et al., 2005). Often, focussing on or trying to ‘fix’ just one part of the problem, for example trying to improve mental health by providing housing stability, is less effective and does not bring about the intended consequence of fostering good health (Belkin, 2010). The failure of the housing projects such as Chicago’s Cabrini-Green in the U.S. highlights the importance of adopting an ecological perspective to mental health. Although many ‘homeless’ families were housed in the high-rise buildings, failure to maintain the buildings and to provide added safety and security measures, saw a dramatic increase in crime, gangs and drugs in the development; and many of the residents lived in
fear, but they continued to stay until the buildings were pulled down because their fear of homelessness outweighed the fear of violence (Belkin, 2010). The mental health of these residents improved soon after moving out (Belkin, 2010). Hence, the adoption of an ecological perspective to mental health and the examination of all aspects of a person and the environment in which they live is the only way for individuals, researchers and communities to create and maintain environments that promote optimal healthy psychological development in children which will continue into adulthood.

The Effects of Low-income on the Mental Health of Families

Often, the resources required for sustaining the mental health of family members and furthering the development of children are dependent on a number of factors, including the family’s financial resources and income (AIHW, 2012) but comparisons of studies on the purported effect of ‘low-income’ on mental health is problematic because often in the literature several terms such ‘income deprivation’, ‘deprivation’, ‘socio-economic disadvantage’, ‘economic hardship’ and ‘poverty’ are used interchangeably and although these terms are used to measure similar constructs, it cannot be assumed that these terms are identical (Haughton & Khandker, 2009). However, meaningful comparisons can still be made but only when these measures of ‘low income’ are used to refer to families whose income falls below a poverty line such as the one used by the Organisation for Economic Development (OECD) which is 50% of median household income (ABS, 2013). In Australia for example, qualification for a Health Care Card from Centrelink, the Federal government income-support agency is commonly used as the short-hand method to identify ‘low-income’ earners because the cut-off figures for eligibility are comparable to the OECD poverty threshold calculated for Australia which is, 50% of $918 (median household income per week) (ABS, 2013; Department of Human Services, 2014; Money Help, 2013).
Continuing on, we turn to look at the work of Fone et al. (2013) who analysed the data provided by 88,623 adult residents of Wales from seven consecutive waves of the annual cross-sectional Welsh Health Survey 2003/04–2010 and examined the associations between income inequality, income deprivation and mental health at both the smaller neighbourhood level and the regional level. Income inequality was calculated using the Gini coefficient (from 0-1), a commonly used measure of income inequality, where a coefficient of zero represents perfect equality, and a coefficient of one represents maximal income inequality where one individual possesses all the wealth. Income deprivation was defined as the percentage of households with annual incomes less than £10,000 equivalent to the U.K. definition of poverty of less than 60% of median income. Mental health was measured using the Mental Health Inventory (MHI-5) a subscale of the 36-item Short Form Health Survey (SF-36) version 2, where questions were scored on a 1-5 scale and summed, so that lower scores indicated worse mental health and higher scores indicated better mental health. The results showed that poorer mental health was significantly associated with female gender, the mid-life age groups (35-54 years), and lower socioeconomic and educational status. At the neighbourhood level, the best mental health was found in neighbourhoods with the highest income inequality where the residents who possessed more of the wealth had better mental health; and worse mental health was found in neighbourhoods with high deprivation where the residents with the lowest incomes had worse mental health. Furthermore, neighbourhoods categorised as high-income inequality/low deprivation had better mental health than neighbourhoods with high-income inequality/high deprivation; and those categorised as low-income inequality/low deprivation had better mental health than neighbourhoods with low-income/high deprivation. This suggests that the effect of deprivation is greater than the effect of income inequality. After adjusting for income deprivation, Fone et al. (2013), found that neighbourhoods of highest income inequality remained significantly associated with better
mental health; and that mental health worsened with increasing income deprivation. These findings emphasise that living in neighbourhoods which are characterised as being in ‘high deprivation’ was important in determining mental health.

Low income has also been associated with increased risk for mental health problems for children and adolescents because it has been linked not only to lower cognitive abilities and school achievement, but also to internalising and externalising problems including depression, anti-social behaviour, dysthymia and suicide (Prelow et al., 2007; Slopen, Fitzmaurice, Williams & Gilman, 2010).

Park, Fertig and Allison (2011) followed 2631 children from birth with follow-up surveys at approximately 1 year, 3 years, and 5 years after birth. Families were recruited from 20 large U.S. cities for the Fragile Families and Child Wellbeing study and data from families whose household incomes were below the federal poverty line were included. Many of these families had their incomes supplemented by the government both in monetary terms and in-kind through the receipt of food stamps and the provision of government health funded health-care. Park et al. (2011) examined mothers’ ratings of child health status and disability; Child Behaviour Checklist (CBCL) scores in the clinical range on the Internalising and Externalising scales; and cognitive development measured using the Peabody Picture Vocabulary Test (PPVT) and graded as below average, average and above average. Park et al. (2011) found that 9.8% of the families had experienced homelessness which was defined as living or having lived in temporary housing; a shelter; an abandoned building; a car; or on the street at the time of interview or in the preceding 12 months and a further 23.6% of families lived with family or friends because of financial problems. The mothers who had experienced homelessness had the highest prevalence rates of mental health problems whilst the mothers who lived with family or friends were younger and had a lower level of education than the mothers who were housed. Park et al. (2011) found that at age 5 between 2% and
5% of the children in the sample had fair or poor health and between 20% and 28% of the sample had mental health problems. The children who experienced homelessness had a higher rate of physical disability and internalising and externalising problems in comparison to those who were housed. Consistent with previous findings, Park et al. (2011) found that as children aged the externalising problems became much more prevalent than the internalising problems for both the homeless and the housed groups. Housing status however, made no difference to cognitive development because at 5 years old, between 44% and 47% of all the children had below-average standardized PPVT scores. The findings of the Park et al. (2011) study show that the hardship which often accompanies poverty, including material deprivation and lack of stable housing has adverse effects on children’s physical and mental health and cognitive development.

Likewise, the effect of low-income on children’s mental health was found in the prospective study conducted by Slopen et al. (2010) where 2,810 children aged 4-14 years (at baseline) and their primary caregivers recruited to the Project on Human Development in Chicago Neighbourhoods were interviewed twice over a 2-year period. Results showed that when compared with children from households with higher incomes, those children whose family income fell below the U.S. federal poverty line were reported to have significantly more internalising and externalising problems in the CBCL clinical range and prevalence rates remained relatively unchanged when the data was re-analysed with the threshold for poverty status set to 130% of the federal poverty line.

A potential problem with such findings would be the temptation to draw the conclusion that low-income will inevitably lead to mental health problems. Slopen et al. (2010) controlled for child characteristics such as gender, age, race; and caregiver characteristics including age, education, cohabitation status, depression, and alcohol problem along with number people living in the household. Park et al. (2011) controlled for similar
characteristics in addition to mother’s overall health status, exposure to domestic violence and mother’s mental health history trying to partial out their influences in the attempt to identify the variance in internalising and externalising problems attributable to low-income alone. However, they did not take into account the influence that variables such as parenting stress or negative parenting practices may have nor did they consider that such variables may mediate the effect of low-income on internalising and externalising problems.

Given that the literature provides strong evidence for the association between low-income and mental health problems, it is pragmatic to examine the impact that living in persistent ‘poverty’ or ‘low-income’ may have on the mental health of children and adolescents.

**The Effects of Persistent ‘Poverty’ or ‘Low-income’ on the Mental Health of Families**

Studies show that poverty is consistently a strong predictor of externalising and internalising problems of children and adolescents and that unfavourable outcomes for children operate cumulatively, so the more risks children experience, the worse their socio-emotional and cognitive development (Gassman-Pines & Yoshikawa, 2006; Najman et al., 2010; Prelow et al., 2007).

Gassman-Pines and Yoshikawa’s (2006) study of child outcomes among 1178 low-income families living below the poverty line in the U.S. found that the more risk factors children experienced, for example, material hardship; food insufficiency; living in single-parent families; and unemployment, the higher were the mother- and teacher-ratings of externalising and internalising problems on the Problem Behaviour Scale of the Social Skills Rating System and the lower their levels of school achievement on the Academic Subscale of the same instrument. Similarly, Najman et al.’s (2010) cohort study of 2609 children born in a public hospital in Brisbane, Australia between 1981 and 1984 and followed up on at ages 14
and 21 years found that children who were exposed to recurrent poverty, whose families were estimated to be at or below the poverty line at recruitment and follow-up; whose parents were separated or divorced; and whose mothers were depressed and anxious were themselves significantly more likely to have anxious and depressed problems (internalising) in the Youth Self-Report (YSR) and Young Adult Self-Report (YASR) clinical range, at both follow-ups. However, in contrast, Slopen et al. (2010) found that at follow-up, persistent poverty was not significantly associated with externalising problems and only marginally associated with internalising problems. This disparity shows that not all people who are economically and socially disadvantaged will become depressed or exhibit delinquent and criminal behaviours (Guillen-Royo et al., 2013); and as previously mentioned one possible explanation for this is that those who cope well are often those who have strong family ties and support networks (Hazel et al., 2014; McGraw et al., 2008; Williams & Chapman, 2012).

Cumulative evidence now suggests that growing up in a relatively disadvantaged family environment increases the probability of accumulating risks associated with material hardship and socio-economic disadvantage. Studies have shown that living in poverty disrupts people from attaining education which often leads to reduced employment; it affects their access to decent housing; it prevents people from achieving and maintaining health; and it reduces their level of social participation and access to services, which makes it harder for people to manage with material hardship, illness and disability (Flanagin & Winker, 2006; Kiernan & Mensah, 2011; Saunders et al., 2006; Smith, 2013). Musick and Mare’s (2006) longitudinal study of 2709 women and their daughters in the U.S. highlights that poverty transcends generations because its sequelae render people unable to escape it, and that in comparison with children who did not grow up in poor households (based on the U.S. poverty line and adjusted for family size), the odds for living in poverty was 3.5 times higher for children who grew up in poorer households. The risk is that often, the consequences of
persistent socio-economic disadvantage can in turn, can become the causes of the enduring nature of poverty (Worts, Sacker & McDonough, 2010).

However, the study conducted by Campbell et al. (2012) of 101 families from the Abecedarian Project, an intensive early childhood education trial, in the U.S. emphasises that regardless of the socio-economic and psycho-social conditions experienced early in life, educational attainment seems to be the vehicle by which people can escape poverty with increased opportunities for consistent employment and improved physical and mental health. From an ecological perspective this indicates one level of environment where interventions, would be useful in helping to promote the mental health of adults and children. Furthermore, the examination of the individual characteristics of children and adolescents which are associated with mental health will help to determine other levels of the environment where interventions could also be useful.

**Child Characteristics Associated with the Mental Health of Children**

Fourteen per cent of Australian children and adolescents aged 4-17 years have a mental health problem, internalising or externalising. This rate of mental health problems is found in all age and gender groups but boys are slightly more likely to experience mental health problems than girls (Hunter Institute of Mental Health, 2014).

Review of the literature on the mental health of children show that child characteristics such as sex, age, intelligence, self-esteem and perceived efficacy are related to risk or resilience. Park et al. (2011) found that as children aged the prevalence of the externalising problems became much more widespread than that of internalising problems.

Age particularly, is one factor consistently identified as being differentially associated with internalising and externalising problems in children (Daley et al., 2013; Luthar & Huston, 2001). For example, young children (5-12 years) are more vulnerable than older
children (13-19 years), because they are at more risk of adverse events such as injuries including falls, burns, scalds and accidental poisoning; the development of chronic conditions including diabetes and asthma; and mental health problems like anxiety and depression; and behaviour problems (AIHW, 2008; Kidsmatter, n.d). If left untreated, internalising problems experienced in early childhood, such as separation anxiety, the fear of separation from the attachment figure, can lead to serious mental health issues later on such as anxiety disorders and depression (Hunter Institute of Mental Health, 2014; Sawyer et al., 2000).

It is also the case that children experience different types of risks as they reach middle childhood (9-12 years) and adolescence (13-19 years). For example, younger children are found to repeatedly exhibit more attention and aggression problems characterised by being stubborn, defiant, disruptive and uncooperative and by destroying things belonging to others, whilst adolescents tend to report higher rates of somatic problems, that is, chronic physical complaints without a known cause; suicidal ideation; and other health-risk behaviours, including smoking, drinking and drug use (ABS, 2007a; Hunter Institute of Mental Health, 2014). These problems are often linked to increased risk of peer relationship problems; school drop-out, depression and crime later in life and if not managed can lead to mental health issues including oppositional defiant disorder and conduct disorder (Hunter Institute of Mental Health, 2014).

Sex is also consistently identified as being differentially associated with internalising and externalising problems in children and adolescents (Hanson et al., 2011; WHO, 2010). For example, boys are more vulnerable than girls to the risks associated with poverty, just as they are more developmentally vulnerable to many physical and psychological risks other than poverty (Park et al., 2011; Sawyer et al., 2000). Taking risks is a normal and common part of adolescence and a time when boys in particular can be influenced by peers to make impulsive emotional decisions such as skipping school, fighting, driving fast or vandalism
without thinking through the consequences (Raising Children Network, n.d.). Hanson et al. (2011) found significant gender differences in several outcomes with girls scoring higher in self-regulation, social participation, and classroom and survival skills; and with boys exhibiting higher externalising problem behaviours. Changes in the family environment due to economic strain such as marital conflict, separation, mothers returning to work or increase of work hours and homelessness are often linked to disruptive and externalising behaviours in boys, often marked by defiance, impulsivity, hyperactivity, aggression and anti-social features, and internalising behaviours in girls, evidenced by withdrawal, emotional distress and anxiety (Hanson et al., 2011; Kilmer, Cook, Crusto, Strater & Haber 2012; Kuruvilla & Jacob, 2007).

As the transition is made from childhood to adolescence to adulthood, child age and sex should be taken into consideration when attempting to create family and social environments conducive to good mental health within which children and adolescents can develop the life skills required for a safe, positive, healthy and socially accepted lifestyle (WHO, 2010).

**Caregiver and Family Characteristics Associated with the Mental Health of Children**

Research often concentrates on the investigation of individual differences and personal circumstances together with aspects of family functioning that are believed to contribute to internalising and externalising problems in family members (Brown, Barbarin & Scott, 2013; Chen, Martin & Matthews, 2006; Felner, 2006; Frongillo, Jyoti & Jones, 2006; Kaminski et al., 2013). In addition to children’s characteristics, family factors often associated with childhood internalising and externalising problems include low socio-economic status; welfare receipt; low maternal education; parental non-employment; poor and negative parenting practices often associated with living in single parent families;
parenting stress; maternal depression; family stress; parental genetic attributes, parental psychopathology; and substance abuse and stressful life events (Brown et al., 2013; Edelman, 2010; Gassman-Pines & Yoshikawa, 2006; Hanson et al., 2011; Kaminski et al., 2013; Kiernan & Mensah, 2011; Kuruvilla & Jacob, 2007; Musick & Mare, 2006). An assumption of these approaches is that presence of such variables will inevitably lead to mental health problems but there appears to be no consideration given to the protective factors that may be available and may moderate the risk to mental health. It is believed that the examination of risk factors will highlight areas of need where specifically designed interventions can be implemented to help promote good mental health and in particular for the ‘low-income’ families who appear to be at greatest risk for mental illness.

It has been argued that the stress that accompanies poverty affects parents’ physical and psychological health and well-being. For example, adults who are caught in a revolving door of unemployment, low-wage or low-status jobs, unable to either advance professionally or become truly economically stable often become demoralised and this impacts negatively on their feelings of dignity and self-worth and contributes to physical and mental illnesses (Daiski, 2007; Hultman et al., 2006; Goodman, Smyth & Banyard, 2010; Mohatt, Fok, Burket, Henry & Allen, 2011).

Women in particular are vulnerable to depression and other mood and anxiety disorders during periods of financial hardship, which has repeatedly been associated with mothers’ negative perceptions of themselves, and of their abilities and parenting skills (Coley, Leventhal, Lynch Kull, 2013; Das, Do, Friedman, McKenzie & Scott, 2007; Groh, 2007; Treadwell, Alkon, Quirolo & Boyce, 2010). In turn, this impinges upon their day to day functioning and ability to respond appropriately to their own needs and to the developmental needs of their children which is often evidenced in increased reporting of child and adolescent
internalising and externalising problems (Barbarin et al., 2006; Coley, et al., 2013; Edelman, 2010; Kiernan & Mensah, 2011).

**Employment (Mothers).** Newland, Crnic, Cox and Mills-Koonce (2013) in their study of 1142 mothers and their children from two areas of high poverty in the U.S., where incomes were less than 200% of the poverty line and where families were in receipt of food stamps and government funded medical health services found that financial hardship and financial pressures were linked to increased reported maternal depression and somatization (the psychological distress arising from perception of bodily dysfunction) on the Brief Symptom Inventory 10 (BSI 18), making mothers less sensitive to the needs of their children which was consequently associated with a relative increase in child externalising problems.

In contrast, Coley and Lombardi (2014) and Lombardi and Coley (2013) found that mothers who were employed and providing increased financial resources to the family reported increased maternal well-being as measured by the Brief Symptom Inventory 10 (BSI 18), in the dimensions of Somatization, Depression and Anxiety and the Global Severity Index; fewer child internalising and externalising problems as measured by the CBCL; and higher child cognitive skills in reading and math as measured by the Woodcock-Johnson Psycho-Educational Battery Revised (WJ-R) Letter-Word Identification and Applied Problems subtests.

It appears that there is some consistency in the literature in terms of the presumed effects of financial security on the well-being of families, and this positive influence appears to be both in direct monetary terms and indirectly with increased sense of self-worth in mothers with the flow on effect of more positive parenting of children associated with better child mental health. Although the association between financial hardship and mental health appears to be quite strong, the links between mental health and maternal stress, maternal
employment, self-worth and parenting skills are not so clear and there may be other factors not yet considered that mediate these relationships.

**Marital Status.** Previous research has also failed to conclusively show that parental marital status has a direct effect on children’s well-being and findings from divorce and separation literature highlight that the level of harmony within the family, the quality of family relationships and level of outside support available to assist with effective parenting appear to be more important than the intact versus the separated family (Barbarin et al., 2006; Hakvoort, Bos, van Balen & Hermanns, 2011; Wallerstein & Blakeslee, 2003). Conversely, Dearing, McCartney and Taylor’s (2006) examination of longitudinal data from Phase I and II of the Early Child Care and Youth Development study showed that when ‘chronically poor’ children’s mothers were partnered and employed there were significant decreases in both externalising and internalising problems. Families were considered to be ‘chronically poor’ if their income-to-needs ratios were calculated at less than 1.0 at three or more assessments. In line with previous studies, Dearing et al. (2006) also found that chronically poor children had more internalising problems and significantly more externalising problems on average than children who were never poor.

**Housing**

Presence of risk factors such as low-income, parental non-employment; negative parenting practices; living in single parent families; and maternal mental health problems does not inevitably consign children to future negative outcomes however it makes their path more difficult because often they have more barriers to overcome along the way. For example, because parental education, employment and family income determine housing affordability and govern where families live, children in low-income families may be forced
to live in neighbourhoods that do not promote their mental health but rather expose them to adverse risk. Quite often, low-income families are forced to live in places where the quality of housing is poor; where there is an absence of essential resources including hospitals, reliable public transport, retail stores and recreational facilities; and where they may be exposed to traumatic events such as crime, violence and abuse (Bassuk, De Candia, Tsertsvadze & Richard, 2014; Mayberry, Shinn, Benton & Wise, 2014; Mohammad, Shapiro, Wainwright & Carter, 2014). The lack of sufficient housing, a basic human need on which other developmental processes are dependent upon, impacts negatively on people’s feelings of dignity and self-worth and contributes to physical and mental illnesses and shortened lives (Daiski, 2007; Kuruvilla & Jacob, 2007; Mayberry et al., 2014). Research has consistently demonstrated that homeless people suffer from depression and other mental health problems at substantially higher rates than members of the general population (Mayberry et al., 2014; Mohammad et al., 2014). This relationship however is complex and appears to be bi-directional, because homelessness may be a precursor to, as well as a result of mental illness (Lund et al., 2011).

**Absence of Risk Factors**

Although there is inconclusive evidence on the strength of relationships between risk factors and mental health, the studies of Brown et al. (2013) and Guillen-Royo et al. (2013), show a very strong link between the ‘absence’ of risk factors and good mental health. Brown et al. (2013) found significantly higher academic and competence skills in children from families with adequate financial resources; where parents had higher levels of educational attainment; were non-depressed; married; and who lived in safer neighbourhoods. Guillen-Royo et al. (2013) expanded on these findings by showing that the lifelong benefits of having well-educated; high status; well-to-do; and healthy parents included children’s own high
levels of education; good jobs; high incomes; increased chances of social participation; and physical and psychological well-being. The literature highlights that unlike their ‘wealthier’ counterparts, children who live with parents and in families with incomes at or below the poverty line, are at greater risk of developing internalising and externalising problems.

**Social / Community Factors Associated with the Mental Health of Children**

Not all children and adults who live with socio-economic disadvantage go on to develop internalising and externalising problems (Robinson, 2013). Some people with particularly resilient personalities can cope successfully even in the most deprived communities because often, they have good family and social supports (Belle, 1990; Brown et al., 2013; Hakvoort et al., 2011). Following the publication of Resnick et al.’s (1997) seminal paper which found that family and school connectedness were the most protective factors of adolescent mental health, a number of studies have documented significant associations between connectedness in a variety of social contexts and mental health. For example, the studies of Brown et al. (2013), Giannattasio et al. (2011), Kilmer et al. (2012) and Tadic, Oerlemans, Bakker and Veenhoven (2013) show that the main protective factors promoting resilience are: child-parent connectedness; family connectedness; school connectedness; and community connectedness. Additionally, these authors argue that a sense of connectedness to parents, family, peers and social and community environments such as school and work is linked to the reduced likelihood of developing mental health problems such as depression, anxiety or suicidal thoughts as well as reduced likelihood of engaging in high-risk behaviours such as drug and alcohol abuse. (Brown et al., 2013; Giannattasio et al., 2011; Kilmer et al., 2012; Tadic et al., 2013).

study was a longitudinal investigation conducted in Melbourne with 16-20 year olds in two phases (Phase 1: N=941; Phase 2: N=204). Participants were recruited from 10 secondary private and public schools. Prelow et al. (2007) on the other hand, recruited 316 ethnically diverse participants from one public high school in a small north eastern city in the United States and used data from 112 African American 16-19 year olds and 94 European American 15-19 year olds. The data from the McGraw et al. (2008) study indicated that lower perceived connectedness to school, family and peers was associated with higher levels of stress, depression, anxiety and overall negative affect both at Time 1 in 2000 and one year later at Time 2 in 2001. Results showed that adolescents reporting low peer, family and school connectedness were significantly more likely to have thoughts of self-harm than were adolescents reporting higher levels of connectedness. On the other hand, high peer connectedness and family connectedness was a protective factor against Time 1 stress, anxiety and depression, with high peer connectedness also identified as a long-term protective factor against depression at Time 2.

The data from Prelow et al. (2007) study indicated that increases in ecological risk including the accumulation of stressful events, association with deviant peers and economic disadvantage was associated with decline in academic achievement (the average of the English/Language, Arts, Mathematics, Science, and History/Social Science grades from the most recent grading period) and increase in the level of problem behaviours comprising delinquency, drug use, physical aggression, and nonphysical aggression as assessed by the Problem Behaviours Scale (PBS). Supportive parenting also emerged as a significant predictor of psychosocial well-being whereby adolescents who reported that their mothers were involved in their lives had higher grade point averages, higher competence levels and fewer problem behaviours. In addition, school connectedness was associated with higher reported levels of competence, but counter-intuitively, there was no evidence to suggest
school connectedness was associated with academic achievement. A surprising yet significant interaction was also found between school connectedness and ecological risk, where European-American adolescents who engaged in more problem behaviours also reported higher levels of school connectedness. This signified that for these adolescents, school connectedness exacerbated ecological risk rather than serving as a protective factor. Prelow and colleagues (2007) suggested that for these adolescents, their sense of connection with the school environment may be coming from the support they receive from their deviant peers who may be reinforcing the problem behaviours; signifying that maybe it was ‘peer connectedness’ that was being measured rather than ‘school connectedness’.

The findings of the McGraw et al., (2008) and Prelow et al., (2007) studies are repeatedly found in the literature and show that for some adolescents, the effects of stressful life circumstances are cushioned by positively perceived relationships to parents, peers and school and so despite living in high-risk contexts they appear to overcome adversity and show healthy psychological development (Hakvoort et al., 2011; Williams & Chapman, 2012). Additionally, because the participants in the Prelow et al. (2007) study came from different countries and from different ethnic backgrounds it can be argued that connectedness to family, peers and school are universally protective factors. However, in order for ‘connectedness’ to be seen as a universal protective factor, its benefits should be evident not only in studies of general adolescent population but also in studies of adolescents who may be at greater risk of mental health problems, for example adolescents who are homeless or suicidal.

The benefits of a heightened sense of connectedness to family and school were highlighted by the Dang (2014) cross-sectional study of 150 homeless participants aged 14-21 years recruited from multiple agencies including drop-in community centres. In this study participants were defined as being homeless if they experienced unstable housing such
as having ‘run away’, been ‘thrown out’ of home; having stayed at shelters or parks; or had ‘couch-surfed’. Dang (2014) measured mental health using the Kessler Psychological Distress Scale (K10) and equated better mental health to ‘less psychological distress’; family connectedness was measured using the Resnick et al. (1997) 12-item instrument where higher scores indicated a higher level of parental connectedness; and school connectedness was measured with a 5-item instrument developed by McNeely, Nonnemaker and Blum (2002) where higher scores indicated a higher level of school connectedness. Dang (2014) reported that attachments to parents and school were positively associated with mental health and well-being. Similar findings were noted in the study by Czyz, Liu and King (2014) of 338 in-patient suicidal adolescents, aged 13-17 years, who were assessed at 3, 6, and 12 months post-hospitalisation. Depressive symptoms were measured using the Children’s Depression Rating Scale Revised (CDRS-R) and connectedness was measured using items from the Perceived Emotional/Personal Support Scale (PEPSS) assessing closeness of relationships with family; friends; and non-family adults. Czyz et al. (2014) found that greater family connectedness at baseline and increased family connectedness post-hospitalisation were associated with decreased depressive symptoms and less severe suicide ideation across the whole follow-up period; and that greater peer connectedness was associated with decreased depressive symptoms and less severe suicide ideation but only at 3 months.

The pattern of findings in the studies examined are consistent, with connectedness to family, school and peers positively associated with positive indicators of mental health. Social support in various contexts has emerged as a critical buffer for stressful life events and a major predictor of emotional and physical well-being (Bassuk et al., 2002; Giannattasio et al., 2011; Tadic et al., 2013). A major implication of these findings is that mental health can be improved by the promotion of positive relationships of adolescents within families, schools and peers.
Summary of Factors Associated with the Mental Health of Children

The findings of the research conducted on the mental health of children and adolescents, suggest that personal attributes like child age and sex; parent characteristics such as being female, unemployed, depressed, anxious or single; family income and housing; safe and well-resourced neighbourhoods; family support; and connectedness with family, peers and school are important to the psychological well-being of children and in particular those in high-risk contexts (Edelman, 2010; Giannattasio et al., 2011; Prelow et al., 2007; Worts et al., 2010). Given that child, family, school and community systems each influence the mental health of children and adolescents; it is also the case that each may offer unique and complementary avenues for intervention (Bettger, 2012). Therefore, by adopting an ecological developmental perspective to research, the association of all levels of environment and mental health can be investigated together. It is proposed that the results of such research will demonstrate that mental health is associated with not only by what happens in childhood and adolescence, but also by what happens in the family and the wider community and therefore, may offer insight into the various corresponding avenues for intervention.

The Current Study

The current study aims to determine the child, caregiver, family and community variables that are associated with the risk of children and adolescents developing emotional and behavioural problems.

Research Question 1.

What effect does family income have on child health and school connectedness?
a) It is hypothesised that children from high-income families will have better physical health; fewer internalising and externalising problems; and a greater sense of connectedness to school than children from low-income families.

**Research Question 2.**

Which variables are associated with internalising and externalising problems in children and adolescents?

a) It is hypothesised that children from low-income families who feel less connected with their school environment will have more emotional and behavioural problems than children from higher income families who feel more connected to their school environment.

b) It is hypothesised that younger, male children from low-income families will have more externalising problems such as rule-breaking behaviours and that older, female children/adolescents will have more internalising problems such as anxiety and withdrawal.

c) It is hypothesised that children from low-income families whose caregivers have more physical and mental health problems will have more emotional and behavioural problems compared to children from higher income families whose caregivers are in better physical and mental health.

d) It is hypothesised that together; a combination of the child, caregiver, family and community predictors will be more robust in predicting internalising and externalising problems in children and adolescents compared to each individual variable alone.
Method

Participants

Fifty-six 11-17 year old students (22 boys and 34 girls) in Grades 6-12 and their caregivers (54 parents and 2 grandparents) were recruited from 3 Catholic Schools and 6 Salvation Army Community Centres from the Melbourne metropolitan region. In families where more than one child wished to participate in the project it was requested that if present, ‘each’ caregiver be matched with one child. There were 3 caregivers in both groups who completed the research papers for two children. This was considered acceptable because of low recruitment numbers and because the key variables measured and analysed were the Internalising, Externalising and Total Problem scores of the children and not the caregiver variables.

Thirty child-caregiver dyads were recruited from their Salvation Army Community Centres. Of the 6 Salvation Army Community Centres who were invited to participate, all (100%) consented to participate in the research project. All of the 30 child-caregiver dyads who agreed to participate did so; however, one child participant withdrew from the project and did not complete the research forms.

Twenty-six child-caregiver dyads were recruited from their Catholic Schools. Of the 39 schools who were invited to participate, 8 School Principals (21%) consented to participate in the research project. Responses were received from 3 schools with a total of 26 families consenting to participate. A large proportion (96%) of those who agreed to participate returned the questionnaires.

Data from four child-caregiver dyads recruited from the schools who indicated that they were holders of a Health Care Card were excluded from all analyses because they were considered to be low income earners and therefore did not meet the criteria for the High Income group.
Subject to another child participant from the Low Income group being omitted from all analyses (details in the Data Screening section), the final sample size included data from 50 child-caregiver dyads which were used in the analyses.

**Procedure**

Ethics approval was obtained from the Monash University Human Research Ethics Committee (MUHREC), the Salvation Army Melbourne Central Divisional Headquarters and the Catholic Education Office Melbourne (CEOM) (See Appendix A). Formal written approval for the research to go ahead was obtained from the Salvation Army Community Centres and the Schools who agreed to participate (See Appendix B). Written approval from the MUHREC was received before the research commenced at each site. Written consent was required from all participants.

**Data Collection at Salvation Army Community Centres.** Families were recruited to the project with flyers posted at their Salvation Army Community Centres (See Appendix C). The Salvation Army Community Centres were provided with Explanatory Statements and Consent forms to be given to any families who were interested in participating in the project (See Appendix C). Families who agreed to participate returned the completed and signed consent forms to the Salvation Army Community Centres in a sealed envelope for the researcher to collect. A mutually convenient interview time was then scheduled by the Centre Manager for each caregiver to meet with the student researcher and to complete the research questionnaires and surveys. The student researcher stayed with the caregiver the whole session and was available to assist with the completion of forms. The children attended on the same day to complete their questionnaires however, when this was not possible, a second session was arranged for the school holidays. Caregivers were in the room at all times but sat
away from their child and student researcher. The procedure followed at each centre consisted of (1) introduction to participants, (2) interview with participants, (3) thanking caregivers for their participation and compensating them for their time with a $30 Coles Myer Voucher and (4) thanking the children for their participation and compensating them for their time with a Village or Hoyts Cinema voucher.

**Data Collection at Catholic Schools.** Families were recruited to the project with flyers posted and handed out at their schools and advertised in their school letter (See Appendix D). Advertisements were placed in the school newsletters both electronic and hardcopy.

Schools were provided with Plain Language Statements, Explanatory Statements and Consent forms to be given to any families who were interested in participating in the project (See Appendix D). Families who agreed to participate returned the completed and signed consent forms to the school office in a sealed envelope for the student researcher to collect. Upon receipt of the signed and completed Consent forms, the research questionnaires and surveys were mailed to the caregivers at the address they provided. The participants were requested to complete the forms and return them to the student researcher in the reply-paid envelope addressed to the student researcher and project. When the completed research questionnaires were received from the caregivers, they were thanked for their participation and compensated for their time by mailing out a $15 Coles-Myer Voucher to the address they had previously provided. These caregivers received a $15 Coles-Myer Voucher whilst the caregivers from the Salvation Army Centres received a $30 Voucher to reflect the additional time they gave to the project. In consultation with the School Principal, the student researcher scheduled a time for the students to be interviewed, along with the other children from their school, to complete their questionnaires. The School Principal delegated a staff
member to be present during the assessment of children and youth. This person sat
unobtrusively in the room, and did not intervene in the procedure. The procedure followed at
each school consisted of (1) introduction to students, (2) interview with students, and (3)
thanking students for their participation and compensating them for their time with a Village
or Hoyts Cinema voucher.

Measures.

The main method of data collection for this project was self-report. Each participant,
adult and child was given an Instruction Page briefly describing what each of the enclosed
research questionnaires/surveys was measuring. Caregivers completed several questionnaires
and measures providing information about themselves and their children. The children
completed two measures; one regarding their psychological well-being and the other
concerning school connectedness.

Family and Community Questionnaire. All caregivers completed an 88-item
questionnaire about their family and the community where they live. Many of the items on
the Family and Community Questionnaire (Coughlan-Ward & Jenvey, 2007) require a
response to be recorded on a 4-point Likert-Scale (See Appendix E).

Both the range and scope of the questions developed in the Family and Community
Questionnaire were informed by the Millennium Poverty and Social Exclusion Survey, U.K
(PSE) (Gordon et al., 1999) and the Social Capital Community Benchmark Survey (The
Saguaro Seminar: Civic Engagement in America, 2000) and adapted for use in Australia.

The Family and Community Questionnaire, was developed by the student researcher
and supervisor to obtain demographic and descriptive information about the sample and to
obtain information on their income, employment, educational attainment, housing status,
health and disability and availability of community services which are recurrently identified in the literature as being associated with poverty and social disadvantage (Gordon et al., 2000; Harding et al., 2001; UNICEF, 2007).

**Income** – Following prior studies in Australia (e.g. Harding, 2006) we used a dichotomous measure of whether parents were a Health Care Card holder as a measure of low income (coded as 1/0 for presence/absence). This method of assessing income was preferred over asking participants to provide their level of income because there is reluctance among Australian populations to accurately report this information (ABS, 2004).

**Employment** - Employment as indicated by number of hours worked per week was excluded from analyses, because this variable is not always indicative of High or Low Income. Some people, for example, have accumulated wealth and do not need to work; others, work fewer hours and get paid very well; whilst many people often work long hours for very little pay. Employment as indicated by parental occupation which ranged from (1) Manager/CEO; (2) Professional/Trade; (3) Clerical/Sales/Transport/Labourer; to (4) Unemployed/Student & Homemaker was excluded from analyses as these responses could not meaningfully be re-coded as 1/0 for presence/absence to indicate a level of Income because, for example, there is a big difference between a CEO and a qualified tradesperson.

**Educational Attainment** which ranged from (4) Primary School; (3) Year 9; (2) Year 12; to (1) University was re-coded to 1/0 for Completed Year 12/Did not complete Year 12 and used in analyses.

**Housing Status** which ranged from (4) Homeless/no permanent housing; (3) Government Rent; (2) Private Rent; to (1) Home Owner was re-coded to 1/0 for Housing Stability/ Not and used in analyses. Private Rent and Homeowner were considered to be stable accommodation options because they are indicative of housing affordability and ability to choose where to live.
Parental Physical Health and Parental Mental Health which ranged from (1) Excellent; (2) Good; (3) Fair; to (4) Poor were re-coded to 1/0 for Good Physical Health/Not and 1/0 for Good Mental Health/Not and used in analyses.

The demographic and descriptive variables included in the questionnaire were categorical in nature and were collected to obtain an overall picture of the families sampled, this data were not included in analyses. The categorical variables examined were: relationship to child; postcode; parental occupation; ancestry; main language spoken at home; and carer role.

Other ranked and continuous data collected but not used in analyses included frequency of hospital visits; contact with family and friends plus reasons for infrequent contact; number of times families engaged in paid entertainment activities; frequency of family holidays; access to medical care; access to positive community services such as parks; transport mode and affordability; and the existence of negative community resources including take-away food outlets and gambling venues in their local community.

These variables were included in the questionnaire, because often, they are used as indicators of social deprivation, isolation and ill-health in poverty research (Gordon et al., 1999; Scutella & Smyth, 2005; Young, McKiernan, Copeland & Ambrose, 2005).

Data regarding caregiver’ feelings and sense of connectedness with their social environments encompassing social and civic engagement; connection with family and friends; limitations on contact with family and friends; connection with their local community; political interest; and volunteering was collected but not used in analyses. These variables were included in the questionnaire, because research suggests that connectedness to family, peers, and the local neighbourhood and community are protective factors and are important to psychological well-being (Brown et al., 2013; Giannattasio et al., 2011; Kilmer et al., 2012; McGraw et al., 2008; Prelow et al., 2007; Tadic et al., 2013 ), whilst social
exclusion, in both public and private spheres, is often found to both precede and accompany mental illness (Hultman et al., 2006; Kuruvilla & Jacob, 2007; Morgan, Burns, Fitzpatrick, Pinfold & Priebe, 2007).

Initially, the Family and Community Questionnaire was developed to yield an Index of Multiple Deprivation and an Index of Social Connectedness where each is made up of a composite score on six deprivation indices and five indices of social connectedness. Pilot testing and evaluation of the questionnaire’s ability to capture these two composite scores was unable to be carried out due to small sample size and therefore some data obtained could not be included in the current study.

**Achenbach Adult Self-Report/18-59 (ASR).** The caregivers recruited from the Salvation Army Community Centres completed this measure to determine the presence or absence of their own emotional and behavioural problems. Due to concerns raised by the CEO about participant burden, the ASR was not administered to caregivers recruited from schools.

The ASR is one of Achenbach’s more recent screening tools, extending the age group from the Youth Self Report/11-18 (YSR) and the Child Behaviour Checklist/6-18 (CBCL/6-18). The ASR assess a number of syndromes, including anxious/depressed, withdrawn/depressed, somatic complaints, thought problems, attention problems, rule breaking behaviour, aggressive behaviour and intrusive syndrome. These narrowband dimensions are then combined to create overall internalising, externalising, and total problems scores (Lengua, Sadowksi, Friedrich & Fisher, 2001; Youngstrom, Loeber & Stouthamer-Loeber, 2000).

The ASR was administered in the Hislop, Fegan, Schlaeppi, Duck & Yeap (2008) study of psychological distress in young adults with Type I diabetes recruited from Fremantle
Hospital, Australia, and was found to be comparable in the detection of psychological distress with the Centre for Epidemiological Studies-Depression Scale (CES-D) (Hislop et al., 2008). The ASR is reported as a reliable and valid standardised self-report tool suitable for ages 18-59 years (Hislop et al., 2008).

**QualityMetric's Short Form 36 Health Survey Version 2 (SF-36v2).** The caregivers recruited from the Salvation Army Community Centres completed this measure to determine their health and well-being with higher scores indicating better health and less disability. In light of the concerns raised by the CEOM that the researchers were asking for too much of the caregivers’ time, the researchers agreed to not administer the SF-36v2 to the caregivers recruited from schools. The SF-36v2 is a self-report measure that asks 36 questions to measure the person’s health and well-being (18 and older) and can be used across disease and treatment groups. The SF-36v2 provides scores for each of the eight health domains: Physical Functioning, Role-Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional, and Mental Health. Each health domain score contributes to the psychometrically-based Physical Component Summary (PCS) and Mental Component Summary (MCS) scores (Ware & Kosinski, 2001).

The SF-36v2 was administered in the Marin, Taylor & Gill (2008) study of the Health Related Quality of Life (HRQoL) of the South Australian population in 2008 using the data collected in the Autumn 2008 Health Omnibus Survey (HOS). They found that the SF-36V2 was better designed and less ambiguous in both instructions and questions over Version 1, making the survey easier to understand and complete (Marin et al., 2008; Ware et al., 2007).

The SF-36v2 has been shown to have greater reliability and precision over Version 1 (Ware & Kosinski, 2001) and can be used across all adult patient and non-patient populations,
with and without chronic conditions, for a variety of purposes (Marin et al., 2008; Ware & Kosinski, 2001).

**Achenbach Child Behaviour Checklist/6-18 (CBCL/6-18).** All caregivers completed the *Child Behaviour Checklist/6-18 (CBCL/6-18)* to determine the presence or absence of emotional and behavioural problems in their child. The CBCL scales assess a number of syndromes, including anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule breaking behaviour and aggressive behaviour. These narrowband dimensions are then combined to create overall internalising, externalising, and total problems scores (Lengua et al., 2001; Youngstrom et al., 2000).

The CBCL provides both T-scores and Raw Scores on the syndrome scales. Even though Achenbach and Rescorla (2001) advocate employing raw scores in data analysis previous studies vary regarding the use of raw scores and T-scores (Thurber & Sheehan, 2012). Many researchers continue to use T-scores in their analyses because standardised scores permit comparisons between gender and across age (Heflinger, Simpkins & Combs-Orme, 2000; Thurber & Sheehan, 2012). Thurber and Sheehan (2012) argue that the use of T-scores has the effect of disguising the level of emotional and behavioural problems in children and youth because statistically the lower portion of the score distribution is eliminated and therefore, Heflinger et al. (2000) posit that the use of both standardised and raw scores would make results more clearer. In the current study we will be using the T-scores in analyses but we will also examine the raw scores to obtain a more comprehensive picture of the emotional and behavioural problems of children and adolescents.

Achenbach and Rescorla (2001) reported good test-retest reliability of 0.95 to 1.00; a range of inter-rater reliability of 0.93 to 0.96; and a range of internal consistency of 0.78 to 0.97; and acceptable criterion validity. The CBCL was administered in the Spatola et al.
(2007) study of general population twins, aged 8-17 years, recruited from the Italian twin Registry, to explore the genetic and environmental influences to individual variation. Comparisons showed no differences in the mean values of the scales rated by mothers versus fathers indicating good inter-rater reliability (Spatola et al., 2007). Furthermore, consistent with previous findings, Spatola et al. (2007) found substantial correlations among syndrome scales belonging to the same broadband dimensions of internalising/externalising showing good internal consistency. This assertion is supported in Furlong and Wood’s (1998) review of the CBCL were they reported a range of internal consistency of 0.92 to 0.96 for Externalising and Total Problem scores and a range of internal consistency of 0.88 to 0.92 for Internalising Problem scores; and strong criterion and construct validity.

**Achenbach Youth Self Report/11-18 (YSR).** All Child participants completed the Achenbach *Youth Self Report/11-18 (YSR)* to determine the presence or absence of emotional and behavioural problems. All questions with references to suicide or self-harm in the YSR, Item 18 (on self-harm), Item 91 (suicidal thoughts) and Item 105 (drug usage for non-medical purposes) were deleted from the (YSR) administered to students in Catholic schools to comply with the Ethics approval given by the CEOM.

The YSR subscales are the same as the CBCL (Lengua et al., 2001; Youngstrom et al., 2000). Furthermore, the YSR provides self-ratings for the competence and problem items paralleling those of the CBCL enabling exploration of cross-informant agreement between caregivers and their children.

The authors of the YSR (Achenbach & Edelbrock, 1991/2001) report moderate reliability with a test-retest value of 0.49 to 0.79 and a range of internal consistency of 0.71 to 0.95; and report that criterion validity was assessed and found to be acceptable. Comparable psychometrics were found in the Besser and Blatt (2007) study of identity consolidation and
internalising and externalising problem behaviours in early adolescence in a sample of 97 children from New York state.

The integration, and assessment of data on childhood functioning and impairment from multiple informants; reasonable predictive accuracy; and adequate reliability and validity supports the use of the YSR and the CBCL in the study of child / youth psychological well-being (Carlson, Tamm & Gaub, 1997).

**Child Health Questionnaire – Parent Form 50 (CHQ-PF50).** All caregivers completed this questionnaire which is designed to assess a child’s physical, emotional and social well-being from the perspective of the parent or guardian (HealthActCHQ, 2008; Medical Outcomes Trust, 2000) with higher scores indicating better health and less disability.

The instrument is comprised of scales specifically developed for children and adolescents 5-18 years of age and the areas measured include: general health, physical functioning, limitations in schoolwork and activities with friends, mental health, emotional or time impact on the parent, family cohesion, change in health, bodily pain or discomfort, behaviour, self-esteem and limitations in family activities (Medical Outcomes Trust, 2000). The Child Health Questionnaire has been normed in a representative sample in the U.S. and has been used in large population studies in Australia, Ireland and the U.K. (HealthActCHQ, 2008; Medical Outcomes Trust, 2000). The CHQ form yields a profile for 14 health concepts, and these individual scale scores can be aggregated to derive two reliable and valid summary scores for (a) physical health and (b) psychosocial health (HealthActCHQ, 2008; Medical Outcomes Trust, 2000).

Waters, Salmon and Wake (2000) examined the psychometric properties of the CHQ-PF50 using a sample of 5,414 Victorian parents and compared the findings with the originating U.S. data (Waters et al., 2000). The researchers found that the CHQ-PF50
performed well in Australia at an item and scale level but that the summary physical and psychosocial scores failed to replicate the U.S. findings and were not supported for population-level analyses (Waters et al., 2000).

**School Connectedness Profile.** All Child participants completed the questionnaire that was developed by the Centre for Adolescent Health for the Gatehouse Project 2002 (known as the *Gatehouse Adolescent Health Profile*) to measure students’ perceptions of their connectedness with the school environment (Bond et al., 2007) (See Appendix F).

The School Connectedness Profile is comprised of 4 questions used to obtain demographic information about the sample including Year level at school; sex; place of birth; and language spoken at home and 48 questions designed to assess adequacy of attachments; the quality of relationships with peers and teachers, self-esteem; trust; support; commitment to school, opportunities to participate; belonging; and interpersonal conflict including the incidence and type of bullying experienced (Bond et al., 2007).

A few different response options were used in the School Connectedness Profile. The response options to some questions were easier to understand and did not require further explanation, for example, “Do you have a group of friends that stays in close touch?” which ranged from No (1), to Yes (2); “People treat me in an unfriendly way at school” which ranged from Always (1), Most of the time (2), Sometimes (3), Rarely (4), to Never (5); and “Has anyone teased you or called you names recently?” which ranged from No (2) to Yes (1) and was followed up with “How often?” which ranged from Most days (1), About once a week (2), to Less than once a week (3). The response options to other questions required clarification by the student researcher, for example, “Continuing or completing my education is important to me” which ranged from YES (4), yes (3), no (2) to NO (1); and “At my school, students have a lot of chances to help decide and plan things like school activities, events and
“policies” which ranged from YES (4), yes (3), no (2) to NO (1). These response options were explained to students as YES (4) means you really agree; yes (3) means you agree; no (2) means you don’t agree; and NO (1) means you really don’t agree (Bond et al., 2007).

Participant responses were summed to yield an overall connectedness to school score, where a high score is indicative of high connectedness and a low score indicative of low connectedness. The Gatehouse Adolescent Health Profile was administered by Bond et al. (2007) in a study where data was collected from a cohort of 2678 young people in 26 Government, Catholic and Independent secondary schools from Melbourne Metropolitan and Regional Victoria participating in the Gatehouse Project. The Social Connectedness scale of the Gatehouse Adolescent Health Profile was found to have good internal consistency (Cronbach alpha .69) and the School Connectedness scale was found to have high internal consistency (Cronbach alpha .87) and the total score had a reasonably normal distribution.

Results

Data Screening

All analyses were conducted using IBM SPSS Windows Version 22. Each variable was screened for errors in data entry, univariate outliers and missing values. Errors in data entry were corrected.

Data screening revealed the presence of a small number of univariate outliers on ten of the variables. Following the recommendations of Tabachnick and Fidell (2007), one outlier (with a number of unusually high scores) in the Low Income group was omitted from all analyses enabling the researchers to look at a more representative sample. Five others in the same group were assigned a raw score one unit larger or smaller than the next most extreme score in the group, so that they still exert their influence but not so extreme as to distort the results (Tabachnick & Fidell, 2007).
Missing values on variables were less than 1% and judged to be randomly distributed and since they contributed to an overall score, the values were not substituted with group means, but were replaced with a zero in order for SPSS to allow the case to be included in analyses.

Multivariate outliers were identified in the context of the regression and two response sets that constituted multivariate outliers were deleted as needed.

**Sample Size and Statistical Analyses**

The small sample size restricted the type of analyses that could be conducted and number of variables that could be tested at the one time. The minimum sample size required to conduct the statistical analyses undertaken were met.

**Characteristics of Participants and Groups**

Analyses focus on participants’ social and emotional well-being and investigate the differences between the High and Low Income group. The sample recruited from the Salvation Army Community Centres were assigned to the Low Income group using low income, holders of a Health Care Card, as a proxy measure of Income (ABS, 2004). The sample recruited from the Catholic Schools were assigned to the High Income group using higher income, non-holders of a Health Care Card, as a proxy measure of Income (ABS, 2004). As previously explained the responses from four families recruited from the schools were excluded as they were holders of a Health Care and considered to be low income earners and therefore did not meet the criteria for the High Income group.
Participant Age

The age of the students who participated in the study ranged from 11 to 17 years. Table 1 shows that in the total sample, the girls were significantly older than the boys; and there were no other significant differences in ages by group and gender. (Tables for data to be included in the main analyses are included in the body of the thesis and all other Tables are placed in the Appendix).
Table 1

_Mean Age (in years) of Children by Gender and Group_

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Children</td>
<td>13.59</td>
<td>1.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls (n= 31)</td>
<td>14.07</td>
<td>1.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys (n= 19)</td>
<td>12.85</td>
<td>1.81</td>
<td>2.22</td>
<td>.031</td>
</tr>
<tr>
<td>High Income (n= 22)</td>
<td>13.91</td>
<td>1.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 28)</td>
<td>13.35</td>
<td>2.08</td>
<td>-1.01</td>
<td>.319</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income (n= 16)</td>
<td>14.31</td>
<td>2.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 15)</td>
<td>13.80</td>
<td>1.93</td>
<td>-0.72</td>
<td>.477</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income (n= 6)</td>
<td>12.83</td>
<td>0.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 13)</td>
<td>12.86</td>
<td>2.18</td>
<td>0.04</td>
<td>.969</td>
</tr>
</tbody>
</table>

*p<.05*

Table 2 shows that there was a wide variation in the age of the caregivers who participated in the study; in the total sample, the male caregivers were significantly older than the female caregivers; and the female caregivers in the Low Income group were significantly younger than those in High Income group.
Table 2

*Mean Age (in years) of Caregivers by Gender and Group*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>S.D.</th>
<th>Range</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Caregivers</td>
<td>43.31</td>
<td>7.62</td>
<td>29-59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females (n= 45)</td>
<td>42.22</td>
<td>6.86</td>
<td>29-57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males (n= 5)</td>
<td>53.40</td>
<td>7.44</td>
<td>43-59</td>
<td>-3.44</td>
<td>.001</td>
</tr>
<tr>
<td>High Income (n= 22)</td>
<td>45.50</td>
<td>4.59</td>
<td>39-57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 28)</td>
<td>41.66</td>
<td>9.01</td>
<td>29-59</td>
<td>-1.98</td>
<td>.054</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income (n= 20)</td>
<td>45.50</td>
<td>4.75</td>
<td>39-57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 25)</td>
<td>39.69</td>
<td>7.23</td>
<td>29-56</td>
<td>-3.11</td>
<td>.003</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income (n= 2)</td>
<td>45.50</td>
<td>3.54</td>
<td>43-48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income (n= 3)</td>
<td>58.67</td>
<td>0.58</td>
<td>58-59</td>
<td>5.22</td>
<td>.114</td>
</tr>
</tbody>
</table>

*p<.05

**Family Circumstances**

Table G1 (See Appendix) shows that mostly mothers from both groups completed the research questionnaires (86%). A large proportion of the Low Income families (51.7%) lived in single parent households whilst the High Income families most commonly lived in nuclear families (90.9%). Diverse family structures were evident in the Low Income group where
children lived in blended families (3.4%); extended families (6.9%); and families where there was a grandparent (3.4%) was raising the child/ren.

Tables G2 and G3 (See Appendix) highlight differences in the financial position of the caregivers from the two groups. The majority of the High Income families experienced no financial difficulties with paying for accommodation (77.3%), utility bills (72.7%) and food (81.8%) in the preceding 12 months and did not require help from family/friends (77.3%) or from community agencies (100%) and only few (13.6%) had to sell items due to financial difficulties. In stark contrast, every month, 20.7% of the Low Income families experienced difficulties in paying for accommodation; 27.6% had trouble paying their utilities; and 20.7% had trouble with buying food and many families required financial assistance for most, if not every month from family/friends (27.6%); community agencies (24.1%); and 44.8% had to sell personal items to raise funds.

Table G4 (see Appendix) shows that a considerable number of families from the High Income group had attained a University Degree or TAFE qualification (77.3%). In comparison, only 51.7% of the Low Income families had obtained a post-secondary qualification and 34.5% did not complete secondary schooling with 6.9% not progressing past primary level education. The difference in the completion rate of secondary schooling was not significant between the High Income group \((M = 0.86, SD = 0.35)\) and the Low Income group \((M = 0.66, SD = 0.48)\), \(t(48.93) = -1.78, p = .081\). \textit{Educational Attainment} was re-coded to 1/0 for Completed Year 12 / Did not complete Year 12 and used in analyses.

Most of the Low Income families were unemployed (86.2%) whilst a large proportion of the High Income families (77.3%) were employed either full-time or part-time. In both groups, those who were employed, worked in jobs requiring a professional or trade qualification. Predominantly the High Income families lived in their own homes (81.8%) in comparison to the 31% of the Low Income families who lived in government housing and the
13.8% of families who had no permanent housing or were homeless. The difference in secure housing was highly significant between the High Income group ($M = 1.00, SD = 0.00$) and the Low Income group ($M = 0.55, SD = 0.5$), $t(48) = -4.78$, $p = .000$. *Housing Status* was re-coded to 1/0 for Housing Stability/Not and used in analyses.

**Children’s Health**

A series of independent t-tests were conducted on the CBCL scores as reported by caregivers. The $t$-test for unequal variances was used when there was a violation of the assumption of homogeneity of variance.

Table 3 shows that the children in the Low Income group were reported to have significantly more emotional and behavioural problems than the High Income group, evidenced by higher Internalising, Externalising and Total Problem T-scores.

A series of independent t-tests on the CBCL Syndrome Raw scores as reported by caregivers were conducted to investigate which emotional and behavioural problems were more prevalent.
Table 3

*CBCL Clinical Problem Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>CBCL Problem Scales</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalising Problems</td>
<td>High Income</td>
<td>45.55</td>
<td>8.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>55.64</td>
<td>13.50</td>
<td>3.17</td>
<td>.003</td>
</tr>
<tr>
<td>Externalising Problems</td>
<td>High Income</td>
<td>43.77</td>
<td>10.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>53.54</td>
<td>13.93</td>
<td>2.76</td>
<td>.008</td>
</tr>
<tr>
<td>Total Problems Score</td>
<td>High Income</td>
<td>44.05</td>
<td>9.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>53.43</td>
<td>15.72</td>
<td>2.65</td>
<td>.011</td>
</tr>
</tbody>
</table>

\(p < .05\)

Taking into account familywise error and a Bonferroni adjustment on the alpha .05 was divided by 3 for the Internalising Syndrome Scores and significance was now set at \(p < .017\) for each test; and a Bonferroni adjustment on the alpha .05 was divided by 2 for the Externalising Syndrome Scores and significance was now set at \(p < .025\) for each test.

Table 4 shows that the Anxious/Depressed; Withdrawn/Depressed; and Rule-Breaking Scores were significantly higher for the Low Income group than for the High Income group.
Furthermore, the Social Problem; Attention Problem; and Thought Problem Scores were all significantly higher for the Low Income group than for the High Income group.

The children from the Low Income group had significantly more caregiver-reported emotional and behavioural problems which were in the CBCL clinical range than those from the High Income group. However, unlike their caregivers, the children did not report any significant differences in the YSR Internalising, Externalising or Total Problem scores between the Low Income and the High Income group (See Table G5 in Appendix) nor did they report any significant differences in the YSR Syndrome Raw Scores between the two groups (See Table G6 in Appendix).

Further statistical analyses including correlations and regressions, were conducted using only the scores on the CBCL.
Table 4

**CBCL Syndrome Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families**

<table>
<thead>
<tr>
<th>CBCL Syndrome Scores</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internalising Problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious/Depressed</td>
<td>High Income</td>
<td>1.32</td>
<td>1.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.50</td>
<td>4.61</td>
<td>3.42</td>
<td>.002</td>
</tr>
<tr>
<td>Withdrawn/Depressed</td>
<td>High Income</td>
<td>1.05</td>
<td>1.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>2.57</td>
<td>2.30</td>
<td>2.79</td>
<td>.008</td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>High Income</td>
<td>1.50</td>
<td>2.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.32</td>
<td>3.54</td>
<td>2.27</td>
<td>.028</td>
</tr>
<tr>
<td><strong>Externalising Problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule-Breaking Behaviour</td>
<td>High Income</td>
<td>1.00</td>
<td>2.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.36</td>
<td>6.39</td>
<td>2.49</td>
<td>.017</td>
</tr>
<tr>
<td>Aggressive Behaviour</td>
<td>High Income</td>
<td>3.09</td>
<td>5.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>6.86</td>
<td>8.09</td>
<td>1.85</td>
<td>.070</td>
</tr>
<tr>
<td><strong>Other Syndrome Scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Problems</td>
<td>High Income</td>
<td>0.64</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.71</td>
<td>4.62</td>
<td>3.47</td>
<td>.002</td>
</tr>
<tr>
<td>Attention Problems</td>
<td>High Income</td>
<td>2.09</td>
<td>2.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.39</td>
<td>4.69</td>
<td>2.28</td>
<td>.028</td>
</tr>
<tr>
<td>Thought Problems</td>
<td>High Income</td>
<td>1.00</td>
<td>1.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.18</td>
<td>4.37</td>
<td>2.49</td>
<td>.018</td>
</tr>
</tbody>
</table>

p<.05
A series of independent t-tests were conducted on the CHQ-PF50 scores. Table 5 shows that the children from the Low Income group had significantly lower Physical Health and Psycho-Social Summary Scores than the children from the High Income group, indicating that their caregivers reported they had worse physical and psycho-social health over the past 12 months.

Table 5

<table>
<thead>
<tr>
<th>CHQ-PF-50 Summary Scores</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health</td>
<td>High Income</td>
<td>55.92</td>
<td>3.85</td>
<td>-2.16</td>
<td>*0.038</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>50.55</td>
<td>12.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psycho-Social Health</td>
<td>High Income</td>
<td>57.19</td>
<td>7.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>49.76</td>
<td>12.20</td>
<td>-7.43</td>
<td>*0.012</td>
</tr>
</tbody>
</table>

A series of Independent t-tests were conducted on the CHQ-PF-50 Sub-Scale Raw Scores (See Tables G7-G9 in Appendix).

Table G7 shows that General Health Perception Scores were significantly lower for the Low Income group (M= 3.62; SD= 0.98) than for the High Income group (M= 4.34;
Family Income and Child Mental Health

$SD = 0.61), t(45.84) = -3.18, p = .003$ indicating that the caregivers in Low Income group perceived their children to be less healthy. Table G8 shows that the caregivers in the Low Income group were caring for children who had significantly more Bodily Pain and Discomfort, $t(39.37) = -2.17, p = .036$; significantly more Mental Health Problems, $t(37.97) = -3.09, p = .004$; significantly more Global Behavioural Problems, $t(47.59) = -2.11, p = .04$; and significantly lower self-esteem, $t(44.59) = -2.66, p = .011$ than the children in the High Income group. Table G9 shows that the physical and emotional health problems of the children in the Low Income group proved to have a significant impact on their caregivers’ emotionally, $t(48) = -2.05, p = .046$; on their time, $t(41.02) = -2.63, p = .012$; and placed significant limitations on the activities these families were able to engage in, $t(47.39) = -3.26, p = .002$.

A series of independent t-tests were conducted on the School Connectedness Profile scores as reported by the children to see if these emotional and behavioural problems persisted into the school environment. Table 6 shows that despite there been no significant differences in the Connectedness scores, the children in the Low Income group reported feeling less connected to: their school environment; their friends; their teachers; and fellow students than did the children in the High Income group. Additionally, even though the children in the Low Income group reported been exposed to bullying-type behaviours more often than the children in the High Income group, these differences did not reach statistical significance. However, a subsequent independent t-test conducted on the question relating to how safe children felt at school showed that the children from the Low Income group ($M = 2.86, SD = 0.85$) felt significantly less safe at school than those in the High Income group ($M = 3.41, SD = 0.59$), $t(48) = -2.60, p = .013$.

The descriptive statistics run on the School Connectedness Profile scores highlighted similarities between the High Income group and the Low Income group. The majority (over
90%) of the young people from both groups stated that they had friends they stayed in close touch with; and also had someone in their lives that they could really depend on if they were having a tough time. A large proportion (over 80%) of these children, felt they had someone they could trust to share their private thoughts and feelings with; and someone they could open up to if they got angry or upset. A small proportion (10.7% of the Low Income and 4.5% of the High Income group) believed they had no-one to share their happiness with. Both groups reported feeling good when they worked hard in class (78.5% of the Low Income group and 86.3% of the High Income group) and this feeling was reinforced for 78.5% of Low Income group and 77.2% of the High Income group, when their teachers noticed that they were doing a good job and let them know about it.
Continuing or completing their education was important to 89.3% of the children in the Low Income group and 100% of the children in the High Income group. An independent t-test conducted on this question showed that the importance of continuing or completing their education was significantly higher for the High Income group ($M = 3.73, SD = 0.46$)
than for the Low Income group ($M = 3.36, SD = 0.68$), $t(46.99) = -2.30, p = .026$. Notably, 89.2% of the children in the Low Income group and 90.9% of those in the High Income group felt that there were lots of chances for people like them to get a good education.

**Caregivers’ Health**

The physical, emotional and mental health of the caregivers was examined from a number of sources. All the caregivers completed the *Family and Community Questionnaire* and the collated data can be found in Tables G10 and G11 (See Appendix).

Table G10 shows that, all the caregivers in the High Income group reported that their physical health was good or excellent and the majority (95.5%) reported that they saw a health professional only a few times a year for any physical health problems they suffered with and these conditions had a minimal effect on their activities. In comparison, 48.3% of the caregivers in the Low Income group reported that their physical health was good or excellent. Almost half of the Low Income group of caregivers needed to see a health professional, at least once a month, for their physical health problems and 34.4% stated that their activities were affected most, if not all the time, by their physical health problems. Physical Health was re-coded to 1/0 for Good Physical Health/Not and used in analyses.

A similar pattern emerged with the caregivers’ mental health. Table G11 shows that all caregivers from the High Income reported that their mental health was good or excellent compared with 62.1% of the caregivers in the Low Income group. The majority of the caregivers, 90.9% in the High Income group saw a health professional only a few times a year for their mental or emotional problems and most reported that their mental and emotional problems no effect on their activities. In comparison, 44.8% of the caregivers from the Low Income group reported needing to see a health professional, at least once a month, for their mental and emotional problems and 27.5% of these caregivers reported that their activities
were affected most, if not all the time, by their mental and emotional problems. Mental Health was re-coded to 1/0 for Good Mental Health/Not and used in analyses.

The physical and mental health of the caregivers in the Low Income group was also examined by looking at their scores on the SF-36v2. No comparisons were made with the High Income group because they did not complete this measure.

Table G12 (See Appendix) shows caregiver mean T-scores of less than 45 for the two overall health dimensions (physical and mental) and for the eight the health domains. These scores indicate poorer physical and mental health and corroborate the health information provided the caregivers in the Family and Community Questionnaire. Using the 1995 Australian Norms (ABS), this group of caregivers are faring worse than the least healthy 20% (first quintile) in Australia in all of the eight health domains but are on a comparable level in terms of their overall physical and mental health.

The mental health of the caregivers in the Low Income group was further investigated by looking at their scores on the ASR. Once more, no comparisons were made with the High Income group because they did not complete this measure.

Table 7 shows that the caregivers from the Low Income group had mean T-scores of less than 60 on the Internalising, Externalising and Total Problems scales. These scores indicate that as a group, the caregivers were in the normal range for Internalising, Externalising and Total Problems.
Table 7

ASR Clinical Scores for Caregivers from the Low Income group (N= 28)

<table>
<thead>
<tr>
<th>ASR Clinical Score</th>
<th>Mean</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalising Problems</td>
<td>59.72</td>
<td>15.89</td>
<td>30 – 92</td>
</tr>
<tr>
<td>Externalising Problems</td>
<td>55.41</td>
<td>12.55</td>
<td>32 – 82</td>
</tr>
<tr>
<td>Total Problems</td>
<td>55.48</td>
<td>16.03</td>
<td>25 - 89</td>
</tr>
</tbody>
</table>

Closer inspection of the range of scores indicated that some caregivers had $T$-scores above 60, signifying that some caregivers had reported emotional and behavioural problems which were in the ASR clinical range. Seeking clarification we looked at the caregivers’ individual scores to identify scores that fell in the ASR clinical range and also examined the ASR Syndrome $T$-scores to identify the problem areas, where a $T$-score of 70 and above was in the ASR clinical range.

The ‘Frequencies’ option in SPSS revealed that 37.9% of the caregivers from the Low Income group had Internalising scores in the clinical range, with 31% reporting somatic complaints; 20.7% revealing that they were Anxious/Depressed; and 10.3% admitted to feeling Withdrawn. In this group, 24.1% of the caregivers had Externalising scores which were in the clinical range, with 27.6% admitting that they engaged in Rule-Breaking behaviours and 10.3% reported struggling with their Aggressive Behaviour. A very small proportion, 3.4% of these caregivers stated that they had Thought Problems and 17.2% revealed Attention difficulties. A sizable proportion, 34.5% of the caregivers, had Total Problem scores in the ASR clinical range.
Predicting Internalising, Externalising and Total Problems in children

A series of Standard and Hierarchical regressions were run. Given our small sample size we sought to minimise Type I errors by initially running hypothesis driven analyses with selected predictor variables and then from these analyses we clustered the significant predictors to see if together they could better predict Internalising, Externalising and Total Problems in children.

The results of these analyses are presented in the next three sections. The first section looks at the children’s personal variables and the community/social variable of children’s sense of connectedness with their school environment; and the second section focuses on the caregiver variables. Both sections include the presence / absence of a Health Care Card as being indicative of the family’s financial situation. The third section looks at a combination of these variables.

Child, Family and Community/Social Variables associated with the CBCL Internalising, Externalising and Total Problem scores.

In the first stage of this analysis a correlation matrix was generated to explore the degree of association between variables. The correlations concerning the children are shown in Table 8.

As expected, the CBCL Internalising and Externalising variables were highly inter-correlated with each other and with the CBCL Total Problem score and therefore, all analyses were conducted with the three outcome variables in independent models.

Health Care Card and School Connectedness both had a moderate and significant correlation with Internalising, Externalising and Total Problem scores. Having a Health Care Card was correlated with increases in Internalising, Externalising and Total Problem scores;
alternatively, feeling more connected with the school was correlated with decreases in these scores.

Table 8. *Pearson’s Correlations between Health Care Card, Child Age, Child Sex, CHQ Child Physical Health, School Connectedness and CBCL Internalising, Externalising and Total Problem scores*

<table>
<thead>
<tr>
<th></th>
<th>HCC</th>
<th>Age</th>
<th>Sex</th>
<th>PH</th>
<th>SC</th>
<th>Int</th>
<th>Ext</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Card (HCC)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Age</td>
<td></td>
<td>-.123</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Sex</td>
<td>.196</td>
<td></td>
<td>-.279</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHQ Child Physical Health (PH)</td>
<td>-.271</td>
<td>-.192</td>
<td>.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Connectedness (SC)</td>
<td>-.240</td>
<td>.043</td>
<td>-.114</td>
<td>.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBCL Internalising (Int)</td>
<td></td>
<td>.400**</td>
<td>-.027</td>
<td>.168</td>
<td>-.170</td>
<td>-.359*</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>CBCL Externalising (Ext)</td>
<td>.370**</td>
<td>.018</td>
<td>.153</td>
<td>-.163</td>
<td>-.477**</td>
<td>.702**</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>CBCL Total Problem (Tot)</td>
<td>.338*</td>
<td>.004</td>
<td>.153</td>
<td>-.194</td>
<td>-.456**</td>
<td>.897**</td>
<td>.904**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Two-tailed correlations *p<.05, **p<.01, n=50

The second stage of the analysis involves the use of regression analyses to explore the degree to which specific sets of variables can be used to predict CBCL Internalising, Externalising and Total Problem scores.
Three standard multiple regressions were performed with Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card, Child Age and Child Sex as the Independent Variables. Due to the small sample size, we wanted to ‘correct’ for a possible overestimation in the R square value and therefore we chose to report on the Adjusted R square statistic for all regression analyses (Tabachnick and Fiddell, 2007).

The results in Table 9.1 indicate that together Health Care Card, Child Age and Child Sex were significant predictors of Internalising problem scores only. The regression accounted for 12% of the variance in the Internalising scores and Health Care Card was the only significant predictor in the model, with reduced family income predicting more Internalising problems.
Table 9.1

**Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Child Age and Child Sex as the Independent Variables**

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>HCC</th>
<th>B</th>
<th>B</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>9.72</td>
<td>.36</td>
<td>2.80</td>
<td>.007**</td>
<td></td>
</tr>
<tr>
<td>Child Age</td>
<td>0.32</td>
<td>.05</td>
<td>.35</td>
<td>.726</td>
<td></td>
</tr>
<tr>
<td>Child Sex</td>
<td>2.76</td>
<td>.12</td>
<td>.75</td>
<td>.456</td>
<td></td>
</tr>
<tr>
<td>R= .41, $R^2 = .17$, Adj. $R^2 = .12$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46) = 3.15$, $p = .034*$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>9.51</td>
<td>.36</td>
<td>2.60</td>
<td>.013*</td>
<td></td>
</tr>
<tr>
<td>Child Age</td>
<td>0.62</td>
<td>.09</td>
<td>.65</td>
<td>.521</td>
<td></td>
</tr>
<tr>
<td>Child Sex</td>
<td>2.90</td>
<td>.11</td>
<td>.75</td>
<td>.458</td>
<td></td>
</tr>
<tr>
<td>R= .39, $R^2 = .15$, Adj. $R^2 = .10$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46) = 2.74$, $p = .054$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>9.04</td>
<td>.33</td>
<td>1.35</td>
<td>.184</td>
<td></td>
</tr>
<tr>
<td>Child Age</td>
<td>0.53</td>
<td>.08</td>
<td>.52</td>
<td>.606</td>
<td></td>
</tr>
<tr>
<td>Child Sex</td>
<td>3.14</td>
<td>.11</td>
<td>.76</td>
<td>.452</td>
<td></td>
</tr>
<tr>
<td>R= .36, $R^2 = .13$, Adj. $R^2 = .07$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,45) = 2.24$, $p = .097$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *p<.05, **p<.01
A new set of regressions were run with Health Care Card, Child Physical Health and School Connectedness as the Independent Variables and with Internalising, Externalising and Total Problem Scores as the Dependent Variables. The results in Table 9.2 indicate that together Health Care Card, Child Physical Health and School Connectedness are significant predictors of Internalising, Externalising and Total Problem Scores. The model accounted for 20% of the variance in Internalising scores; 35% of the variance in Externalising scores; and 29% of Total Problem scores. All predictors were differentially significant with having a Health Care Card/ reduced family income predicting more Internalising problems; poorer physical health predicting more Externalising problems and Total Problems; and feeling less connected to school predicting more Internalising, Externalising and Total Problem scores.
Table 9.2

Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Child Physical Health and School Connectedness as the Independent Variables

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>7.67</td>
<td>.30</td>
<td>.30</td>
<td>.034*</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.20</td>
<td>-.12</td>
<td>-.89</td>
<td>.380</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.23</td>
<td>-.28</td>
<td>-2.09</td>
<td>.042*</td>
</tr>
<tr>
<td>( R = .50, R^2 = .25, Adj. R^2 = .20 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( F(3,45) = 4.89, p = .005** )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>5.95</td>
<td>.23</td>
<td>1.83</td>
<td>.074</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.50</td>
<td>-.29</td>
<td>-2.41</td>
<td>.020*</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.35</td>
<td>-.41</td>
<td>-3.37</td>
<td>.002**</td>
</tr>
<tr>
<td>( R = .63, R^2 = .39, Adj. R^2 = .35 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( F(3,45) = 9.60, p = .000** )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>5.25</td>
<td>.19</td>
<td>1.45</td>
<td>.153</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.50</td>
<td>-.27</td>
<td>-2.13</td>
<td>.039*</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.36</td>
<td>.11</td>
<td>-3.14</td>
<td>.003**</td>
</tr>
<tr>
<td>( R = .58, R^2 = .34, Adj. R^2 = .29 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( F(3,45) = 7.56, p = .000** )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*p<.05, **p<.01
Given that School Connectedness was a significantly strong predictor in all three regression models we wanted to test the unique contribution that School Connectedness makes to the prediction of Internalising, Externalising and Total Problem Scores. Three hierarchical regressions were conducted. For Internalising, Externalising and Total Problem Scores the variables were entered into the regression with Health Care Card and Child Physical Health entered in the first step and School Connectedness entered in the second step.

For Internalising Problem Score, Table 9.3 shows that in the first step of the model that Health Care Card and Child Physical Health are significant predictors of Internalising Problem Score and the addition of School Connectedness in the second step resulted in a significant increase in $R$ where School Connectedness explained an additional 7% of the variance in Internalising Problem score even when the effects of Health Care Card and Child Physical Health were statistically controlled for.
Table 9.3

*Hierarchical Regression Analysis for Variables Predicting Internalising Problem Score*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>9.60</td>
<td>3.53</td>
<td>.37</td>
<td>2.68</td>
<td>.010**</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.16</td>
<td>.26</td>
<td>-.12</td>
<td>-.83</td>
<td>.410</td>
</tr>
</tbody>
</table>

\[ R = .42, R^2 = .17, Adj. R^2 = .18 \]

\[ F(2, 46) = 4.80, p = .013^* \]

<table>
<thead>
<tr>
<th><strong>Step 2</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HCC</td>
<td>7.67</td>
<td>3.51</td>
<td>.30</td>
<td>2.19</td>
<td>.034*</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.20</td>
<td>.23</td>
<td>-.12</td>
<td>-.89</td>
<td>.380</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.23</td>
<td>.11</td>
<td>-.28</td>
<td>-2.09</td>
<td>.042*</td>
</tr>
</tbody>
</table>

\[ R = .50, R^2 = .25, Adj. R^2 = .20 \]

\[ F(3, 45) = 4.89, p = .005** \]

\[ R^2_{\text{Change}} = .07, F(1, 45) = 4.38, \]

\[ p = .042^* \]

*\( p < .05 \), **\( p < .01 \)

For Externalising Problem Score, Table 9.4 shows that in the first step of the analysis that Health Care Card and Child Physical Health are significant predictors of Externalising Problem Score and the addition of School Connectedness in the second step resulted in a significant increase in \( R \) where School Connectedness explained an additional 15% of the variance in Externalising Problem score even when the effects of Health Care Card and Child
Physical Health were statistically controlled for. In this model, Health Care Card lost its significant coefficient when School Connectedness was added.

Table 9.4

*Hierarchical Regression Analysis for Variables Predicting Externalising Problem Score*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>8.62</td>
<td>3.49</td>
<td>.33</td>
<td>2.47</td>
<td>.017*</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.50</td>
<td>.23</td>
<td>-.29</td>
<td>-2.14</td>
<td>.038*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.49, R² = .24, Adj. R² = .20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F(2,46)= 7.10, p=.002*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>5.95</td>
<td>3.25</td>
<td>.23</td>
<td>1.83</td>
<td>.074</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.50</td>
<td>.21</td>
<td>-.29</td>
<td>-2.41</td>
<td>.020*</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.35</td>
<td>.10</td>
<td>-.41</td>
<td>-3.37</td>
<td>.002**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.63, R² = .39, Adj. R² = .35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F(3,45)= 9.60, p=.000**</td>
</tr>
</tbody>
</table>

R² Change=.15, F(1,45)= 11.38,
p = .002**

*p<.05, **p<.01

For Total Problem Score, Table 9.5 shows that in the first step of the analysis that Health Care Card and Child Physical Health are significant predictors of Total Problem Score and the addition of School Connectedness in the second step resulted in a significant increase
in $R$ where School Connectedness explained an additional 15% of the variance in Total Problem score even when the effects of Health Care Card and Child Physical Health were statistically controlled for. In this model, Health Care Card lost its significant coefficient but Child Physical Health was shown to be a significant predictor of Total problems when School Connectedness was added.

Table 9.5

*Hierarchical Regression Analysis for Variables Predicting Total Problem Score*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>$B$</th>
<th>$SE$ $B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>8.00</td>
<td>3.82</td>
<td>.29</td>
<td>2.09</td>
<td>.042*</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.49</td>
<td>.25</td>
<td>-.26</td>
<td>-1.92</td>
<td>.062</td>
</tr>
<tr>
<td>$R^2 = .44, R^2 = .19, Adj. R^2 = .15$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(2,46) = 5.37, p = .008**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 2**

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>$B$</th>
<th>$SE$ $B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCC</td>
<td>5.25</td>
<td>3.61</td>
<td>.19</td>
<td>1.45</td>
<td>.153</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.50</td>
<td>.23</td>
<td>-.27</td>
<td>-2.13</td>
<td>.039*</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.36</td>
<td>.11</td>
<td>-.39</td>
<td>-3.14</td>
<td>.003**</td>
</tr>
<tr>
<td>$R^2 = .58, R^2 = .34, Adj. R^2 = .29$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,45) = 7.56, p = .000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2_{Change} = .15, F(1,45) = 9.86,$

$p = .003**$

*p < .05, **p < .01
Caregiver, Family and Community/Social Variables associated with the CBCL

Internalising, Externalising and Total Problem scores.

In the first stage of this analysis a correlation matrix was generated to explore the degree of association between variables. The correlations concerning the caregivers are shown in Table 10.

As we saw in the previous correlation matrix, the CBCL Internalising and Externalising variables were highly inter-correlated with each other and with the CBCL Total Problem score and there was a moderate and significant positive correlation between Health Care Card and the three outcome variables.

The matrix showed that there were moderate to strong correlations between Caregiver Mental Health and Caregiver Physical Health; and Internalising, Externalising and Total Problem scores; where poorer Caregiver Mental Health was associated with poorer Caregiver Physical health; and with increases in Internalising, Externalising and Total Problem scores.

The matrix also revealed that there were moderate and significant correlations between Caregiver Physical Health and Caregiver Education; and Externalising Problem scores where better Caregiver Physical Health was associated with having completed Year 12; and with decreases in Externalising Problem scores.

The other variables in the matrix were not significantly associated with Internalising, Externalising and Total Problem scores. However, we found that there were moderate to strong correlations between Health Care Card and Caregiver Physical and Mental Health; and Stable Housing; where having a Health Care Card was associated with poorer Caregiver Physical and Mental Health; and greater risk of insecure and unstable housing.

Furthermore, the matrix showed that there were moderate to strong correlations between Single Parenthood and Health Care Card; Caregiver Mental Health; and Stable
Housing, where living in a Single Parent Household was significantly associated with reduced family income; poorer Caregiver Mental Health; and greater risk of insecure housing.
Table 10.

*Pearson’s Correlations between Health Care Card, Caregiver Age, Caregiver Sex, Caregiver Education, Caregiver Physical Health, Caregiver Mental Health, Single Parent Household, Stable Housing and CBCL Internalising, Externalising and Total Problem scores*

<table>
<thead>
<tr>
<th></th>
<th>HCC</th>
<th>Age</th>
<th>Sex</th>
<th>Edu</th>
<th>PhH</th>
<th>MeH</th>
<th>SP</th>
<th>StH</th>
<th>Int</th>
<th>Ext</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Card (HCC)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver Age</td>
<td>-.241</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver Sex</td>
<td>.027</td>
<td></td>
<td>.439</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver Education (Edu)</td>
<td>-.250</td>
<td></td>
<td>-.321</td>
<td>-.258</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver Physical Health (PhH)</td>
<td>-.580</td>
<td></td>
<td>-.077</td>
<td>-.218</td>
<td>.308</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver Mental Health (MeH)</td>
<td>-.443</td>
<td></td>
<td>.234</td>
<td>.000</td>
<td>.274</td>
<td>.327*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Parent Household (SP)</td>
<td>.656</td>
<td></td>
<td>-.165</td>
<td>-.040</td>
<td>-.093</td>
<td>-.271</td>
<td>-.341*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable Housing (StH)</td>
<td>-.525</td>
<td></td>
<td>.131</td>
<td>.046</td>
<td>.168</td>
<td>.109</td>
<td>.160</td>
<td>-.642*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalising (Int)</td>
<td>.400</td>
<td></td>
<td>-.154</td>
<td>-.101</td>
<td>-.256</td>
<td>-.275</td>
<td>-.574**</td>
<td>.196</td>
<td>-1.69</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Externalising (Ext)</td>
<td>.370</td>
<td></td>
<td>-.178</td>
<td>-.016</td>
<td>-.177</td>
<td>-.365**</td>
<td>-.514**</td>
<td>.115</td>
<td>-.017</td>
<td>.702**</td>
<td>1.00</td>
</tr>
<tr>
<td>Total Probs (Tot)</td>
<td>.338</td>
<td></td>
<td>-.154</td>
<td>-.031</td>
<td>-.179</td>
<td>-.271</td>
<td>-.555**</td>
<td>.091</td>
<td>-.073</td>
<td>.897**</td>
<td>.904**</td>
</tr>
</tbody>
</table>

Two-tailed correlations *p<.05, **p<.01, n=50
The second stage of the analysis involves the use of regression analyses to explore the degree to which specific sets of variables can be used to predict CBCL Internalising, Externalising and Total Problem scores.

Three standard multiple regressions were performed with Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card, Caregiver Age and Caregiver Sex as the Independent Variables. The results in Table 11.1 indicate that this model significantly predicted Internalising Problem Score and that Health Care Card was the only significant predictor, with reduced family income predicting more Internalising problems.

Another set of standard multiple regressions were performed with Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card, Caregiver Education and Single Parent Household as the Independent Variables. The results in Table 11.2 indicate that together, Health Care Card, Caregiver Education and Single Parent Household were significant predictors of both Internalising and Externalising Problem scores. Health Care Card was a significant predictor in both regressions showing that reduced family income predicts more Internalising and Externalising problems.

The next set of multiple regressions were performed with Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card, Caregiver Mental Health and Caregiver Physical Health as the Independent Variables. The results in Table 11.3 indicate that this model significantly predicted Internalising, Externalising and Total Problem scores and explained a good proportion of the variance in scores: 31% for Internalising score; 27% for Externalising score; and 28% for Total Problem Scores. In all regressions, Caregiver Mental Health was a significant predictor, where Caregiver Mental Health problems predicted more Internalising, Externalising and Total problems in their children.
Table 11.1

*Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Age and Caregiver Sex as the Independent Variables*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>B</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>10.11</td>
<td>.40</td>
<td>2.86</td>
<td>.006**</td>
</tr>
<tr>
<td>Caregiver Age</td>
<td>-.02</td>
<td>-.01</td>
<td>-.07</td>
<td>.946</td>
</tr>
<tr>
<td>Caregiver Sex</td>
<td>-4.48</td>
<td>-.12</td>
<td>-.71</td>
<td>.482</td>
</tr>
<tr>
<td>R = .42, R² = .17, Adj. R² = .12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(3,46) = 3.19, p = .032*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **DV: Externalising Score** |     |     |     |      |
| HCC                   | 9.09 | .35 | 2.43 | .019* |
| Caregiver Age         | -.18 | -.10| -.66 | .516 |
| Caregiver Sex         | .87  | .02 | .13  | .897 |
| R = .38, R² = .15, Adj. R² = .09 | |     |      |      |
| F(3,46) = 2.62, p = .062 | |     |      |      |

| **DV: Total Problem Score** |     |     |     |      |
| HCC                   | 8.90 | .32 | 2.22 | .031* |
| Caregiver Age         | -.13 | -.07| -.45 | .653 |
| Caregiver Sex         | -.38 | .01 | -.05 | .958 |
| R = .35, R² = .12, Adj. R² = .06 | |     |      |      |
| F(3,46) = 2.09, p = .115 | |     |      |      |

*p < .05, **p < .01
Table 11.2

*Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Education and Single Parent Household as the Independent Variables*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>$B$</th>
<th>$B$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>10.68</td>
<td>.42</td>
<td>2.33</td>
<td>.024*</td>
</tr>
<tr>
<td>Caregiver Education</td>
<td>-4.55</td>
<td>-.16</td>
<td>-1.16</td>
<td>.253</td>
</tr>
<tr>
<td>Single Parent Household</td>
<td>-2.42</td>
<td>-.10</td>
<td>-.54</td>
<td>.59</td>
</tr>
<tr>
<td>$R= .44, R^2= .19, Adj. R^2= .14$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)= 3.62, p= .020^*$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>13.01</td>
<td>.49</td>
<td>2.69</td>
<td>.010**</td>
</tr>
<tr>
<td>Caregiver Education</td>
<td>-2.21</td>
<td>-.07</td>
<td>-.53</td>
<td>.597</td>
</tr>
<tr>
<td>Single Parent Household</td>
<td>-5.67</td>
<td>-.22</td>
<td>-1.21</td>
<td>.233</td>
</tr>
<tr>
<td>$R= .41, R^2= .17, Adj. R^2= .12$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)= 3.17, p= .033^*$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>12.81</td>
<td>.46</td>
<td>2.48</td>
<td>.017*</td>
</tr>
<tr>
<td>Caregiver Education</td>
<td>-2.65</td>
<td>-.08</td>
<td>-.60</td>
<td>.553</td>
</tr>
<tr>
<td>Single Parent Household</td>
<td>-6.09</td>
<td>-.22</td>
<td>-1.22</td>
<td>.230</td>
</tr>
<tr>
<td>$R= .39, R^2= .15, Adj. R^2= .10$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)= 2.731, p= .055$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01
Table 11.3

Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health and Caregiver Physical Health as the Independent Variables

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>4.39</td>
<td>.17</td>
<td>1.13</td>
<td>.265</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-15.45</td>
<td>-.49</td>
<td>-3.72</td>
<td><strong>.001</strong></td>
</tr>
<tr>
<td>Caregiver Physical Health</td>
<td>-.35</td>
<td>.01</td>
<td>-.09</td>
<td>.931</td>
</tr>
<tr>
<td>R= .60, R² = .36, Adj. R² = .31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(3,46) = 8.47, p = <strong>.000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>2.08</td>
<td>.08</td>
<td>.49</td>
<td>.623</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-13.74</td>
<td>-.42</td>
<td>-3.06</td>
<td><strong>.004</strong></td>
</tr>
<tr>
<td>Caregiver Physical Health</td>
<td>-5.19</td>
<td>-.18</td>
<td>-1.20</td>
<td>.235</td>
</tr>
<tr>
<td>R= .56, R² = .31, Adj. R² = .27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(3,46) = 6.93, p = <strong>.001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>2.28</td>
<td>.08</td>
<td>.52</td>
<td>.606</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-17.20</td>
<td>-.50</td>
<td>-3.67</td>
<td><strong>.001</strong></td>
</tr>
<tr>
<td>Caregiver Physical Health</td>
<td>-1.80</td>
<td>-.06</td>
<td>-.40</td>
<td>.692</td>
</tr>
<tr>
<td>R= .57, R² = .32, Adj. R² = .28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(3,46) = 7.25, p = <strong>.000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01
A new set of standard multiple regressions were performed with Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card, Caregiver Mental Health and Stable Housing as the Independent Variables. The results in Table 11.4 indicate that Health Care Card, Caregiver Mental Health and Stable Housing were significant predictors of Internalising, Externalising and Total Problem scores. The model accounted for 31% of the variance in Internalising score; 28% of the variance in Externalising score; and 28% of the variance in Total Problem Scores. In all regressions, Caregiver Mental Health was a significant predictor where Caregiver Mental Health problems predicted more Internalising, Externalising and Total problems in their children.
Table 11.4

*Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health and Stable Housing as the Independent Variables*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>4.67</td>
<td>.19</td>
<td>1.20</td>
<td>.236</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-15.47</td>
<td>-.49</td>
<td>-3.72</td>
<td>.001**</td>
</tr>
<tr>
<td>Stable Housing</td>
<td>.203</td>
<td>.01</td>
<td>.05</td>
<td>.960</td>
</tr>
<tr>
<td>$R=.60$, $R^2=.36$, $Adj. R^2=.31$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)=8.47$, $p=.000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>7.70</td>
<td>.29</td>
<td>1.85</td>
<td>.071</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-13.65</td>
<td>-.42</td>
<td>-3.06</td>
<td>.004**</td>
</tr>
<tr>
<td>Stable Housing</td>
<td>6.06</td>
<td>.20</td>
<td>1.41</td>
<td>.164</td>
</tr>
<tr>
<td>$R=.57$, $R^2=.32$, $Adj. R^2=.28$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)=7.19$, $p=.000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>4.66</td>
<td>.17</td>
<td>1.07</td>
<td>.293</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-17.08</td>
<td>-.50</td>
<td>-3.65</td>
<td>.001**</td>
</tr>
<tr>
<td>Stable Housing</td>
<td>2.96</td>
<td>.09</td>
<td>.66</td>
<td>.51</td>
</tr>
<tr>
<td>$R=.57$, $R^2=.33$, $Adj. R^2=.28$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(3,46)=7.39$, $p=.000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*$p<.05$, **$p<.01$
Child, Caregiver, Family and Community/Social Variables associated with the CBCL Internalising, Externalising and Total Problem scores.

To better understand the combination of variables most likely to predict emotional and behavioural problems in children, we ran an additional set of regressions including those variables that emerged as significant predictors in previous models.

Three standard regressions were run with Health Care Card, Caregiver Mental Health, Child Physical Health and School Connectedness as the Independent Variables and Internalising, Externalising and Total Problem Scores as the Dependent Variables.

The results in Table 12 indicate that together Health Care Card, Caregiver Mental Health, Child Physical Health and School Connectedness were significant predictors of Internalising, Externalising and Total Problem scores. The model accounted for 34% of the variance in Internalising score; 36% of the variance in Externalising score; and 37% of the variance in Total Problem Scores.

Caregiver Mental Health was shown to be a significant predictor of Internalising, Externalising and Total problems with Caregiver Mental Health problems predicting more Internalising, Externalising and Total problems. Additionally, School Connectedness emerged as a significant predictor of Externalising problems with feeling more connected to the school environment predicting fewer Externalising problems.
Table 12

*Standard Multiple Regressions of Internalising, Externalising and Total Problem Scores as the Dependent Variables and Health Care Card (HCC), Caregiver Mental Health, Child Physical Health and School Connectedness as the Independent Variables*

<table>
<thead>
<tr>
<th>Variables in Equation</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: Internalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>3.02</td>
<td>.12</td>
<td>.88</td>
<td>.382</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-16.04</td>
<td>-.52</td>
<td>-3.60</td>
<td>.001**</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>.03</td>
<td>.02</td>
<td>.14</td>
<td>.889</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.09</td>
<td>-.10</td>
<td>-.77</td>
<td>.444</td>
</tr>
<tr>
<td>$R= .63, R^2= .40, Adj. R^2= .34$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(4,43)= 6.95, p= .000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Externalising Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>2.66</td>
<td>.11</td>
<td>.79</td>
<td>.435</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-11.15</td>
<td>-.36</td>
<td>-2.54</td>
<td>.015*</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.37</td>
<td>-.20</td>
<td>-1.55</td>
<td>.128</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.25</td>
<td>-.30</td>
<td>-2.27</td>
<td>.028*</td>
</tr>
<tr>
<td>$R= .65, R^2= .42, Adj. R^2= .36$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(4,43)= 7.65, p= .000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV: Total Problem Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCC</td>
<td>.66</td>
<td>.03</td>
<td>.19</td>
<td>.853</td>
</tr>
<tr>
<td>Caregiver Mental Health</td>
<td>-15.90</td>
<td>-.49</td>
<td>-3.43</td>
<td>.001**</td>
</tr>
<tr>
<td>Child Physical Health</td>
<td>-.25</td>
<td>-.13</td>
<td>-1.01</td>
<td>.317</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>-.21</td>
<td>-.23</td>
<td>-1.78</td>
<td>.082</td>
</tr>
<tr>
<td>$R= .65, R^2= .42, Adj. R^2= .37$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F(4,43)= 7.80, p= .000**$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01
Discussion

This present study sought to examine the child, caregiver, family and community variables that are associated with the risk of children and adolescents developing emotional and behavioural problems, second to examine the association of school connectedness and the incidence of mental health problems in young people given its purported protective effects. Consistent with previous research conducted in the U.S. (Park et al., 2011; Slopen et al., 2010) and in Australia (Najman et al., 2010) we found that the caregivers of the children and adolescents in the Low Income group (defined as holders of a Health Care Card) reported that the children they cared for had significantly more physical, psycho-social and mental health problems than did the caregivers of the children in the High Income group (defined as absence of a Health Care Card). As measured by the Child Health Questionnaire (CHQ-PF50) the children in the Low Income group were identified as experiencing more physical pain and discomfort than the children in the High Income group; and they were also seen as having significantly more Internalising problems such as feeling anxious and depressed and more Externalising problems such as engaging in rule-breaking behaviours, as measured by the Child Behaviour Checklist (CBCL). Given the consistency in findings of the present cross-sectional study and the longitudinal studies by Park et al. (2011) and Slopen et al. (2010) who administered the CBCL (1½-5 years; 6-18 years) and found that low-income, as defined by incomes falling below the poverty line, was significantly associated with an increase in internalising and externalising problems, it is suggested that there is a prospective link between the ‘risk factors’ associated with low income and subsequent health outcomes including mental health problems in childhood.

Contrary to our hypotheses and previous research, variations in age (Daley et al., 2013; Luthar & Huston, 2001) and sex (Hanson et al., 2011; WHO, 2010) were not found to be differentially associated with childhood emotional and behavioural problems. However as
expected poor child physical health was found to be strongly associated with poor child mental health (AIHW, 2008; Kidsmatter, n.d). The results show that even though children aged 11-17 years, both young children (5-12 years); and older children (13-19 years) were included in the present study, the majority (52.9%) were aged 12-14 years and therefore there was not enough variance in age of participants for age to emerge as being significantly associated with emotional and behavioural problems. In future, given that the Child Behaviour Checklist (CBCL) can be administered for children aged 6-18 years it would be better to include two groups of children distinctly delineated by age, for example including children from the youngest age group 6-9 years; and from the oldest age group 14-17 years. Furthermore, given that the mean age of the group was 13.59 years it may also be the case that the children in the current study may not have all reached the stage in their development where boys tend to be influenced by their peers to skip school, to fight and vandalise (Raising Children Network, n.d.) and where girls become self-conscious and have a tendency to withdraw and often experience bouts of emotional distress and anxiety (Hanson et al., 2011; Kuruvilla & Jacob, 2007) and therefore, as already mentioned, the inclusion of participants from a broader range of ages and developmental stages in future studies may show that sex, that is being male or female, is associated with different emotional and behavioural problems in children.

It is important to note that unlike their caregivers, children in the Low Income group did not report that they had significantly more emotional and behavioural problems than the children in the High Income group. A common argument in the literature for this disparity is that often when caregivers are themselves depressed such caregivers may also have more negative views of everything including their child’s behaviours and they may actually elicit different behaviours from their children, resulting in more negative behaviours in the home than the classroom or other social contexts and consequently a tendency for parents to report
significantly greater levels of pathology in their children (van Lier, Verhulst & Crijnen, 2003; Youngstrom et al., 2000). Given that the caregivers in the Low Income group reported having more issues and problems with their physical and mental health than the caregivers in the High Income group it is possible that this contention may in fact explain the difference noted in the reporting of problems by children and their caregivers. A limitation of the present study however is that the caregivers from the High Income group did not complete the Achenbach Adult Self-Report/18-59 (ASR) nor the QualityMetric's Short Form 36 Health Survey Version 2 (SF-36v2) which would have allowed for a more rigorous investigation of the differences in the mental and physical health of the two groups. Further studies will need to secure approval for the administration of all research instruments to participants promoting better research and more robust findings. Additionally, teachers may be asked to complete the Teacher Report Form (TRF/6-18) (Achenbach, 1991) and provide teacher’s ratings of the problems rated on the CBCL so that data obtained from multiple informants can be integrated by researchers to obtain a picture of childhood emotional and behavioural problems across the various social and physical environments.

As measured by the Child Health Questionnaire, a second core finding was that the physical and mental health problems of the children in the Low Income group were associated with increased physical (time) and emotional demands on the caregivers. This, in addition to insufficient income was associated with poorer health of the caregivers in the Low Income group who reported experiencing physical and mental health problems both more frequently and at a greater severity than those in the High Income group. These caregivers were identified as suffering with physical pain and somatic complaints and reported having thought and attention problems; feeling anxious; being depressed; withdrawn; having a lower sense of vitality; difficulties with aggression; and engaging in rule-breaking behaviours. As hypothesised children from low-income families whose caregivers have physical and mental
health problems were associated with more child internalising, externalising and total problems. These findings are consistent with the literature insofar as low income has been linked to poorer mental health for both caregivers and their children (Gassman-Pines & Yoshikawa, 2006; Lombardi & Coley, 2013; Park et al., 2011). The adults in the Fone et al. (2013) study in Wales completed the Mental Health Inventory subscale of the SF-36v2 and like the caregivers in the Low Income group in the present study those with low-incomes reported more mental health problems whilst those with higher incomes reported better mental health. Fone et al. (2013) however did not examine the mental health of children and so useful comparisons cannot be made. Unlike Fone et al. (2013), Lombardi and Coley (2013) investigated the mental health of both mothers and children (aged 0 to 4 years or 10-14 years) recruited from low-income neighbourhoods in Boston, Chicago and San Antonio and found a strong association between the higher incomes secured by working mothers and increased maternal well-being; and fewer emotional and behavioural problems in their children as measured by the CBCL. The present study and along with Fone et al. (2013) show that for comparative reasons it is important to include both low income and high income families in studies; and equally important to include two groups of children clearly defined by age as in the Lombardi and Coley (2013) study to allow for income; age; and sex-related differences between groups to emerge. Furthermore, the consistency in findings of the present study with the literature including the Gassman-Pines and Yoshikawa study (2006) emphasises the benefits of securing sufficient income for low income families and highlights the need to further explore the best possible anti-poverty solutions in an attempt to reduce the incidence and severity of both adult and child emotional and behavioural problems.

A third core finding is a significant age difference between the two groups of caregivers where the female caregivers in the High Income group were older \((M=45.5)\) years; age range 39 to 57 years) than those in the Low Income group \((M=39.69)\) years; age range 29
to 56 years). This finding is important because often in the literature maternal age has been associated with a number of health outcomes including depression for mothers and anxiety for children (Edwards et al., 2012; Oswalt, McClain, Bonds & Melnyk, 2013). Edwards et al. (2012) for example, collected data from 248 young low-income African American mothers (aged 14 to 21 years) during pregnancy and at 4, 12, and 24 months postpartum and using The Centre for Epidemiologic Studies-Depression Scale (CES-D) found that mothers reported the highest levels of depressive symptoms in the prenatal period with declining levels at each subsequent time point. Edwards et al. (2012) found that lower levels of depressive symptoms were associated with both higher levels of support from the mother’s family and from the father of the baby with the strongest associations being living with a parent and being in a partnered relationship with the baby’s father; however, young mothers who have rapid, repeat pregnancies were thought to be at especially high risk for depression. On the other hand, Oswalt et al. (2013) studied data collected from 253 mothers of low birth-weight premature infants in the neonatal intensive-care unit (NICU), to examine the effectiveness of the Creating Opportunities for Parent Empowerment (COPE) program, an educational–behavioural parent intervention, on maternal and child anxiety based on maternal age, with data collected at 24 months and 2 to 4 days post-intervention. Oswalt et al. (2013) found that more mothers over 21 years old were White, college educated, had more than one child and a reported family income greater than $30,000 whilst more mothers aged 21 years or younger were Black, high school educated or less, had one child and a reported family income less than or equal to $30,000. Unlike the findings of Park et al. (2011) and Edwards et al. (2012) that maternal age is associated with higher rates of mental health problems, Oswalt et al. (2013) did not find a significant association between maternal age and maternal anxiety assessed using the State-Trait Anxiety Inventory but found that maternal age was associated with child anxiety assessed using the Child Behaviour Checklist for Ages 2 to 3. The Oswalt
et al. (2013) findings indicate that younger mothers, 21 years old or younger, with lower levels of income and education and more children reported higher levels of child anxiety at baseline. These studies suggest that maternal age, along with other covariates such as living with supportive parents and living with a partner are associated with the mental health of both mothers and their children.

Consistent with previous studies, (Dearing et al., 2006; Fone et al., 2013; Gassman-Pines & Yoshikawa, 2006; Mohammad et al., 2014) the majority of caregivers in the High Income group in the current study tended to live in intact nuclear families; had completed Year 12; were employed; and owned their own home. In comparison, many of the caregivers in the Low Income group lived in single-parent families; did not finish Year 12; were unemployed; and required assistance from family, friends and community agencies because of financial difficulties in the previous 12 months. Additionally, there was a significant difference in housing stability between the groups where 31% of the families in the Low Income group lived in government housing and a further 13.8% were homeless with no stable accommodation whilst 81.1% of the families in the High Income group owned their own home including paying off a mortgage. Caregivers whose families were homeless and in unstable housing reported more Internalising and Externalising problems in their child than did their housed counterparts, a finding which is found repeatedly in the literature (Park et al., 2011; Mayberry et al., 2014; Mohammad et al., 2014).

Contrary to our hypotheses and previous findings (Brown et al., 2013; Coley et al., 2013; Dearing et al., 2006; Edelman, 2010; Gassman-Pines & Yoshikawa, 2006; Hanson et al., 2011; Kaminski et al., 2013; Kiernan & Mensah, 2011), even though we found notable differences between the High and Low Income groups in terms of caregiver age, sex, marital status and physical health, these variables were not found to be associated with differences in the reported levels of child emotional and behavioural problems between the groups. It is
believed that with a larger sample, the differences found in caregiver age, sex, marital status and physical health may reach statistical significance and may emerge as significant predictors of child emotional and behavioural problems.

The present study has shown that income, caregiver physical and mental health and housing stability are associated with the mental health of children and these findings are consistent with the literature where the four domains including socio-demographic factors; parental well-being; family functioning and neighbourhood quality have often been identified as critical to healthy human development (Barbarin et al., 2006; Edelman, 2010; Hultman et al., 2006; Smith, 2013). Additionally as emphasised by the findings of the Campbell et al. (2012) study of 101 families from the Abecedarian Project, educational attainment seems to be the vehicle by which people can escape poverty and it is suggested that educational attainment, parental employment and income sufficiency will give families greater choice of where they live and it is believed that living in stable housing in safer neighbourhoods and environments will be associated with healthy psychological development in children that will continue into adulthood (AIHW, 2012; Bronfenbrenner, 1995; Campbell et al., 2012; Mohatt et al., 2011).

However, unlike other studies, we did not investigate the domain of family functioning and did not measure parental stress or parenting practices. The literature shows that the constant and unrelenting grind of low and insufficient income, has a demoralising effect on the well-being of parents (Daiski, 2007; Goodman et al., 2010). The chronic and acute stress over worries about food, work, housing and exposure to violence (Edelman, 2010; Goodman et al., 2010; Kilmer et al. 2012; Mayberry et al., 2014) sees parents develop negative feelings of self-worth and dignity; and is often linked to changes in parenting behaviour such that their capacity for supportive, consistent and involved parenting is diminished (Kilmer et al., 2012; Mayberry et al., 2014) making them less sensitive to children
and their needs (Newland et al., 2013) and often inconsistent and punitive in their discipline of children (Edelman, 2010). Parenting stress and the ensuing negative parenting practices are commonly associated with more child Internalising and Externalising problems such as depression and problematic relationships with peers (Kilmer et al., 2012; Newland et al., 2013). Given that parenting stress and practice are commonly associated with a greater incidence of mental illness in both parents and children (Newland et al., 2013; Treadwell et al., 2010) these variables should be measured and included in future studies as it would allow for the testing of the moderating role or mediating role these variables may play between low-income and childhood emotional and behavioural problems. The results of such studies may show the importance that needs to be placed on programs designed to assist parents deal with stress and worry thus enabling more positive parenting, leading to good mental health in children. For example the Mayberry et al. (2014) study shows that often the strict rules and restrictions in homeless shelters interferes with family routines and the ability of mothers to feel like the ‘parent’ responsible for their children, for example being unable to cook for their children or give them drinks and snacks outside of set meal times. The responses from mothers indicate that in the shelters there is not enough play time, or family time for their children and that threat of reporting to child protection services interfered with discipline routines and undermined parental authority (Mayberry et al., 2014). Additionally mothers who were homeless and forced to live with extended family reported that their parenting decisions were constantly questioned and this often undermined their personal strengths and positive relationships with their children (Mayberry et al., 2014). For these families, been homeless and the changes to their routines left mothers feeling demoralised and questioning their parenting ability. The findings of such studies (Kilmer et al., 2012; Mayberry et al., 2014) emphasise the importance of understanding families as systems, giving consideration to their values, routines and interactions, and the need to focus on parent-child relationship
building for the well-being of the family as well as individual family member health. Understandably, the inherent difficulties in allowing all families to live, eat, sleep and play as they wish in shelters for example, would result in chaos, however, there could be a group effort between program staff and parents to help identify and implement creative strategies whereby family routines could be maintained and sources of parental and family stress and strain addressed, allowing parents to positively interact with and support their children, promoting healthy development (Kilmer et al, 2012; Mayberry et al., 2014).

Consistent with the literature, we found that despite living with low income and unstable housing; struggling with their own mental and physical health issues; and living with their caregivers’ health problems, children in the Low Income group reported they felt just as connected to their school environment as did the children in the High Income group; and continuing or completing their education was important to nearly 90% of the children in the Low Income group. Higher levels of School Connectedness were found to be associated with fewer reported internalising, externalising and total problems for children both from low-income and higher-income families.

Our hypothesis that children from High Income families will have a greater sense of connectedness to school than children from Low Income families was not supported. Recently in New Zealand, Stuart and Jose (2014) followed a group of 1774 adolescents aged 9-15 years over a 3-year period in 2006, 2007 and 2008 and also found that perceived connectedness to family, school and peers was related to higher levels of well-being and with increases in well-being over time and that this held true for children both from low-income and higher income families.

Feeling connected to school is important for the psychological well-being of children but more so for children from low-income families because as the Campbell et al. (2012) study showed, educational attainment seems to be the vehicle by which people can escape
poverty with increased opportunities for consistent employment and improved physical and mental health. Therefore, it is important to implement strategies that encourage children from low income families to continue feeling connected to their school environment; their friends; their teachers; and fellow students and continue to value education so that they will stay on to complete Year 12 and increase their chances of achieving better educational outcomes, successfully transition to full-time work and develop healthy adult lifestyles (Muir et al., 2009).

As expected, the regression models found to best predict Internalising problems such as anxiety and depression included Health Care Card, Child Physical Health & Caregiver Mental Health; and Health Care Card, Caregiver Mental Health and Unstable Housing with both models significantly explaining 31% of the Internalising scores, whilst the regression model including Health Care Card, Child Physical Health & School Connectedness significantly explained 35% of the variance in Externalising Scores (for rule-breaking and aggressive behaviours) and 29% of overall problems. These findings show that as found in the literature a number of factors often work cumulatively and expose children and adolescents to the risk of mental health problems but that School Connectedness is a protective factor (Gassman-Pines & Yoshikawa, 2006; Hazel et al., 2014; McGraw et al., 2008; Najman et al., 2010; Prelow et al., 2007; Williams & Chapman, 2012). What we did not include in the current study was an examination of attachment and resilience in the children which may provide an indication of the varying degree of protectiveness that School Connectedness offers children dependent on their own personal traits in these areas.

Collectively, the regression model that included Health Care Card, Child Physical Health, Caregiver Mental Health and School Connectedness as simultaneous predictors was found to have the strongest association with child Internalising (34%); Externalising (36%); and overall problems (37%) compared to the other models examined. This finding supports
the hypothesis that children living in low-income families with caregivers with mental health problems; who feel less connected to their school environment and who also have poorer physical health have more internalising and externalising problems and therefore highlights the value of adopting an ecological perspective to research where all levels of the social and physical environments can be examined to evaluate the impact on the mental health of children and adults (Bronfenbrenner, 1986; McAllister et al., 2005). The adoption of an ecological perspective to human development would take into account the biological and psychological characteristics of individuals in addition to the familial, social and community characteristics of the environments within which all human development occurs (Bettger, 2012; Bronfenbrenner, 1995).

**Limitations**

There are several important limitations of the present study. Recruitment from Melbourne suburbs may limit generalisability of findings to other child and adolescent groups including those from the rural sector. However, this focus on families recruited from the suburbs is also its strength, given that we sought to extend on existing research conducted predominantly in large U.S. cities by examining the effects of low income and school connectedness on the emotional and behavioural problems of children and adolescents.

In addition, the small sample size restricted the number of variables that could be tested in a regression model at the one time, so although we sought to examine all the child, caregiver, family and community predictors for internalising and externalising problems together in a single regression we were only able to test a few at the one time in order to meet the minimum sample size required to conduct the statistical analyses undertaken. Limited statistical power because of the small sample size in the present study may have played a role
in the non-significant results and in limiting the significance of some of the statistical comparisons conducted because it may be the case that a different combination of predictor variables may have seen other variables emerge as significant predictors of child emotional and behavioural problems and may have explained more of the variance in Internalising, Externalising and Total Problem scores.

Another study limitation has to do with a lack of parental measures across both groups which limits comparison. Getting people to fill out and return research questionnaires can often be difficult, however it can also be a cost-efficient method of obtaining moderate amounts of information. In this current study, the Catholic Education Office Melbourne did not give Ethics clearance for the caregivers to complete the SF-36v2 asking questions about their physical health and the Adult Self-Report asking questions about their mental health because of the time involved (KU Work Group for Community Health and Development, 2014). One of the main problems with the caregivers from the high-income group not completing these questionnaires is that apart from the basic questions asked in the Family and Community Questionnaire the nature and incidence of mental and physical illness in this caregiver group is largely unknown (KU Work Group for Community Health and Development, 2014). Not having this information and therefore not been able to investigate the associations with the health and well-being of their children means that we were unable to accurately assess the health needs of the sample (KU Work Group for Community Health and Development, 2014). Without this information our evaluations therefore may not be as accurate as they could have been (Hoskin, 2012). For example, with more detailed information regarding caregiver physical and mental health, it is possible that a different set of predictors in the regression models may have emerged as having stronger associations with child Internalising, Externalising and overall problems compared to the model that included Health Care Card, Child Physical Health, Caregiver Mental Health and School
Connectedness. Given this, we cannot be certain that children from low-income families who have physical health problems, who feel less connected to their school environment and whose caregivers have mental health problems are more likely to experience emotional and behavioural problems. It could be that these children may be more likely to experience emotional and behavioural problems for other personal, familial and environmental reasons (“Psychological Research and Scientific Method”, n.d.). Therefore the possible under-representation of the physical and mental health needs of this group has implications for policy makers who use estimates to determine needs for health services in our country and for evaluating what the appropriate outcomes of an effort should be (Centers for Disease Control and Prevention, n.d.).

Furthermore, there was no validation across reporters, so the generalisability of the present study’s findings may be affected by reporting bias (Burns & Saunders, 2009) for it is possible that the caregivers in the low-income group tended to report higher levels of child emotional and behavioural problems than did the children and it also possible that children did not want to candidly state the level of their emotional and behavioural problems because of concern over what people would think and how they would react (SANE, 2009).

Another study limitation is that we did not assess parental stress or parenting practices which would have provided more in-depth information on the moderating or mediating roles of these variables between low-income and childhood emotional and behavioural problems; nor did we examine attachment and resilience in the children which would have provided an indication of the independent degree of protectiveness that School Connectedness offers.

Finally, although the current small cross-sectional study was useful for it provided a snap-shot of the ‘risk factors’ associated with the emotional and behavioural problems in childhood, because data was gathered at one time point only, there was no indication of sequence of events making it is impossible to infer causality (Levin, 2006) and therefore
findings could be equally true in the other direction, for example, children and adolescents with fewer problems may have better capacity to be more connected at school.

**Implications**

The implications of the current study are relevant to the understanding of psychological development in low-income vs high-income families and to the process by which connectedness to school and other social environments may protect children and adolescents from emotional and behavioural problems. For example, in light of the current findings it would be useful to further investigate the effect that insufficient income has on families both in terms of their ability to eat nutritious foods promoting healthy growth and development and to pay their bills so there is less family stress; along with looking at the opportunities available for them to live in clean, safe homes and environments free of crime helping to promote good physical health. It would mean looking at the mental health problems that caregivers are living with and trying to identify the possible origins or exacerbating factors that may be ameliorated to promote better mental health. Furthermore, it would involve looking at those friendships and relationships that children have with their peers and teachers at school; and the promotion and adoption of good school policies to effectively deal with bullying in schools so that children may be encouraged to stay on at school and complete their education, thereby increasing their chances of escaping ‘poverty’ and its long enduring effects.

It is believed that the examination of all these factors together using an ecological perspective to human development will help to identify those individual and environmental aspects that have the potential to either increase the harm on mental health or can offer a protective buffer. As a consequence, government policy should take into consideration the strong interconnectedness between children and adolescents and their family, peers, school,
and community systems and develop programs and implement interventions that promote mental well-being across all levels of environment thus helping to reduce the incidence and impact of mental health problems in the communities within which we live (Bronfenbrenner, 1986; Felner, 2006; Huston & Bentley, 2010; McAllister et al., 2005).

**Conclusions**

This study of children aged 11-17 years examined the extent to which certain child and caregiver variables; along with family income and housing; and school connectedness, influenced the development of emotional and behavioural problems in children and adolescents. The strong link between low-income, caregiver mental health, child physical health and school connectedness and the development of emotional and behavioural problems in childhood has important prevention implications, given that children from low-income families are particularly vulnerable to mental health problems.
References


Family Income and Child Mental Health


NOTIFICATION – CHANGE OF THESIS TITLE

SUBSEQUENT TO DATA COLLECTION THE THESIS TITLE WAS CHANGED
APPENDIX A – MONASH UNIVERSITY ETHICS CLEARANCE AND APPROVAL LETTERS

MONASH University

Monash University Human Research Ethics Committee (MUHREC)
Research Office

Human Ethics Certificate of Approval

Date: 10 May 2010
Project Number: CF09/2351 - 2009001371
Project Title: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment
Chief Investigator: Dr Vickii Jenvey
Approved: From: 10 May 2010 to 10 May 2015

Terms of approval
1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, and a copy forwarded to MUHREC before any data collection can occur at the specified organisation. Failure to provide permission letters to MUHREC before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number.
6. Amendments to the approved project (including changes in personnel): Requires the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. Future correspondence: Please quote the project number and project title above in any further correspondence.
8. Annual reports: Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. Final report: A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. Monitoring: Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. Retention and storage of data: The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

Professor Ben Canny
Chair, MUHREC

Cc: Mrs Vicky Coughlan-Ward
Dr Vickii Jenvey  
School of Psychology and Psychiatry  
Faculty of Medicine, Nursing and Health Sciences  
Room 428, Building 17 - Clayton Campus  
Monash University,  
Victoria 3800

Dear Vickii,

CF09/2351: 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment.

I am pleased to write on behalf of The Salvation Army in Victoria to authorise Monash University researchers to engage with our service users and their children in the above-mentioned project. The nature of the project has been discussed with me, and an outline of the project has been provided to service managers, and we are anticipating outcomes which will increase our capacity, along with the welfare sector in general, to provide a more significant and meaningful response to the needs of people seeking assistance. We are also hoping that with increasing community awareness, there will be a more sympathetic response to people marginalized through receiving low income.

Yours sincerely

[Redacted]

Major (Dr) Doug Thomas  
Assistant Divisional Commander – Social  
Melbourne Central Division
In reply please quote:

GE10/0009
1540

3 March 2010

Mrs V Coughlan-Ward
School of Psychology, Psychiatry & Psychological Medicine
Faculty of Medicine, Nursing & Health Sciences
Room 427, Building 17 – Clayton Campus
MONASH UNIVERSITY VIC 3800

Dear Mrs Coughlan-Ward

I am writing with regard to your research application received on 25 August 2009 concerning your forthcoming project titled Poverty, social connectedness and physical health: Association with parents' and children's psychological adjustment. You have asked approval to approach Catholic schools in the Archdiocese of Melbourne, as you wish to survey students aged 10–17 years and their parents.

I am pleased to advise that your research proposal is approved in principle subject to the nine standard conditions outlined below and that all references to suicide or self-harm in student questionnaires such as Item 18 (on self-harm), Item 91 (suicidal thoughts) and Item 105 (drug usage for non-medical purposes) in the Student Self-Report are deleted. Additionally, I ask that you forward to this Office a copy of the notification of approval from the University's Ethics Committee when it becomes available.

1. The decision as to whether or not research can proceed in a school rests with the school's principal, so you will need to obtain approval directly from the principal of each school that you wish to involve.

2. You should provide each principal with an outline of your research proposal and indicate what will be asked of the school. A copy of this letter of approval, and a copy of notification of approval from the university's Ethics Committee, should also be provided.

3. A Working with Children (WWC) check is necessary for all researchers visiting schools. Appropriate documentation must be shown to the principal before starting the research in each school.

4. No student is to participate in the research study unless s/he is willing to do so and informed consent is given in writing by a parent/guardian.

5. You should provide the names of schools which agree to participate in the research project to the Knowledge Management Unit of this Office.
6. Any substantial modifications to the research proposal, or additional research involving use of the data collected, will require a further research approval submission to this Office.

7. Data relating to individuals or schools are to remain confidential.

8. Since participating schools have an interest in research findings, you should consider ways in which the results of the study could be made available for the benefit of the school communities.

9. At the conclusion of the study, a copy or summary of the research findings should be forwarded to this Office. It would be appreciated if you could submit your report in an electronic format using the email address provided below.

I wish you well with your research study. If you have any queries concerning this matter, please contact Mr Mark McCarthy of this Office.

The email address is <km@ceo.melb.catholic.edu.au>.

Yours sincerely,

[Signature]

DEPUTY DIRECTOR
APPENDIX B – LETTER TO SALVATION ARMY CENTRE MANAGERS AND SCHOOL PRINCIPALS
(Name)  
Centre Manager  
(Address)  
(Date)  

Attention: (Centre Manager Name)  

Re: Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment  

Dear (Title) (Name),  

My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my PhD (Psychology). I am conducting this research under the supervision of Dr Vickii Jenvey, a Senior Lecturer in the School of Psychology and Psychiatry at Monash University. I will be submitting a thesis which is the equivalent of a 300 page book and will be submitting articles for publication in journals and for presentation at conferences. I have been granted ethics approval for the research project by the Monash University Human Research Ethics Committee (MUHREC). I have also been given approval by Major Doug Thomas (The Salvation Army Social Advocacy Division - Assistant Divisional Commander, Melbourne Central Division) to approach the individual Community Centre Managers recommended to discuss the recruitment of Centre clients for my project. 

I will be investigating the personal, family and community variables that may be associated with the psychological adjustment of parents and their children. In particular, my aims are to assess whether physical health; social connectedness; and family and community circumstances are linked to psychological well-being. I will include families from different social backgrounds. Results of the research may help us to understand better the influence that these variables have on the well-being of families, and in particular, how some parents and their children are more susceptible to psychological problems, or how others, are protected from adverse effects on psychological adjustment. In the long term, such an understanding may help inform the development of social policies aimed to prevent or alleviate problems of mental illness in our society, which should improve the benefits that parents and children gain from mainstream social and educational activities. 

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study. 

The time taken to participate in this project would be as follows: 

Parents/Caregivers:  
(a) Filling out The Family and Community Questionnaire; a questionnaire about participants’ family and the community where they live: 30 minutes.
(If participants have already completed this form as part of their involvement in the project CF07/1250 - 2007000297: Families, communities and children's ideas about poverty, Experience of poverty from the point of view of the poor, they will not need to complete this questionnaire again. However, I will need their written permission to use the information for the current project if they agree to participate).

(b) Filling out the Adult Self-Report Form, a psychological test that gives us information about the mental health of adult participants: 15 minutes.

(c) Filling out the Child Behaviour Checklist, a psychological test that gives us information about the mental health of child participants: 15 minutes.

(d) Filling out the SF-36 Health Survey, Version 2 (Titled Your Health and Well-Being), a questionnaire that gives us information about the overall physical and mental health of adult participants: 15 minutes.

(e) Filling out the Child Health Questionnaire – Parent Form (CHQ PF-50), a questionnaire that gives us information about the overall physical and mental health of child participants: 15 minutes.

Children:
(a) Filling out the Youth Self-Report Form, a psychological test that gives us information about the mental health of child participants: 15 minutes.

(b) Filling out the School Connectedness Profile, a questionnaire that gives us information about the quality of child participants’ relationships with their peers and teachers: 15 minutes.

I am keen to not place any additional strain or burden on families who are already experiencing difficulties, so I will be recommending that families not participate in the research project if either the parent or their child:

a. Might have difficulties reading some of the instructions or questions.

b. Have a disabling medical condition including mental health problems that are affecting them, at present.

I would like to advertise the research project in your Community Centre via an advertisement/flyer (please find attached). I would then like for your staff to give out the Explanatory Statements and the Consent forms to any families who express an interest in participating in the research project. Those families, parents and children, who agree to participate in the research project, will return the completed consent forms to the Salvation Army Community Centre, sealed, in an envelope provided and placed in “post-box” marked “Family Well-being Study” with the Monash University logo and my name, for me to collect. Once I receive the completed consent forms, an interview time which you think is suitable, will be arranged for the families to complete the questionnaires. Parents will complete these forms at interview with the student researcher. Children can come along with their parents and complete their forms at the same interview, or alternatively, a second appointment can be scheduled for the parents to return with their child where he/she will complete their questionnaires.
If, any parent or child participant becomes distressed when answering some of the questions, the student researcher will stop the interview immediately and will make every effort to assist the participant to become less distressed/upset. The incident/distress will be reported to the appropriate person at your Centre, who could provide further assistance. Furthermore, a list of community organisations whom participants can contact for information, support and assistance will be provided with the Explanatory Statements.

All families who take part in this research will be thanked for their time by giving the parents/caregivers a $30.00 Coles-Myer voucher and the children a Movie Voucher to be used at the cinemas on completion of all the forms.

Being in this study is voluntary and families are under no obligation to consent to participation. If families consent to participate, they may withdraw at any time but I will be unable to delete their information once it has been put onto the computer. Each parent/caregiver and their child, who participates, will be allocated a code number that will be used throughout the research. All their information will be kept confidential and put onto a password-protected computer file. The only people who will have access to this information will be my supervisor and I.

According to the University regulations hard copies of the data collected will be stored at the University premises in a locked filing cabinet, in a locked office, for 5 years. In any published reports, journal articles or conference presentations, only the group results of all people who participated in the research will be reported and no participant or Centre will be identifiable. Every measure will be taken to ensure the confidentiality and anonymity of the information gathered.

Some time after the project is finished; you, the Centre manager and all the families who participated in the research project will be sent a letter telling you about the main group trends in the research findings.

Please find attached copies of the advertisement, Explanatory Statements, Consent Forms, and each measure to be used in the project for your perusal. If you have any further questions about the project, please contact me, Vicky Coughlan-Ward [University], (Mobile Number), or [University], (Mobile Number).

If you agree and give permission for us to approach clients in your Centre for recruitment to our research project, then we would be grateful if you could complete the following page, and return to researchers. This signed letter of permission must be forwarded to the Monash University Human Research Ethics Committee (MUHREC) before the research can proceed at your Centre.

Yours sincerely,

Ms Vicky Coughlan-Ward
(Ph.D. Candidate)

Dr Vickii Jenvey
(Supervisor)
CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

(Date)

Vickii Jenvey
c/o Vicky Coughlan-Ward
School of Psychology and Psychiatry
Faculty of Medicine, Nursing and Health Sciences
Room 427, Building 17 - Clayton Campus
Monash University, Victoria 3800
Australia

Dear Dr Vickii Jenvey and Ms Vicky Coughlan-Ward,

Thank you for your request to recruit participants from the (Suburb) Salvation Army Community Support Services for the above-named research.

I have read and understood the Letter for Salvation Army Centre Managers and the Explanatory Statements regarding the research project:

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

and hereby give permission for this research to be conducted at my Centre.

Yours Sincerely,

(Name)
Centre Manager
Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

Dear [Title] [Name],

My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my PhD (Psychology). I am conducting this research under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in Psychology, at Monash University. I will be submitting a thesis which is the equivalent of a 300 page book and will be submitting articles for publication in journals and for presentation at conferences. I have been granted ethics approval for the research project by the Monash University Human Research Ethics Committee (MUHREC). I have also been given approval by the Catholic Education Office Melbourne to approach primary and secondary schools in the Melbourne metropolitan area seeking participants for this study.

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study.

The time taken to participate in this project would be as follows:

Parents/Caregivers who consent to participate will answer questions about their family and the community where they live, as well as questions about their child’s health. It will take the parents/caregivers about 45 mins to fill out the forms, when and where they choose:

(a) The Family and Community Questionnaire; a questionnaire about participants’ family and the community where they live.

(b) The Child Behaviour Checklist, a psychological test that gives us information about the mental health of child participants.

(c) The Child Health Questionnaire – Parent Form (CHQ PF-50), a questionnaire that gives us information about the overall physical and mental health of child participants.
Their child will be asked to answer questions about his/her own mental health as well as questions about how they are getting along with their peers and teachers; this should take about 30 minutes:

(a) The *Youth Self-Report Form*, a psychological test that gives us information about the mental health of child participants.

(b) The *School Connectedness Profile*, a questionnaire that gives us information about the quality of child participants’ relationships with their peers and teachers.

The children and young people will complete these forms at a group interview with me, with a teacher present the whole time.

I am keen to not place any additional strain or burden on families who are already experiencing difficulties, so I will be recommending that families not participate in the research project if either the parent or their child:

a. Might have difficulties reading some of the instructions or questions.

b. Have a disabling medical condition including mental health problems that are affecting them, at present.

The background research to this study has shown that psychological adjustment problems in children, adolescents and adults impede an individual’s ability to reach their full potential and to contribute meaningfully to their society. We believe that the results of this project will help us to understand better the influence that personal, family and community variables have on the well-being of families, and in particular, how some parents and their children are more susceptible to psychological problems, or how others, are protected from adverse effects on psychological adjustment. In the long term, such an understanding may help inform the development of social policies aimed to prevent or alleviate problems of mental illness in our society, which should improve the benefits that parents and children gain from mainstream social and educational activities.

Furthermore, I believe that the knowledge to be gained from this project will further develop students’ understanding that the physical, social and emotional health of individuals, families and communities comes from a sense of belonging, of community and social connectedness which comes from learning to live and work with others and from having a meaningful sense of participation and contribution within a group, whether this is with peers, work, family or community. This will help reinforce the importance of creating positive social relationships and environments that are conducive to the development of life skills such as positive attitudes, protective coping skills and a sense of optimism all of which help to build resilience in young people and promote a sense of purpose in life. In turn, this could help young people seek out the social, emotional and intellectual support needed to achieve their full potential in higher levels of schooling and beyond.

Ultimately, information obtained from the results of this study should provide students with an insight into the extent of disadvantage in certain communities that preclude access to adequate health, educational and social resources making it difficult for some people, including those suffering with mental illness, to fully participate in community life. This acknowledgement may encourage young people to foster and develop understanding, acceptance and empathy for all fellow human beings, both within the school context and beyond.
I would like to advertise the research project in your school newsletter via an advertisement/flyer (please find attached). Additionally, I would like to address students at school assemblies and in their individual grades for recruitment. Upon request, I will also make myself available for a meeting with parents who may wish to ask specific questions about the project. Any families, who are interested in finding out more about this project, will be asked to provide their contact details on the tear-off section of the advertisement and then return it to the school office, sealed, in the envelope provided and placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name, for me to collect. I would then like to send home the Plain Language Statements, the Explanatory Statements and the Consent Forms to any families who express an interest in participating in the research project. Those families, parents and children, who agree to participate in the research project, will return the completed consent forms to the school office, sealed, in an envelope provided and placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name, for me to collect.

Once I receive the completed consent forms, I will:

(1) Mail the three forms I mentioned earlier, to the parents/caregivers, for them to complete. The Parents/Caregivers will be asked to complete the forms and return them to me at Monash University in the reply-paid envelope I will provide.

(2) Once I have received the completed forms, I will consult with you, the School Principal, to arrange a time which you think is suitable, for the consenting students to be interviewed, in a group, by me, with a teacher present. I will then send a notice home to the parents/caregivers to let them know when I will be interviewing their child.

If any parent/caregiver participant becomes distressed when answering some of the questions, they can stop filling out the forms and not return them to me and they can contact you the School Principal or one of the researchers to discuss their concerns. Furthermore, a list of community organisations whom participants can contact for information, support and assistance will be provided with the Explanatory Statements.

If a student becomes distressed when answering some of the questions, the student researcher will stop the interview immediately and will make every effort to assist the participant to become less distressed/upset. The incident/distress will be reported to you the School Principal who will make the necessary decisions regarding appropriate actions.

All families who take part in this research will be thanked for their time by giving the parents/caregivers a $15.00 Coles-Myer voucher and the children a Movie voucher to be used at the cinemas on completion of all the forms.

Being in this study is voluntary and families are under no obligation to consent to participation. If families consent to participate, they may withdraw at any time but I will be unable to delete their information once it has been put onto the computer. Each parent/caregiver and their child, who participates, will be allocated a code number that will be used throughout the research. All their information will be kept confidential and put onto a password-protected computer file. The only people who will have access to this information will be my supervisor and I.

According to the University regulations hard copies of the data collected will be stored at the University premises in a locked filing cabinet, in a locked office, for 5 years. In any published reports, journal articles or conference presentations, only the group results of all people who
participated in the research will be reported and no participant or School will be identifiable. Every measure will be taken to ensure the confidentiality and anonymity of the information gathered.

Some time after the project is finished; you, the School Principal and all the families who participated in the research project will be sent a letter telling you about the main group trends in the research findings.

Please find attached, copies of the advertisement, Plain Language Statements, Explanatory Statements, Consent Forms, Interview Notification form and each measure to be used in the project for your perusal.

If you agree and give permission for us to approach families at your School for recruitment to our research project, then we would be grateful if you could complete the following page, and return to researchers. This signed letter of permission must be forwarded to the Monash University Human Research Ethics Committee (MUHREC) before the research can proceed at your School.

If you have any further questions about the project, please contact me, Vicky Coughlan-Ward on [University], [Mobile number], [My Supervisor, Dr Vickii Jenvey [Supervisor]]

Thank you for taking the time to consider my request, and I look forward to meeting with you and working in your school.

Yours sincerely,

Ms Vicky Coughlan-Ward
(Ph.D. Candidate)

Dr Vickii Jenvey
(Supervisor)
Dear Dr Vickii Jenvey,

Thank you for your request to recruit participants from (School Name) for the above-named research.

I have read and understood the Letter for School Principals and the Explanatory Statements regarding the research project:

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

and hereby give permission for this research to be conducted at my school.

Yours Sincerely,

(Name)
School Principal
APPENDIX C – SALVATION ARMY PROJECT ADVERTISEMENT, EXPLANATORY STATEMENTS AND CONSENT FORMS
My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my Ph.D., under the supervision of Dr Vickii Jenvey, a Senior Lecturer in Psychology at Monash University. I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study.

We will investigate whether certain aspects of personal, family or community life are linked to people’s mental health and well-being. The results of this project may help us to understand better the sorts of things that can sometimes affect the well-being of parents and their children. In the long term, that information could be used to develop programmes and policies that might lead to improved health of communities.

If you are interested in finding out more about this project, please discuss this with your Salvation Army Caseworker or Centre Manager. They will then provide you with the Explanatory Statement that will explain the research project in more detail and will tell you what you need to do next if you want to take part in the project.

I look forward to working with you and your children.

Thank-you.
Explanatory Statement (Salvation Army) - Parents / Caregivers of primary and secondary school children aged 11-17 years old

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

This information sheet is for you to keep.

My name is Vicky Coughlan-Ward and I am conducting a research project as part of my Ph.D. under the supervision of Dr Vickii Jenvey a Senior Lecturer in the School of Psychology and Psychiatry at Monash University. This means that I will be writing a thesis which is the equivalent of a 300 page book and will be submitting articles for publication in journals and for presentation at conferences.

I have approval from the Salvation Army to approach Salvation Army Community Centres in the Melbourne metropolitan area seeking participants for this study. This explanatory statement has been given to families who have children who are aged 11-17 years old and who have expressed an interest in participating in this research project. Your participation is voluntary.

In order to avoid placing any unnecessary demands on you and your family we recommend that you do not participate in this research project if you or your child:

a. Might have difficulties reading some of the instructions or questions.

b. Have a disabling medical condition including mental health problems that are affecting you, at present.

The aims of this research are to examine the health and well-being of adults and their primary and secondary school children (aged 11-17 yrs) and to assess whether family and community circumstances and physical health are associated to their health and well-being. A potential outcome of this research might be to identify what makes some parents and children more likely to experience social and personal problems while others do not.

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study. I will include families from different social backgrounds.

The time taken to participate in this project would be as follows:

**Parents/Caregivers:**

(a) Filling out the *Family and Community Questionnaire*; a questionnaire about your family and the community where you live: 30 minutes.  
(If you have already completed this form as part of your involvement in the project CF07/1250 - 2007000297: Families, communities and children's ideas about poverty, *Experience of poverty from the point of view of the poor*, you will not need to complete this questionnaire again. However, I will need your written permission to use the information for the current project if you agree to participate).

(b) Filling out the *Adult Self-Report Form*, a psychological test that gives us information about your mental health: 15 minutes.
(c) Filling out the Child Behaviour Checklist, a psychological test that gives us information about your child’s mental health: 15 minutes.

(d) Filling out the SF-36 Health Survey, Version 2 (Titled Your Health and Well-Being), a questionnaire that gives us information about your overall physical and mental health: 15 minutes.

(e) Filling out the Child Health Questionnaire – Parent Form (CHQ PF-50), a questionnaire that gives us information about your child’s overall physical and mental health: 15 minutes.

These forms will be completed at your local Salvation Army Centre.

**Children:**

(a) Filling out the Youth Self-Report Form, a psychological test that gives us information about your child’s mental health: 15 minutes.

(b) Filling out the School Connectedness Profile, a questionnaire that gives us information about the quality of your child’s relationships with their peers and teachers: 15 minutes.

These forms will be completed at your local Salvation Army Centre.

According to responses provided, adults and children whose scores are classified as belonging to a “clinical group” will be considered to be “at risk”. Participants classified as “at risk” will be informed in writing and will be given information about organisations that may assist. Furthermore, any reports from participants of planned harm to themselves or others will be reported to the participant’s Centre Manager who will make the necessary decisions regarding appropriate actions, referrals and notification to relevant authorities.

It is unlikely that you or your child will be inconvenienced or feel uncomfortable or distressed from participating in this study.

However, in the unlikely event that you or your child becomes distressed during the assessment for any reason:

1. The assessment/completion of forms will cease.
2. Every effort will be made to assist you and/or your child to become less distressed/upset.
3. The incident/distress will be reported to your Centre Manager who will make the necessary decisions regarding appropriate actions.

Furthermore, a list of community organisations whom you can contact for information, support and assistance has been provided with this explanatory statement.

All families who take part in this research will be thanked for their time by giving the parents/caregivers a $15.00 Coles-Myer voucher and the children a Movie Voucher to be used at the cinemas on completion of all the forms.

If you agree to participate in the research project you and your child will fill in and return the consent forms. Forms should be returned to the Salvation Army Community Centre, sealed, in the envelope that you have been given, so that your information can be kept private. The envelope should be placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name.
Once I receive the completed consent forms, an interview time which you and the Salvation Army Community Centre Manager think is suitable, will be arranged for you to come and see me so that you can fill in the questionnaires I mentioned before. If possible, your child may also attend and complete their questionnaires, or on the other hand, another appointment can be organised for you to come back to the Centre with your child so that he/she can complete the questionnaires I mentioned earlier.

Being in this study is voluntary and you are under no obligation to consent to participation. If you do consent to participate, you may withdraw at any time but I will be unable to delete the information provided by yourself and your child once it has been put onto the computer. Each parent/caregiver and their child, who participates, will be allocated a code number that will be used throughout the research. I will need to keep a list of your names and your code number together until all the information has been put onto a password-protected computer file. Once your information is linked on the computer, I will delete your details from the list of names and code numbers, and then, you and your child will be unable to be identified from this information. The information provided by you and your child will be kept confidential. The only people who will have access to this information will be my supervisor and I.

According to the University regulations, hard copies of the data collected will be stored at the University premises in a locked filing cabinet, in a locked office, for 5 years. In any published reports, journal articles or conference presentations, only the group results of all people who participated in the research will be reported and no participant or Centre will be identifiable. Every measure will be taken to ensure the confidentiality and anonymity of the information gathered.

Some time after the project is finished; you and your Centre manager will be sent a letter telling you about the main group trends in the research findings.

If you would like to contact the researchers about any aspect of this study, please contact:

- Dr Vickii Jenvey (Supervisor)
- Vicky Coughlan-Ward (Student Researcher)

If you have a complaint concerning the manner in which this research CF09/2351 – 2009001371 is being conducted, please contact:

- Executive Officer, Human Research Ethics Committee (MUHREC)

Thank you,

Ms Vicky Coughlan-Ward
(Ph.D. Candidate)

Dr Vickii Jenvey
(Supervisor)
## LOCAL COMMUNITY ORGANISATIONS (SAMPLE)

If you require information regarding services available in your local area please contact your local council or local community health centre as listed below.

### CRANBOURNE

- **City of Casey**
  - Magid Drive, Narre Warren 3805
  - (off Princes Highway, near Fountain Gate Shopping Centre)
  - 9705-5200

- **Cardinia-Casey Community Health Service Cranbourne**
  - 140-154 Sladen Street, Cranbourne 3977
  - 5990 6789

### HAMPTON PARK

- **City of Casey**
  - Magid Drive, Narre Warren 3805
  - (off Princes Highway, near Fountain Gate Shopping Centre)
  - 9705-5200

- **Hampton Park Community House**
  - 16-29 Stuart Avenue, Hampton Park 3976
  - 9799-0708

### MALVERN

- **City of Stonnington**
  - Malvern Town Hall, Malvern 3144
  - (Cnr High St and Glenferrie Road)
  - 8290-1333

- **Inner South Community Health Service**
  - 240 Malvern Road, Prahran 3181
  - 9525 1300

### SERVICES FOR CHILDREN

- **Kids Helpline**
  - 1800 55 1800
Explanatory Statement (Salvation Army) - Primary and secondary school children aged 11-17 years old

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

This information sheet is for you to keep.

My name is Vicky Coughlan-Ward and I am conducting a research project as part of my Ph.D., under the supervision of Dr Vickii Jenvey a Senior Lecturer in Psychology at Monash University. I will be writing a thesis and sending in articles to be published in journals and to be presented at conferences.

I have permission from the Salvation Army to ask children and their families, who come to the Salvation Army Centres, if they want to take part in this study. You have been given this letter because your family has said they would like to be involved.

I am doing this research because I want to learn more about the sorts of things that can affect the mental health of parents and their children. I want to see if family and community circumstances and physical health are related to mental health. I believe that this research may give me information about the sorts of things that can be risky and the things that can be good for people’s psychological health.

If you say yes and take part in this project:

(1) Your Mum or Dad or the person who looks after you will answer questions about your family and the community where you live; their health; and, your health. It should take them about 1-1½ hrs to fill out these forms.

(2) I will also need you to answer questions about your own mental health as well as questions about how you are getting along with your peers and teachers. It should take you about 30 minutes to fill out these forms.

Your mother or father or whoever looks after you has been told about this and they don’t mind if you want to answer these questions for me, but you don’t have to fill out these forms if you don’t want to. I will be coming to meet with you and your family at your local Salvation Army Community Centre at a time which your parents/caregivers and the Salvation Army Community Centre Manager think is suitable.

If you want to answer these questions for me, you and your parent or caregiver will let me know by returning the consent forms. I will then let you know on which day and what time your interview will be with me. If you change your mind, all you need to do is to get whoever looks after you to leave a note for me at the Salvation Army Community Centre and I can take you off my interview list if that is what you want. If you start to answer the questions and you don’t want to any more, that’s fine, too. All you have to do is say so and you can go back to your parent/caregiver. I know that sometimes it’s difficult to answer certain types of questions, so I will understand if you want to stop.
It is really up to you if you want to take part in this project or not and nothing will happen if you don’t want to. If you do decide to be involved and you are unhappy about anything that happens, you can talk to your parents or whoever looks after you and they will know what to do about it.

The questionnaires and forms I get back from you and your parent/caregiver will have a code number put on them so that I can keep your information together. I will put all this information onto the computer under a password-protected file so I can look at all the information together. Once I do this, no-one will be able to tell from the information on the computer that it is your information.

The information provided by you and your parent/caregiver will be kept confidential. The university rules say I have to keep this information at the university for at least five years. No one but my teacher and I will be able to access this information – all the information will be kept locked up.

Being in this study is voluntary and you are under no obligation to take part. Even if you agree to participate, you may decide later that you no longer want to be involved. If this happens, then I will not use the information you have given to me. However, if I have already put all the information on to the computer, I will not be able to tell what information is yours and therefore, I will not be able to delete it.

<table>
<thead>
<tr>
<th>If you would like to contact the researchers about any aspect of this study, please contact:</th>
<th>If you have a complaint concerning the manner in which this research CF09/2351 – 2009001371 is being conducted, please contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Vickii Jenvey (Supervisor)</td>
<td>Executive Officer, Human Research Ethics Monash University Human Research Ethics Committee (MUHREC) Building 3e Room 111 Research Office Monash University VIC 3800</td>
</tr>
<tr>
<td>Vicky Coughlan-Ward (Student Researcher)</td>
<td></td>
</tr>
</tbody>
</table>

Thank you,

Ms Vicky Coughlan-Ward  
(Ph.D. Candidate)

Dr Vickii Jenvey  
(Supervisor)
Consent Form - Parent/Caregiver Consent (Salvation Army)

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children's psychological adjustment

NOTE: This consent form will remain with the Monash University researcher for their records

I agree to take part in the Monash University research project specified above. I have had the research project explained to me and/or I have read the Explanatory Statement which I will keep for my records, and I understand the aims of the research project and the methods to be used in the project. I understand that agreeing to take part means that:

1. I agree to be interviewed by the researcher □ Yes □ No
2. I agree to complete questionnaires asking me about: my family and the community where I live; my own mental and physical health; and my child's mental and physical health □ Yes □ No

I understand that my participation is voluntary and that I can choose not to participate in part or all of the project. I understand also that I can withdraw at any stage of the project provided it is prior to the information been put onto the computer, without being penalised or disadvantaged in any way.

I understand that any information I provide is confidential and that no information that could lead to the identification of any individual will be disclosed in any reports, published findings or conference presentations on the project.

I understand that hard copies of the data collected will be kept in a secure storage and will be accessible only to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects □ Yes □ No

Participant’s name: __________________________________________
Participant’s Date of Birth: ________________________________
Address: ____________________________________________________
Daytime telephone number: ________________________________
Signature: ________________________________________________
Date: _____________________________________________________
Consent Form - Parental Consent (Salvation Army)

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

NOTE: This consent form will remain with the Monash University researcher for their records

I agree that ____________________________ (Child’s name) ______________ (Child’s Date of Birth) may take part in the above Monash University research project. I have had the research project explained to me and/or I have read the Explanatory Statement which I will keep for my records, and I understand the aims of the research project and the methods to be used in the project.

I understand that agreeing to take part means that I am willing to allow _____________________ to:

- Be interviewed by the researcher at my local Salvation Army Community Centre.
- Complete questionnaires asking him/her about his/her mental health; and about his/her relationships with his/her peers and teachers

I understand that participation is voluntary, and that my child can choose not to participate in part or all of the project, and that he/she can withdraw at any stage of the project provided it is prior to the information been put onto the computer, without being penalised or disadvantaged in any way.

I understand that any information my child provides is confidential and that no information that could lead to the identification of any individual will be disclosed in any reports, published findings or conference presentations on the project.

I understand that hard copies of the data collected will be kept in a secure storage and will be accessible only to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects  □ Yes □ No

Participant’s (Child’s) name: ______________________________
Participant’s (Child’s) Date of Birth: _______________________
Parent’s/Caregiver’s name: ________________________________
Parent’s/Caregiver’s relationship to participant: ______________
Address: ______________________________________________
Daytime telephone number: ______________________________
Parent’s/Caregiver’s Signature ____________________________ Date: __________________
Participant’s (Child’s) Signature __________________________ Date: __________________
MONASH University

Consent Form - Interviews – Primary/Secondary School Students (Salvation Army)

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

NOTE: This consent form will remain with the Monash University researcher for their records

I agree to take part in the above Monash University research project. I have had the research project explained to me and/or I have read the Explanatory Statement which I will keep for my records, and I understand the aims of the research project and the methods to be used in the project.

I understand that agreeing to take part means that I am willing to:

- Be interviewed by the researcher, at my local Salvation Army Community Centre
- Complete questionnaires asking me about my mental health; and about my relationships with my peers and teachers.

I understand that it is up to me if I want to be interviewed by the researcher or not and that nothing will happen if I don’t want to. I understand that I can choose not to take part in the research project, and that I can withdraw at any stage of the project provided it is prior to the information been put onto the computer, without getting into any trouble.

I understand that any information the researcher gets from the interview which may be used in any reports, published findings or conference presentations on the project, will not, under any circumstances, contain names or identifying characteristics.

I understand that the information that I provide will be accessible only to the research team. I also understand that the information will kept confidential and locked up at the university for at least five years. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects  □ Yes  □ No

Participant’s (Child’s) name: ________________________________________________________
Participant’s (Child’s) Date of Birth: _________________________________
Parent’s/Caregiver’s name: ________________________________________________________
Address: _______________________________________________________________________
Year (at school): _________________________________
Participant’s (Child’s) Signature _________________________________  Date: ________________
APPENDIX D – CATHOLIC SCHOOLS PROJECT ADVERTISEMENT, 
PLAIN LANGUAGE STATEMENTS, EXPLANATORY STATEMENTS AND 
CONSENT FORMS
My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my Ph.D., under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in Psychology at Monash University. I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study.

We will investigate whether certain aspects of personal, family or community life are linked to people’s mental health and well-being. The results of this project may help us to understand better the sorts of things that can sometimes affect the well-being of parents and their children. In the long term, that information could be used to develop programmes and policies that might lead to improved health of communities.

If you are interested in finding out more about this project, please complete the tear off section below and return it to the school office, sealed, in the envelope provided and placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name, for me to collect.

I will then send a letter home with your child explaining the research project in more detail and telling you what you need to do next if you want to take part in the project.

I look forward to working with you and your children.

Thank-you.

Child’s name (printed): .................................................................

Child’s Date of Birth: .................................

School: .................................................................

Year: ...................................  Room Number: .................................

Parent’s /Caregiver’s name (printed): .................................................................

Home telephone number (or other contact number): .................................................................
PLAIN LANGUAGE STATEMENT - (Parent/Caregiver)

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my Ph.D., under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in Psychology, at Monash University.

We will investigate whether certain aspects of personal, family or community life are linked to people’s mental health and well-being. The results of this project may help us to understand better the sorts of things that can sometimes affect the well-being of parents and their children. In the long term, that information could be used to develop programmes and policies that might lead to improved health of communities.

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who consent to take part in the study.

If you and your child join in the project, you as the parent/caregiver will answer questions about your family and the community where you live, as well as questions about your child’s health and everyday behaviours. It will take you about 45mins to fill out these forms when and where you choose. These forms will be mailed to your home and you can return them to the researchers in the reply-paid envelope that will be provided. Your child will be asked to answer questions about his/her own mental health as well as questions about how they are getting along with their peers and teachers. This should take about 30 minutes. Your child will fill out these forms on their own, but along with other children from his/her school who I will interview together.

If you want to take part in this research, and you and your child agree to take part you will both need to fill in the consent forms and return the signed forms to the Student Services office, sealed in the envelope that you have been given, so that your information can be kept private. The envelope should be placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name.

Once I receive the completed consent forms,

(1) I will, mail the three forms I mentioned earlier, with instructions on how to complete and return the questionnaires to me; and
(2) In consultation with the School Principal a time will be arranged for your child to be interviewed by me with a teacher present, along with other children from his/her school, to complete the questionnaires previously outlined in this letter.
If you have any questions you may contact me, Vicky Coughlan-Ward on Ph: [REDACTED] or my supervisor, Dr Vickii Jenvey [REDACTED].

I look forward to working with you and your children.

Thank you,

Ms Vicky Coughlan-Ward
(Ph.D. Candidate)

Dr Vickii Jenvey
(Supervisor)
PLAIN LANGUAGE STATEMENT - (Children/Young People)

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

My name is Vicky Coughlan-Ward and I am conducting a research project on the psychological well-being of parents and their children as part of my Ph.D., under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in Psychology, at Monash University.

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study.

I am conducting this research project because I want to learn more about the sorts of things that can sometimes affect the psychological well-being of parents and their children.

If you say yes and take part in this project:

(1) Your parent/caregiver will answer questions about your family and the community where you live and about your health.

(2) You, during a group interview with other children from your school, will answer questions about your own mental health as well as questions about how you are getting along with your peers and teachers.

If you have any questions you may contact me, Vicky Coughlan-Ward or [contact information], or my Supervisor, Dr Vickii Jenvey at [contact information].

I look forward to working with you.

Thank you,

Ms Vicky Coughlan-Ward  
(Ph.D. Candidate)  

Dr Vickii Jenvey  
(Supervisor)
Explanatory Statement (Catholic Schools) - Parents / Caregivers of primary and secondary school children aged 11-17 years old

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

This information sheet is for you to keep.

My name is Vicky Coughlan-Ward and I am conducting a research project as part of my Ph.D., under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in the School of Psychology and Psychiatry at Monash University. This means that I will be writing a thesis which is the equivalent of a 300 page book and will be submitting articles for publication in journals and for presentation at conferences.

I have approval from the Monash University Human Research Ethics Committee and the Catholic Education Office Melbourne to approach Catholic primary and secondary schools in the Melbourne metropolitan area seeking participants for this study. This explanatory statement has been given to families who have children who are aged 11-17 years old and who have expressed an interest in participating in this research project. Your participation is voluntary.

In order to avoid placing any unnecessary demands on you and your family we recommend that you do not participate in this research project if you or your child:

   a. Might have difficulties reading some of the instructions or questions.
   b. Have a disabling medical condition including mental health problems that are affecting you, at present.

The aims of this research are to examine the health and well-being of primary and secondary school children (aged 11-17 yrs) and to assess whether family and community circumstances and physical health are associated to their health and well-being.

A potential outcome of this research might be to identify what makes some parents and children more likely to experience social and personal problems while others do not.

I am looking for families, where at least one parent/caregiver lives at home with one or more child(ren), aged 11-17 years old, who attend(s) primary or secondary school and who are willing to take part in this study. I will include families from different social backgrounds.

The time taken to participate in this project would be as follows:

Parents/Caregivers:

(a) Filling out The Family and Community Questionnaire; a questionnaire about your family and the community where you live: 20 minutes.

(b) Filling out the Child Behaviour Checklist, a psychological test that gives us information about your child’s mental health: 10-15 minutes.
(c) Filling out the Child Health Questionnaire – Parent Form (CHQ PF-50), a questionnaire that gives us information about your child’s overall physical and mental health: 10-15 minutes.

You may complete these forms, when and where you choose.

Children:

(a) Filling out the Youth Self-Report Form, a psychological test that gives us information about your child’s mental health: 15 minutes.

(b) Filling out the School Connectedness Profile, a questionnaire that gives us information about the quality of your child’s relationships with their peers and teachers: 15 minutes.

These forms will be completed at school.

According to responses provided, children whose scores are classified as belonging to a “clinical group” will be considered to be “at risk”. Participants classified as “at risk” will be informed in writing and will be given information about organisations that may assist.

Furthermore, any reports from child participants of planned harm to themselves or others will be reported to the Principal who will make the necessary decisions regarding appropriate actions, referrals and notification to relevant authorities.

It is unlikely that you or your child will be inconvenienced or feel uncomfortable or distressed from participating in this study.

However, in the unlikely event that you become distressed during the assessment for any reason:
1. You may stop filling out the forms and not return them to the student researcher.
2. You may contact the Principal who will decide what action, if any to take in relation to the incident.
3. You may contact one of the community organisations or Helplines from the list provided with this explanatory statement for information, support and assistance.
4. You may contact the researchers to discuss your concerns.

Furthermore, in the unlikely event that your child becomes distressed during the assessment for any reason:
1. The assessment/completion of forms will cease.
2. Every effort will be made to assist your child to become less distressed/upset.
3. If your child no longer wants to participate, he/she will be returned to their classroom.
4. The incident/distress will be reported to Principal who will decide what action, if any to take in relation to the incident.

All families who take part in this research will be thanked for their time by giving the parents/caregivers a $15.00 Coles-Myer voucher and the children a Movie Voucher to be used at the cinemas on completion of all the forms.

If you agree to participate in the research project you and your child will fill in and return the consent forms. Forms should be returned to the school office, sealed, in the envelope that you have been
given, so that your information can be kept private. The envelope should be placed in the “post-box” marked “Family Well-being Study” with the Monash University logo and my name.

Once I receive the completed consent forms,

(1) I will mail out the three forms I mentioned earlier, to the address you have given me, with instructions on how to complete and return the questionnaires to me; and
(2) In consultation with the School Principal a time will be arranged for your child to be interviewed by me with a teacher present, along with other children from his/her school, to complete the questionnaires previously outlined in this letter.

Being in this study is voluntary and you are under no obligation to consent to participation. If you do consent to participate, you may withdraw at any time but I will be unable to delete the information provided by yourself and your child once it has been put onto the computer.

Each parent/caregiver and their child, who participates, will be allocated a code number that will be used throughout the research. I will need to keep a list of your names and your code number together until all the information has been put onto a password-protected computer file. Once your information is linked on the computer, I will delete your details from the list of names and code numbers, and then, you and your child will be unable to be identified from this information. The information provided by you and your child will be kept confidential. The only people who will have access to this information will be my supervisor and I.

According to the University regulations, hard copies of the data collected will be stored at the University premises in a locked filing cabinet, in a locked office, for 5 years. In any published reports, journal articles or conference presentations, only the group results of all people who participated in the research will be reported and no participant or School will be identifiable. Every measure will be taken to ensure the confidentiality and anonymity of the information gathered.

Some time after the project is finished; you and your School principal will be sent a letter telling you about the main group trends in the research findings.

<table>
<thead>
<tr>
<th>If you would like to contact the researchers about any aspect of this study, please contact:</th>
<th>If you have a complaint concerning the manner in which this research <strong>CF09/2351 – 2009001371</strong> is being conducted, please contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Vickii Jenvey (Supervisor)</td>
<td>Executive Officer, Human Research Ethics Monash University Human Research Ethics Committee (MUHREC) Building 3e Room 111 Research Office Monash University VIC 3800</td>
</tr>
<tr>
<td>Vicky Coughlan-Ward (Student Researcher)</td>
<td></td>
</tr>
</tbody>
</table>

Thank you,

Ms Vicky Coughlan-Ward (Ph.D. Candidate)  
Dr Vickii Jenvey (Supervisor)
LOCAL COMMUNITY ORGANISATIONS (SAMPLE)

If you require information regarding services available in your local area please contact your local council or local community health centre as listed below.

CRANBOURNE

- **City of Casey**  
  Magid Drive, Narre Warren  3805  
  (off Princes Highway, near Fountain Gate Shopping Centre)

- **Cardinia-Casey Community Health Service Cranbourne**  
  140-154 Sladen Street, Cranbourne  3977

HAMPTON PARK

- **City of Casey**  
  Magid Drive, Narre Warren  3805  
  (off Princes Highway, near Fountain Gate Shopping Centre)

- **Hampton Park Community House**  
  16-29 Stuart Avenue, Hampton Park  3976

MALVERN

- **City of Stonnington**  
  Malvern Town Hall, Malvern  3144  
  (Cnr High St and Glenferrie Road)

- **Inner South Community Health Service**  
  240 Malvern Road, Prahran  3181

SERVICES FOR CHILDREN

- **Kids Helpline**  
  1800 55 1800
Explanatory Statement (Catholic Schools) - Primary and secondary school children aged 11-17 years old

Research Project: CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

This information sheet is for you to keep.

My name is Vicky Coughlan-Ward and I am conducting a research project as part of my Ph.D., under the supervision of Dr Vickii Jenvey, an Adjunct Senior Research Fellow in the School of Psychology and Psychiatry at Monash University. This means that I will be writing a thesis which is the equivalent of a 300 page book and will be submitting articles for publication in journals and for presentation at conferences.

I have approval from the Monash University Human Research Ethics Committee and the Catholic Education Office Melbourne to approach secondary schools in the Melbourne metropolitan area seeking participants for this study. This explanatory statement has been given to families who have children who are aged 11-17 years old and who have expressed an interest in participating in this research project. Your participation is voluntary.

I am doing this research because I want to learn more about the sorts of things that can affect the mental health of parents and their children. I want to see if family and community circumstances and physical health are related to mental health. I believe that this research may give me information about the sorts of things that can be risky and the things that can be good for people’s psychological health.

If you say yes and take part in this project:

(1) Your Mum or Dad or the person who looks after you will answer questions about your family and the community where you live; and, your health. It should take them about 45 mins to fill out these forms.

(2) You, during a group interview with other children from your school, will answer questions about your own mental health as well as questions about how you are getting along with your peers and teachers. It should take you about 30 minutes to fill out these forms.

Your mother or father or whoever looks after you has been told about this and they don’t mind if you want to answer these questions for me, but you don’t have to talk to me if you don’t want to. I will be coming in to your school and will be conducting these interviews during a time your Principal feels is suitable. If you want to, you will complete these two forms along with other children from your school.

If you want to answer these questions for me, you and your parent or caregiver will let me know by returning the consent forms. I will then let you know on which day and what time your interview will be with me. If you change your mind, all you need to do is to get whoever looks after you to leave a
note for me at the school and I can take you off my interview list if that is what you want. If you start to answer the questions and you don't want to any more, that's fine, too. All you have to do is say so and you can go back to your classroom. I know that sometimes it's difficult to answer certain types of questions, so I will understand if you want to stop.

The questionnaires and forms I get back from you and your parent/caregiver will have a code number put on them so that I can keep your information together. I will put all this information onto the computer under a password-protected file so I can look at all the information together. Once I do this, no-one will be able to tell from the information on the computer that it is your information.

The information provided by you and your parent/caregiver will be kept confidential. The university rules say I have to keep this information at the university for at least five years. No one but my teacher and I will be able to access this information — all the information will be kept locked up.

Being in this study is voluntary and you are under no obligation to take part. Even if you agree to participate, you may decide later that you no longer want to be involved. If this happens, then I will not use the information you have given to me. However, if I have already put all the information on to the computer, I will not be able to tell what information is yours and therefore, I will not be able to delete it.

<table>
<thead>
<tr>
<th>If you would like to contact the researchers about any aspect of this study, please contact:</th>
<th>If you have a complaint concerning the manner in which this research CF09/2351 – 2009001371 is being conducted, please contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Vickii Jenvey (Supervisor)</td>
<td>Executive Officer, Human Research Ethics Committee (MUHREC)</td>
</tr>
<tr>
<td></td>
<td>Building 3e Room 111</td>
</tr>
<tr>
<td>Vicky Coughlan-Ward (Student Researcher)</td>
<td>Research Office</td>
</tr>
<tr>
<td></td>
<td>Monash University VIC 3800</td>
</tr>
</tbody>
</table>

Thank you,

Ms Vicky Coughlan-Ward
(Ph.D. Candidate)

Dr Vickii Jenvey
(Supervisor)
Consent Form - Parent/Caregiver Consent (Schools)

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association
with parents’ and children’s psychological adjustment

NOTE: This consent form will remain with the Monash University researcher for their records

I agree to take part in the Monash University research project specified above. I have read the
Explanatory Statement which I will keep for my records, and I understand the aims of the research
project and the methods to be used in the project. I understand that agreeing to take part means
that:

1. I agree to complete questionnaires asking me about: my family and the community where
   I live; my own mental and physical health; and my child’s mental and physical health
   □ Yes □ No

I understand that my participation is voluntary and that I can choose not to participate in part or all
of the project. I understand also that I can withdraw at any stage of the project provided it is prior to
the information been put onto the computer, without being penalised or disadvantaged in any way.

I understand that any information I provide is confidential and that no information that could lead to
the identification of any individual will be disclosed in any reports, published findings or conference
presentations on the project.

I understand that hard copies of the data collected will be kept in a secure storage and will be
accessible only to the research team. I also understand that the data will be destroyed after a 5 year
period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects □ Yes □ No

Participant’s name: ___________________________________________________________
Participant’s Date of Birth: __________________________
Address: _______________________________________________________________
Daytime telephone number: __________________________
Signature: __________________________________________
Date: _________________________________________
NOTE: This consent form will remain with the Monash University researcher for their records

I agree that ____________________________ (Child’s name) ____________ (Child’s Date of Birth) may take part in the above Monash University research project. I have read the Explanatory Statement which I will keep for my records, and I understand the aims of the research project and the methods to be used in the project.

I understand that agreeing to take part means that I am willing to allow _____________________ to:

• Be interviewed by the researcher, in a group with other children from his/her school
• Complete questionnaires asking him/her about his/her mental health; and about his/her relationships with his/her peers and teachers

I understand that participation is voluntary, and that my child can choose not to participate in part or all of the project, and that he/she can withdraw at any stage of the project provided it is prior to the information been put onto the computer, without being penalised or disadvantaged in any way.

I understand that any information my child provides is confidential and that no information that could lead to the identification of any individual will be disclosed in any reports, published findings or conference presentations on the project.

I understand that hard copies of the data collected will be kept in a secure storage and will be accessible only to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects □ Yes □ No

Participant’s (Child’s) name: ______________________________________________________

Participant’s (Child’s) Date of Birth: ________________________________

Parent’s/ Caregiver’s name: ______________________________________________________

Parent’s/ Caregiver’s relationship to participant: ________________________________

Address: _______________________________________________________________________

Daytime telephone number: ______________________________

Parent’s/ Caregiver’s Signature __________________________ Date: ________________

Participant’s (Child’s) Signature ____________________________ Date: ________________
Consent Form - Interviews – Primary/Secondary School Students (Schools)

CF09/2351 – 2009001371: Poverty, social connectedness and physical health: Association with parents’ and children’s psychological adjustment

NOTE: This consent form will remain with the Monash University researcher for their records

I agree to take part in the above Monash University research project. I have had the research project explained to me and/or I have read the Explanatory Statement which I will keep for my records, and I understand the aims of the research project and the methods to be used in the project.

I understand that agreeing to take part means that I am willing to:

- Be interviewed by the researcher, in a group with other children from my school
- Complete questionnaires asking me about my mental health; and about my relationships with my peers and teachers

I understand that it is up to me if I want to be interviewed by the researcher or not and that nothing will happen if I don’t want to. I understand that I can choose not to take part in the research project, and that I can withdraw at any stage of the project provided it is prior to the information been put onto the computer, without getting into any trouble.

I understand that any information the researcher gets from the interview which may be used in any reports, published findings or conference presentations on the project, will not, under any circumstances, contain names or identifying characteristics.

I understand that the information that I provide will be accessible only to the research team. I also understand that the information will kept confidential and locked up at the university for at least five years. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

I am happy for this information to be used in future research projects  □ Yes □ No

Participant’s (Child’s) name: _________________________________________________________
Participant’s (Child’s) Date of Birth: ______________________________
Parent’s/Caregiver’s name: ________________________________________________________
Address:  _______________________________________________________________________
Year and Room Number: ____________________________
Participant’s (Child’s) Signature ____________________________ Date: ________________
APPENDIX E – FAMILY AND COMMUNITY QUESTIONNAIRE

MONASH University

FAMILY AND COMMUNITY QUESTIONNAIRE

FILLING IN THE QUESTIONNAIRE – INSTRUCTIONS

1. Make sure to read every question carefully.
2. Tick the box that best describes your family and community.
3. Please try to answer all questions.
4. Please note: Every page has questions on both sides

Approximate time to complete: 30 minutes
FAMILY AND COMMUNITY QUESTIONNAIRE

(1) What is your relationship to the child?

- Mother
- Father
- Step-mother / Step-father
- Foster Carer
- Grandmother / Grandfather
- Other. ______________________

(2) Who lives at home with you? e.g. husband, daughter, mother

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

(3) What is your postcode? ____________

(4) What is your age? ________________ years
(5) Where were you born?

- Australia (Aboriginal/Torres Strait Islander)
- Australia (Other)
- Another country, (which country) ____________________________

(6) Are you an Australian citizen?

- Yes
- No

(7) Where were your parents born?

- Australia
- Other country, (which country?) ____________________________

(8) What language do you usually speak at home?

______________________________

(9) Describe your usual job?

______________________________
(10) How much time each week do you spend in this work?

- 0-5 hours
- 6-24 hours
- 25-35 hours
- 36+ hours

(11) Do you have a Health Care Card?

- Yes
- No

(12) How much would you earn usually in:

- One week $__________
- Or
- One year $__________

(13) In the past 12 months, did you have difficulties paying your mortgage or rent?

- Every month
- Most months
- A few times
- Never
(14) In the past 12 months, did you have difficulties paying your electricity, gas, water or telephone bills?

Every month  Most months  A few times  Never

(15) In the past 12 months, did you have difficulties in buying food?

Every month  Most months  A few times  Never

(16) In the past 12 months, did you have difficulties in paying for child care?

Every month  Most months  A few times  Never
(17) In the past 12 months, did you have to sell something because you needed the money?

☐ Every month
☐ Most months
☐ A few times
☐ Never

(18) In the past 12 months, how often did you have to ask for help from family or friends?

☐ Every month
☐ Most months
☐ A few times
☐ Never

(19) In the past 12 months, how often did you have to ask for help from community agencies?

☐ Every month
☐ Most months
☐ A few times
☐ Never
(20) What is your housing situation?

- Own your home or paying off a mortgage
- Private rent
- Pay rent to the government (e.g. Ministry of Housing)
- Homeless / No permanent housing

(21) What was the highest level of education you finished?

- Finished Primary School
- Finished Year 9
- Finished Year 12
- Finished University Degree or TAFE qualification

(22) How would you rate your physical health?

- Excellent
- Good
- Fair
- Poor
(23) How often would you visit a medical practitioner or health worker for treatment for a long-standing physical problem? (Long-standing means anything that has troubled you for over 12 months or that is likely to have a long lasting effect on your health)

- Often, every week
- Once every 2 weeks
- Once a month
- Very rarely, only a few times a year

(24) Does this illness or disability affect your activities in any way?

- Always
- Most of the time
- Sometimes
- Never

(25) How would you rate your mental health?

- Excellent
- Good
- Fair
- Poor
(26) How often do you visit a medical practitioner or health worker for treatment for a long-standing mental or emotional problem? *Long-standing means anything that has troubled you for over 12 months or that is likely to have a long lasting effect on your health.*

- Often, every week
- Once every 2 weeks
- Once a month
- Very rarely, only a few times a year

(27) Does this illness or disability affect your activities in any way?

- Always
- Most of the time
- Sometimes
- Never

(28) When you or your child needs to see a doctor, can you usually get an appointment?

- Straight-away / Same day
- 1-2 days
- 3-6 days
- over 1 week
(29) When you or your child are sick and need to see a doctor, how often would you go to the nearest hospital instead of visiting the doctor's practice?

- Always
- Most of the time
- Sometimes
- Never

(30) In most weeks, how often do you care for elderly parents?

- Everyday
- More than three times a week
- Once or twice a week
- Never

(31) In most weeks, how often do you care for your spouse who has a physical illness or disability?

- Everyday
- More than three times a week
- Once or twice a week
- Never
(32) In most weeks, how often do you care for your spouse who suffers from a mental illness or disability?

- Everyday
- More than three times a week
- Once or twice a week
- Never

(33) In most weeks, how often do you care for your child who suffers with a physical illness or disability?

- Everyday
- More than three times a week
- Once or twice a week
- Never

(34) In most weeks, how often do you care for your child who suffers from a mental illness or disability?

- Everyday
- More than three times a week
- Once or twice a week
- Never
(35) How often do you receive Home Help services? (e.g. Meals on Wheels? Cleaning and gardening help or respite care?).

- Everyday
- Quite a lot (3-4 times per week)
- Once a week
- Never

(36) How often do you get together with family or close friends who do not live with you?

- Everyday
- Quite a lot (3-4 times per week)
- Once a week
- Once a month or less

(37) Does the cost of travelling affect how many times you get together with family and close friends?

- Always
- Most of the time
- Sometimes
- Never
(38) Does work affect how many times you get together with family and close friends?

- Always
- Most of the time
- Sometimes
- Never

(39) Does caring for your children affect how many times you get together with family and close friends?

- Always
- Most of the time
- Sometimes
- Never

(40) Does caring for sick or disabled relatives affect how many times you get together with family and close friends?

- Always
- Most of the time
- Sometimes
- Never
(41) How often do you choose not to get together with family and close friends?

- Always
- Most of the time
- Sometimes
- Never

(42) How often do your friends make you feel like you belong and that you are a part of a community?

- Always
- Most of the time
- Sometimes
- Never

(43) How often do the people in your neighbourhood make you feel like you belong and that you are a part of a community?

- Always
- Most of the time
- Sometimes
- Never
How often does your place of worship, for example your church, temple or mosque make you feel like you belong and that you are a part of a community?

- Always
- Most of the time
- Sometimes
- Never

How often do the people you work with or study with make you feel like you belong and that you are a part of a community?

- Always
- Most of the time
- Sometimes
- Never

How often do the people who share your culture make you feel like you belong and that you are a part of a community?

- Always
- Most of the time
- Sometimes
- Never
(47) Usually, how often do you have a meal at a restaurant or hotel?

☐ Once a week or more
☐ Once a month
☐ A few times a year
☐ Never

(48) Usually, how often do you go to the movies?

☐ Once a week or more
☐ Once a month
☐ A few times a year
☐ Never

(49) Usually, how often do you go to watch live sport? (not including watching children's sport)

☐ Once a week or more
☐ Once a month
☐ A few times a year
☐ Never
(50) Usually, how often do you visit a library?
- Once a week or more
- Once a month
- A few times a year
- Never

(51) Usually, how often do you visit a museum/gallery
- Once a week or more
- Once a month
- A few times a year
- Never

(52) Usually, how often do you go to a live performance? (e.g. circus, live band, concert)
- Once a week or more
- Once a month
- A few times a year
- Never
(53) Usually, how often do you buy a take-away meal?
- Once a week or more
- Once a month
- A few times a year
- Never

(54) Usually, how often do you borrow a DVD or video?
- Once a week or more
- Once a month
- A few times a year
- Never

(55) In the past 12 months, how often did you and your family have a holiday for one week or more away from home?
- More than four times
- 2-4 times
- Once
- Not at all
(56) How would you rate the park(s) in your area?

Excellent
Good
Fair
Poor

(57) How would you rate the local community and leisure or sports centre and/or swimming pool in your area?

Excellent
Good
Fair
Poor

(58) If you have needed police help, how helpful were the local police?

Very helpful
Quite helpful
Not very helpful
Unhelpful
(59) How would you rate the shops in your area?
- Excellent
- Good
- Fair
- Poor

(60) How would you rate the supermarket(s) in your area?
- Excellent
- Good
- Fair
- Poor

(61) How would you rate the banking facilities in your area?
- Excellent
- Good
- Fair
- Poor
(62) How would you rate the postal services in your area?

- Excellent
- Good
- Fair
- Poor

(63) How would you rate the chemist in your area?

- Excellent
- Good
- Fair
- Poor

(64) Where do you usually access a computer and the internet?

- At home
- School or library
- Community Centre
- Internet Café
- No access
(65) How many take-away food outlets are there near your home?

- Many (4+)
- Some (3)
- Few (1-2)
- None

(66) How many gambling venues (e.g. TAB, pokies, etc...) are there near your home?

- Many (4+)
- Some (3)
- Few (1-2)
- None

(67) How good is the public transport (bus/train/tram) in your area?

- Excellent
- Good
- Fair
- Poor
(68) How often do you use your car or motorbike each week?

- Everyday
- More than three times a week
- Once or twice a week
- Never

(69) How do you find the costs of running your car or bike (including petrol/registration/insurance, service and repairs)?

- Very Expensive
- Not too expensive, but not too cheap
- OK, Not Expensive
- Cheap

(70) How often do you ride a bicycle or walk to wherever you need to go?

- Everyday
- More than three times a week
- Once or twice a week
- Never
(71) How interested are you in what the local council does in your area?

- Very interested
- Somewhat interested
- Only slightly interested
- Not interested

(72) How interested are you in what the Victorian State government does?

- Very interested
- Somewhat interested
- Only slightly interested
- Not interested

(73) How interested are you in what the Australian government does?

- Very interested
- Somewhat interested
- Only slightly interested
- Not interested
(74) In the past 12 months, how often did you sign a petition?

- More than four times
- 2-4 times
- Once
- Not at all

(75) In the past 12 months, how often did you attend a political meeting or rally?

- More than four times
- 2-4 times
- Once
- Not at all

(76) In the past 12 months, how often did you attend a trade union meeting or rally?

- More than four times
- 2-4 times
- Once
- Not at all
(77) In the past 12 months, how often did you participate in any demonstrations, protests, boycotts or marches?

- More than four times
- 2-4 times
- Once
- Not at all

(78) In the past 12 months, how often did you attend a local community meeting or rally?

- More than four times
- 2-4 times
- Once
- Not at all

(79) In the past 12 months, how often did you attend a local school group at your child’s school?

- More than four times
- 2-4 times
- Once
- Not at all
(80) In the past 12 months, how often did you volunteer to work on a community project?

- More than four times
- 2-4 times
- Once
- Not at all

(81) In the past 12 months, how often did you do any volunteer work at the local school?

- About once a week
- About once a month
- A few times
- Not at all

(82) In the past 12 months, how often did you do any volunteer work at a local youth organisation such as a sports club or scouts?

- About once a week
- About once a month
- A few times
- Not at all
(83) In the past 12 months, how often did you do any volunteer work at a local adult sports or activity club?

☐ About once a week
☐ About once a month
☐ A few times
☐ Not at all

(84) In the past 12 months, how often did you do any volunteer work at a club or organisation for senior citizens?

☐ About once a week
☐ About once a month
☐ A few times
☐ Not at all

(85) In the past 12 months, how often did you do any volunteer work at a local charity or welfare organisation?

☐ About once a week
☐ About once a month
☐ A few times
☐ Not at all
(86) In the past 12 months, how often did you do any volunteer work at a local association like a neighbourhood watch group?

- About once a week
- About once a month
- A few times
- Not at all

(87) If there was an emergency in your local area how would you rate the chances of people working together to fix the problem?

- Excellent
- Good
- Fair
- Poor

(88) How would you rate your chances of making your local area a better place to live in?

- Excellent
- Good
- Fair
- Poor
You have finished.
Thank you for completing this questionnaire.
This is NOT a test. There are no right or wrong answers.

Please answer all the questions as truthfully as you can.

If there is a question you do not wish to answer you can skip it but please try to answer as many questions as you can.

Your answers are CONFIDENTIAL and will not be told to your family, friends or school.

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002.
Please mark only one answer per question

Either tick a box or circle an answer

If you are not sure of an answer, please give the nearest one you can

If you have made a mistake, put a cross through it and answer again

Please follow the arrows carefully

If you have any problems, put up your hand and you will be helped

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
Questions about You

1.1 What year level are you in?
- Grade 5
- Year 7
- Year 8
- Year 9
- Grade 6
- Year 10
- Year 11
- Year 12

1.2 Are you:
- Female
- Male

1.3 Were you born in Australia?
- Yes
- No

1.4 What language do you speak at home? (tick one answer)
- English
- Another language
- English and another language

Thinking about friends...

2.1 Do you have a group of friends that stays in close touch?
- No
- Yes

2.2 Recently have you had any fights or arguments with people close to you?
- No
- Yes - with one or two people
- Yes - with more than two people

2.3 If you get angry or upset do you have people you can tell just how you feel?
- No
- Yes - one or two people
- Yes - with more than two people

2.4 When you feel happy do you have someone you can share this with?
- No
- Yes

2.5 Do you have someone you can trust with your private thoughts and feelings?
- No
- Yes

2.6 If you're having a tough time, do you have someone you can really depend on?
- No
- Yes
- Yes, but I don't need anyone

2.7 Is there anyone who really knows you very well (understands how you think and feel)?
- No
- Yes
- Yes, sort of

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
### Questions about School

<table>
<thead>
<tr>
<th>Question</th>
<th>YES!</th>
<th>yes</th>
<th>no</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 I like school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 I like my teachers this year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 There are lots of chances for students at my school to get involved in sports, clubs and other activities outside class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 I try hard in school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 My teachers notice when I am doing a good job and let me know about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 Most days I look forward to going to school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7 What I have learned in school this year will be useless in getting a good job</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.8 Doing well in school is important to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.9 At my school, students have a lot of chances to help decide and plan things like school activities, events and policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.10 I feel good when I work hard in my classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.11 My teachers are fair in dealing with students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.12 When I have an assignment to do I keep working on it until it is finished</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.13 I like my classes this year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.14 I like the other students in my classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.15 There are lots of chances for me to work on my own with a teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.16 I help out other students who need it</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.17 Continuing or completing my education is important to me</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.18 There are lots of chances for people like me to get a good education</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.19 I worry about not being good at the things that make you popular at this school</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.20 I feel safe at my school</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.21 It's easy to warg at my school</td>
<td>YES! yes no NO!</td>
</tr>
<tr>
<td>3.22 I have more school work than I can handle</td>
<td>Always Most of the time Sometimes Rarely Never</td>
</tr>
<tr>
<td>3.23 I work too many hours at my school work</td>
<td>Always Most of the time Sometimes Rarely Never</td>
</tr>
<tr>
<td>3.24 People treat me in an unfriendly way at school</td>
<td>Always Most of the time Sometimes Rarely Never</td>
</tr>
<tr>
<td>3.25 I am bored at school</td>
<td>Always Most of the time Sometimes Rarely Never</td>
</tr>
</tbody>
</table>

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
Please tick the box and follow the arrows

Thinking about school...

4.11 Has anyone teased you or called you names recently?

- No
- Yes

  → 4.12 How often?

  □ Most days
  □ About once a week
  □ Less than once a week

  4.13 Did it upset you?
  □ Not at all
  □ A bit
  □ A lot

  4.14 Did it make you angry?
  □ Not at all
  □ A bit
  □ A lot

Go to 4.21

4.21 Has anyone spread rumours about you recently?

- No
- Yes

  → 4.22 How often?

  □ Most days
  □ About once a week
  □ Less than once a week

  4.23 Did it upset you?
  □ Not at all
  □ A bit
  □ A lot

  4.24 Did it make you angry?
  □ Not at all
  □ A bit
  □ A lot

Go to 4.31

4.31 Have you been deliberately left out of things recently?

- No
- Yes

  → 4.32 How often?

  □ Most days
  □ About once a week
  □ Less than once a week

  4.33 Did it upset you?
  □ Not at all
  □ A bit
  □ A lot

  4.34 Did it make you angry?
  □ Not at all
  □ A bit
  □ A lot

Go to 4.41

4.41 Have you been threatened physically or actually hurt by another student recently?

- No
- Yes

  → 4.42 How often?

  □ Most days
  □ About once a week
  □ Less than once a week

  4.43 Did it upset you?
  □ Not at all
  □ A bit
  □ A lot

  4.44 Did it make you angry?
  □ Not at all
  □ A bit
  □ A lot

Go to 4.51

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
Congratulations!!

- You have reached the end of the survey
- Please check that you have answered all the questions
- Please fold this survey booklet in half and put up your hand—someone will come to assist you

Thank you for completing this survey

This questionnaire was developed by the Centre for Adolescent Health for the Gatehouse Project 2002
APPENDIX G – ADDITIONAL RESULTS TABLES
Table G1

*Parent Role and Family Structure Information for High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>Family Demographics</th>
<th>High Income</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Parent Role</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>86.4%</td>
<td>86.2%</td>
</tr>
<tr>
<td>Father</td>
<td>9.1%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Grandparent</td>
<td>4.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td><em>Family Structure</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother/Father+Child (Single Parents)</td>
<td>0%</td>
<td>51.7%</td>
</tr>
<tr>
<td>Mother+Father+Child (Nuclear)</td>
<td>90.9%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Blended Family</td>
<td>0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Extended Family</td>
<td>9%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Grandparent +Grandchild</td>
<td>0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Mother/Father+ Child +Relative/Friend</td>
<td>0%</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

Note. Blended Family includes Mother + Mother’s Children + Father + Father’s Children

Extended Family refers to a Mother or Father + Grandparent + Child
Table G2

*Frequency of Financial Difficulties experienced in the past 12 months for High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>Areas of Difficulty</th>
<th>High Income</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accommodation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every month</td>
<td>0%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Most months</td>
<td>0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>A few times</td>
<td>22.7%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Never</td>
<td>77.3%</td>
<td>41.4%</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every month</td>
<td>0%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Most months</td>
<td>0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>A few times</td>
<td>27.3%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Never</td>
<td>72.7%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Buying Food</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every month</td>
<td>0%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Most months</td>
<td>0%</td>
<td>34.5%</td>
</tr>
<tr>
<td>A few times</td>
<td>18.2%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Never</td>
<td>81.8%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>
Table G3

Assistance Required for Financial Difficulties experienced in the past 12 months for High Income (N= 22) and Low Income (N= 28) families

<table>
<thead>
<tr>
<th>Areas of Assistance</th>
<th>High Income</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needed Help from Family/Friends</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every month</td>
<td>0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Most months</td>
<td>9.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>A few times</td>
<td>13.6%</td>
<td>31%</td>
</tr>
<tr>
<td>Never</td>
<td>77.3%</td>
<td>41.4%</td>
</tr>
</tbody>
</table>

*Needed Help from Community Agencies*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Every month</td>
<td>0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Most months</td>
<td>0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>A few times</td>
<td>0%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Never</td>
<td>100%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

*Need to Sell items for Money*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Every month</td>
<td>0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Most months</td>
<td>0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>A few times</td>
<td>13.6%</td>
<td>31%</td>
</tr>
<tr>
<td>Never</td>
<td>86.4%</td>
<td>55.2%</td>
</tr>
</tbody>
</table>
Table G4

*Education, Employment and Housing Information reported by Caregivers for High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>Proxy Measures of Income</th>
<th>High Income</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Educational Attainment</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finished Primary School</td>
<td>0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Finished Year 9</td>
<td>13.6%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Finished Year 12</td>
<td>9.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Finished University Degree / TAFE Qualification</td>
<td>77.3%</td>
<td>51.7%</td>
</tr>
<tr>
<td><em>Employment Sector</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager / CEO</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Professional / Trade Qualification Required</td>
<td>68.2%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Non-Professional / Trade (e.g. Clerical/Sales/Transport/Labourer)</td>
<td>9.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>No Job (Unemployed/House Duties/Study)</td>
<td>22.7%</td>
<td>86.2%</td>
</tr>
<tr>
<td><em>Housing Status</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own Home/Mortgage</td>
<td>81.8%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Private Rent</td>
<td>18.2%</td>
<td>37.9%</td>
</tr>
<tr>
<td>Government Rent</td>
<td>0%</td>
<td>31%</td>
</tr>
<tr>
<td>Homeless / No permanent Housing</td>
<td>0%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

Note. *Educational Attainment* was re-coded to 1/0 for Completed Year 12 / Did not complete Year 12 and used in analyses.

*Housing Status* was re-coded to 1/0 for Housing Stability/ Not and used in analyses.
Table G5

*YSR Clinical Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>YSR Problem Scales</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalising Problems</td>
<td>High Income</td>
<td>48.68</td>
<td>8.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>53.54</td>
<td>11.51</td>
<td>1.66</td>
<td>.104</td>
</tr>
<tr>
<td>Externalising Problems</td>
<td>High Income</td>
<td>48.05</td>
<td>10.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>52.14</td>
<td>12.40</td>
<td>1.26</td>
<td>.215</td>
</tr>
<tr>
<td>Total Problems Score</td>
<td>High Income</td>
<td>48.46</td>
<td>9.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>53.61</td>
<td>12.01</td>
<td>1.65</td>
<td>.106</td>
</tr>
</tbody>
</table>

*p<.05*
Table G6

*YSR Syndrome Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>CBCL Syndrome Scores</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internalising Problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious/Depressed</td>
<td>High Income</td>
<td>3.95</td>
<td>3.12</td>
<td></td>
<td>.343</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>5.11</td>
<td>4.92</td>
<td>0.96</td>
<td></td>
</tr>
<tr>
<td>Withdrewn/Depressed</td>
<td>High Income</td>
<td>2.32</td>
<td>1.96</td>
<td></td>
<td>.088</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.39</td>
<td>2.32</td>
<td>1.74</td>
<td></td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>High Income</td>
<td>3.00</td>
<td>2.18</td>
<td></td>
<td>.086</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.68</td>
<td>4.41</td>
<td>1.76</td>
<td></td>
</tr>
<tr>
<td><strong>Externalising Problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule-Breaking Behaviour</td>
<td>High Income</td>
<td>2.77</td>
<td>3.18</td>
<td></td>
<td>.140</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.29</td>
<td>3.95</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>Aggressive Behaviour</td>
<td>High Income</td>
<td>5.68</td>
<td>5.30</td>
<td></td>
<td>.181</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>7.89</td>
<td>6.01</td>
<td>1.36</td>
<td></td>
</tr>
<tr>
<td><strong>Other Syndrome Scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Problems</td>
<td>High Income</td>
<td>3.00</td>
<td>2.20</td>
<td></td>
<td>.098</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.32</td>
<td>3.31</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td>Attention Problems</td>
<td>High Income</td>
<td>4.41</td>
<td>3.05</td>
<td></td>
<td>.152</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>5.82</td>
<td>3.66</td>
<td>1.46</td>
<td></td>
</tr>
<tr>
<td>Thought Problems</td>
<td>High Income</td>
<td>2.82</td>
<td>2.34</td>
<td></td>
<td>.224</td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.04</td>
<td>4.50</td>
<td>1.23</td>
<td></td>
</tr>
</tbody>
</table>

p<.05
Table G7

**CHQ-PF-50 Caregiver Perception of Child’s Overall Health and Change Over Time**
Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families

<table>
<thead>
<tr>
<th>CHQ-PF-50 Sub-Scales (Overall Health &amp; Changes)</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Income</td>
<td>4.58</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.22</td>
<td>0.91</td>
<td>-1.55</td>
<td>.128</td>
</tr>
<tr>
<td>Global Health</td>
<td>High Income</td>
<td>4.34</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.62</td>
<td>0.98</td>
<td>-3.18</td>
<td>.003</td>
</tr>
<tr>
<td>General Health Perception</td>
<td>High Income</td>
<td>3.36</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.25</td>
<td>0.93</td>
<td>-0.47</td>
<td>.639</td>
</tr>
</tbody>
</table>

*p<.05*
### Table G8

**CHQ-PF-50 Child Health & Limitations Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families**

<table>
<thead>
<tr>
<th>CHQ-PF-50 Sub-Scales (Child Health &amp; Limitations)</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Functioning</td>
<td>High Income</td>
<td>3.98</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.83</td>
<td>0.41</td>
<td>-1.84</td>
<td>.076</td>
</tr>
<tr>
<td>Bodily Pain / Discomfort</td>
<td>High Income</td>
<td>5.59</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.91</td>
<td>1.48</td>
<td>-2.17</td>
<td>.036</td>
</tr>
<tr>
<td>Limitations in School &amp; Activities due to Physical Health</td>
<td>High Income</td>
<td>3.93</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.78</td>
<td>0.49</td>
<td>-1.42</td>
<td>.162</td>
</tr>
<tr>
<td>Psycho-Social Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>High Income</td>
<td>4.56</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.13</td>
<td>0.66</td>
<td>-3.09</td>
<td>.004</td>
</tr>
<tr>
<td>Global Behaviour</td>
<td>High Income</td>
<td>4.45</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.99</td>
<td>0.91</td>
<td>-2.11</td>
<td>.040</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>High Income</td>
<td>4.55</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>4.01</td>
<td>0.89</td>
<td>-2.66</td>
<td>.011</td>
</tr>
<tr>
<td>Limitations in School &amp; Activities due to Emotional /Behavioural Difficulties</td>
<td>High Income</td>
<td>4.41</td>
<td>3.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>5.82</td>
<td>3.66</td>
<td>-1.07</td>
<td>.290</td>
</tr>
</tbody>
</table>

*p<.05*
Table G9

CHQ-PF-50 Impact on Parent & Family Limitations Sub-Scale Raw Scores for Child Participants from High Income (N= 22) and Low Income (N= 28) families

<table>
<thead>
<tr>
<th>CHQ-PF-50 Sub-Scales (Impact on Parent &amp; Family Limitations)</th>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>T</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Impact on Parent</td>
<td>High Income</td>
<td>4.44</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.89</td>
<td>1.07</td>
<td>-2.05</td>
<td>.046</td>
</tr>
<tr>
<td>Time Impact on Parent</td>
<td>High Income</td>
<td>3.89</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.55</td>
<td>0.61</td>
<td>-2.63</td>
<td>.012</td>
</tr>
<tr>
<td>Limitations in Family Activities</td>
<td>High Income</td>
<td>4.62</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.82</td>
<td>1.03</td>
<td>-3.26</td>
<td>.002</td>
</tr>
<tr>
<td>Family Cohesion</td>
<td>High Income</td>
<td>4.06</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Income</td>
<td>3.85</td>
<td>1.06</td>
<td>-0.63</td>
<td>.534</td>
</tr>
</tbody>
</table>

*p<.05
Table G10

*Self-Reported Ratings of Caregivers' Physical Health for High Income (N= 22) and Low Income (N= 28) families*

<table>
<thead>
<tr>
<th>Physical Health Problems / Limitations</th>
<th>High Income group</th>
<th>Low Income group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate your Physical Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>68.2%</td>
<td>0%</td>
</tr>
<tr>
<td>Good</td>
<td>31.8%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Fair</td>
<td>0%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Poor</td>
<td>0%</td>
<td>24.1%</td>
</tr>
</tbody>
</table>

**Frequency of Visit to Health Professional for long standing (12months+) Physical Problem**

<table>
<thead>
<tr>
<th></th>
<th>High Income group</th>
<th>Low Income group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Week</td>
<td>0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Once Every 2 weeks</td>
<td>4.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Once a Month</td>
<td>0%</td>
<td>37.9%</td>
</tr>
<tr>
<td>A Few Times a Year</td>
<td>95.5%</td>
<td>51.7%</td>
</tr>
</tbody>
</table>

**Frequency that the Physical Illness / Disability Affects Activities**

<table>
<thead>
<tr>
<th></th>
<th>High Income group</th>
<th>Low Income group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>0%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>0%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>13.6%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Never</td>
<td>86.4%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

Note. *Physical Health* was re-coded to 1/0 for Good Physical Health/Not and used in analyses.
Table G11

**Self-Reported Ratings of Caregivers' Mental Health for High Income (N= 22) and Low Income (N= 28) families**

<table>
<thead>
<tr>
<th>Mental Health Problems / Limitations</th>
<th>High Income group</th>
<th>Low Income group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate your Mental Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>72.7%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Good</td>
<td>27.3%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Fair</td>
<td>0%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Poor</td>
<td>0%</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>Frequency of Visit to Health Professional for long standing (12months+) Mental or Emotional Problem</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every Week</td>
<td>4.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Once Every 2 weeks</td>
<td>4.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Once a Month</td>
<td>0%</td>
<td>31%</td>
</tr>
<tr>
<td>A Few Times a Year</td>
<td>90.9%</td>
<td>55.2%</td>
</tr>
<tr>
<td><strong>Frequency that the Mental or Emotional Illness / Disability Affects Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>0%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>9.1%</td>
<td>31%</td>
</tr>
<tr>
<td>Never</td>
<td>90.9%</td>
<td>41.4%</td>
</tr>
</tbody>
</table>

*Note. Mental Health was re-coded to 1/0 for Good Mental Health/Not and used in analyses*
Table G12

SF-36v2 Norm-Based Scores for Caregivers from the Low Income group (N= 28)

<table>
<thead>
<tr>
<th>SF-36v2 Components</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Summary Measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Component Summary</td>
<td>41.90</td>
<td>10.42</td>
</tr>
<tr>
<td>Mental Component Summary</td>
<td>40.49</td>
<td>14.72</td>
</tr>
<tr>
<td>Health Domain Scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Functioning Limitations</td>
<td>43.75</td>
<td>11.93</td>
</tr>
<tr>
<td>Physical Health-Related Role Limitations</td>
<td>42.24</td>
<td>8.89</td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>39.03</td>
<td>10.87</td>
</tr>
<tr>
<td>General Health Perceptions</td>
<td>39.36</td>
<td>11.56</td>
</tr>
<tr>
<td>Vitality</td>
<td>40.46</td>
<td>10.88</td>
</tr>
<tr>
<td>Social Functioning Impact of Health Problems</td>
<td>39.36</td>
<td>12.74</td>
</tr>
<tr>
<td>Mental Health-Related Role Limitations</td>
<td>41.27</td>
<td>13.29</td>
</tr>
<tr>
<td>Mental Health</td>
<td>41.27</td>
<td>13.72</td>
</tr>
</tbody>
</table>